



**BENTON COUNTY
COMPREHENSIVE
LAND USE PLAN
2006 UPDATE***

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Benton County Comprehensive Plan

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INTRODUCTION CHAPTER 1

PURPOSE AND INTENT OF THE BENTON COUNTY COMPREHENSIVE PLAN

This Plan amends the County's adopted 1985 Comprehensive Plan. The purpose and intent of this plan is to provide for local needs relating to the use of land, including the protection of property and water rights, and in so doing, to meet the state's minimum planning law requirements.

Local Purpose

At the local level, the fundamental purpose of Benton County's Comprehensive Plan is to manage growth so that it sustains and enhances the quality of life for county residents, as that quality is defined by the residents themselves via a public process.

The following excerpt from the 1985 Comprehensive Plan (Chapter 1, page 8) succinctly summarizes the local citizen's interest relative to the products of their Plan. The public process for the development of this 1997 Plan, which included a Rural Survey (Benton County Rural Visioning Survey Report, Spring 1993), as well as the extensive involvement of Rural Planning Committees in each of the rural Planning Areas has re-affirmed these as basic issues:

"Throughout the development and adoption process for this Comprehensive Plan, several issues

have continually risen to the surface as major concerns that people of Benton County believe should be addressed by the County's Comprehensive Plan. These issues (in no particular order) are:

- 1. provisions for the economic growth of the County;*
- 2. provisions for a variety of residential living opportunities;*
- 3. provisions for the preservation and protection of the County's good agricultural lands;*
- 4. provisions for the protection of the County's environmental quality; and,*
- 5. provisions for the minimization of incompatible land uses.*

The intent of this Comprehensive Plan is to provide for the realization of these five general goals in such a way that the County's livability is protected and enhanced for both the present and future generations."
(1985 Comprehensive Plan)

The above objectives are a solid base from which to construct this plan. They also display the essential paradox which challenges any effort to plan for and manage growth, i.e., that within the mix of benefits the use of land and natural resources contributes to a "high quality of life," there are inherent tensions and trade-offs, which are also interrelated and circular. In order to provide for

economic growth (# 1, above) and its accompanying residential population growth (# 2) resources of land, water, air, and biology must be converted to new buildings, infrastructure, ball fields, farms etc; cumulatively these conversions irreversibly degrade all aspects of environmental quality (# 4), and create a landscape of potential conflicts between incompatible uses (# 5); which can threaten the productivity of economies based upon natural resource lands (agriculture), as well as the custom and culture of rural communities (no 3); all of which reduce the ability to optimize and sustain economic growth (# 1).

This Plan seeks to preserve those elements of the natural environment and the local custom and culture that are the essence of the quality of life for county residents. Simultaneously, it seeks to facilitate, even encourage economically productive use of the land/resources base in order to provide the prosperity which enables the enjoyment of a quality life.

The State of Washington's Purpose and Intent

Various provisions of the Washington State Growth Management Act (GMA) require local Comprehensive Plans to address planning issues of statewide importance. It is a characteristic of GMA that depending upon the issue, the state purposes for local plans can be either general or very specific.

An expression of general statewide

interest is that "the legislature finds that uncoordinated and unplanned growth, together with a lack of common goals expressing the public's interest in the conservation and wise use of our lands, pose a threat to the environment, sustainable and economic development, and health and safety, and high quality of life enjoyed by residents of this state.. "(RCW36.70A.010)

Greater specificity of state interest can be seen in GMA's thirteen planning goals to guide the adoption of plans and regulations (RCW36.70A.020); still greater specificity is in the six mandatory plan "elements," some with required provisions in detail (36.70A.70).

Relative to natural resource lands (mineral, agricultural and forestry lands), and "critical areas" (wetlands and fish and wildlife conservation, frequently flooded, critical aquifer recharge, and geologically hazardous areas), the expression of state interest is clear and specific. These must be designated and "protected" (critical areas) or "conserved" (agriculture, minerals and forestry) by regulation (36.70A.060).

SCOPE OF THE PLAN

As a result of time and circumstance, and natural resources, the scope of the County's Comprehensive Plan, though converging directly upon and serving its local purpose, extends far beyond the physical boundaries of the county.

Significant land use activities within the county have current and potential global markets and applications. Agricultural products grown and processed in the county are finding expanding global markets especially on the Pacific Rim for which the State of Washington is advantageously located relative to trade.

Additionally, local road, rail, and waterborne transportation systems connect to a global network that moves agricultural products grown regionally in the central basin and mid-west to global markets. Non-farm products move trans-continentially back and forth from Asia to Europe, pass through and make connections within the county.

In the non-farm sectors, the hazardous radio-nuclide and chemical waste cleanup technologies and science being developed locally to clean the Hanford Site for future uses are also expected to find global markets. Finally, the relatively mild climate and location at the confluence of three major river systems provides the county with a resource base for an expanding visitor, tourism and recreational economy.

The county's comprehensive plan must reflect the demands and opportunities afforded by these regional and global connections. **Table 4.0** of Chapter 4 indicates how the Plan responds to these opportunities and trends.

PLAN FORMAT

This plan consists of 12 chapters and an Appendix. The six mandatory Plan Elements each have a chapter; there are two "optional" elements (i.e., not required by state planning law), each having a chapter. The goals and policies for all the elements are excerpted to a single chapter (Chapter 3) for quick reference; the remaining three chapters are "Introduction", "Natural Resources", and "Environmental Analysis". A Hanford Sub-Area Plan when completed will be amended as Chapter 13.

Each of the Plan Elements covers a separate topic (e.g., land use, housing, transportation etc.). The standard format for each chapter is simple, direct, and focused on the future. The progression of each chapter flows in the following order:

- Introduction
- Existing Conditions
- Current Trends
- Future Considerations

Relationships Between Plan Components

There is a linear connection between the plan's goals, policies and actions, and the maps, textual background information and data contained in the Elements. The connection progresses from the broad *Goals*, through legitimizing *Policies* and then to specific *Actions*. An example of this progression follows:

Goal 41, under Public Services, seeks "...to expand and diversify the rural economy and employment base ...". **Goal 49**, refines the direction further by seeking to "...promote and protect tourism related to viticulture and other agricultural activities."



Policy D. under Public Services responds directly to Goals 41 and 49, by stating that "priority recipients for capital facilities planning and expenditures" are those projects which "...would improve the maintenance and growth of the rural/agricultural economy...";



Maps of the Land Use Element of the Plan show unincorporated rural and agricultural land areas, as well as specific lands (parks, industrial lands etc) where Goal 41 is most likely to be successfully achieved. The map is augmented by descriptive text focusing on which land areas offer unique tourism, viticulture, etc. opportunities.



Action 4, initiates movement toward achieving the Goal and implementing the Policy by requiring "a study to determine the marketability of a water oriented Destination Resort within the unincorporated county." Destination Resorts are uses listed in both the Rural and Agricultural land use zones.



Action 5, requires a phased construction schedule for the Master Plan of the Horn Rapids Regional Park. Development of the park which should have important visitor and recreational spin-offs outside of the park;



Table 9.0, of the Capital Facilities Element schedules projects to provide water, power, access and parking, and rest room facilities at the Park.

Relative Importance of Plan Elements

Though all the Elements of the Plan are integrated functional components, some (Land Use, Transportation, Capital Facilities, Utilities), have greater effect and are more essential to the implementation of the Plan than others.

For example, the land use map of the Land Use Element is in essence a graphic policy statement which is served by, and in turn serves the other Elements. Based upon the land use designations on the map, private and public sector service providers can project future locational demands for water, sewer, natural gas, electrical power, roads, emergency, waste management, transit, communications service, etc. Using this information, the providers can, with relative certainty, invest their resources to plan, purchase the necessary easements and real estate, secure funding and construct capital facilities to meet future land use demands.

Definition of Terms

In concert with the land use map, the "Goals, Policies, and Actions," within the plan are the primary directives for land use decision-making and long range planning. They are also the principal directives to county decision-

makers and staff relative to what planning and public works actions, studies, and other projects, have to be undertaken during the plan's 20 year "horizon" in order to address current and future growth and development, and resource issues.

An example of the linear relationship between Goals, Policies and Actions is provided above. The meaning of these terms as they are used in the Plan is defined below:

Goals are broad statements of intent and philosophy expressing countywide values and attitudes. Goals are used as a general guide for action by the County. A goal may never be completely attained, but it is to strive for over time.

Policies provide the basis for decision making and specific courses of action which move the County toward the attainment of its adopted goals. Policies have major influence because decisions, actions, and programs should neither conflict with, nor be inconsistent with adopted policy. Policies should be operable on a continuous basis and applied consistently over time.

Actions are work tasks, projects, studies, etc. to be undertaken as part of implementing and realizing the Plan. An action may be necessary to forward a goal; or to carry out or make possible the carrying out of a policy; or to accomplish a project scheduled in the Capital Facilities Plan, or a study in preparation for

constructing the project.

Unless an action is accompanied by a specific date for initiation or completion, it has no schedule and may fall anywhere on the priority list of planning "to do's" as that list is drawn by the Planning Director and the Board of Commissioners. The undertaking of actions is always dependent upon the availability and allocation of staff and budgeting resources.

RELATIONSHIP OF THE PLAN TO ZONING AND OTHER "OFFICIAL CONTROLS"

The relationship of the Comprehensive Plan to zoning and other official controls is stated succinctly by the State Planning Enabling Act's definition of and authorization for development of official controls by a county. The pertinent statutes in effect prior to the enactment of GMA, which adds significant requirements (as shown below) read as follows:

"Official controls" means legislatively defined and enacted policies, standards, precise detailed maps and other criteria, all of which control the physical development of a county or any part thereof or any detail thereof, and are the means of translating into regulations and ordinances all or any part of the general objectives of the comprehensive plan.

Such official controls may include, but are not limited to: "ordinances establishing zoning, subdivision control, platting, and adoption of detailed maps." (RCW 36.70.020(11)

"From time to time, the planning agency may, or if so requested by the board shall, cause to be prepared

official controls which, when adopted by ordinance by the board, will further the objectives and goals of the comprehensive plan. The planning agency may also draft such regulations, programs and legislation as may, in its judgement, be required to preserve the integrity of the comprehensive plan and assure its systematic execution, and the planning agency may recommend such plans, regulations, programs and legislation to the board for adoption." (RCW 36.70.550).

In addition, the Enabling Act states that "Zoning maps as an official control may be adopted only for areas covered by a comprehensive plan containing not less than a Land Use Element and a Circulation Element." (RCW 36.70.720).

These statutory citations serve to clarify the relationship between a comprehensive plan and a zoning ordinance. Simply put, a zoning ordinance (and other controls) is intended to implement the comprehensive plan. Upon passage of a comprehensive plan, a county assumes a responsibility to effectuate that plan and to conform the zoning ordinance and other implementing tools to it.

Changes In The Relationship Of A Plan to Official Controls Per GMA

GMA requires that counties and cities not planning under its provisions shall bring their development regulations into consistency with their comprehensive plans by July 1, 1992.

Prior to the enactment of GMA there was no legal requirement that comprehensive plans and ordinances be consistent.

Counties and cities planning under GMA must also have consistency between their plans and regulations, but were given additional time (beyond the July 1992 date) to do so. The effect of the requirement for consistency is to make the Plan a "standard" rather than a general guide for new development. As such, it can be relied upon for public and private sector capital facilities and utilities planning. The significant changes resulting from GMA in the force and effect of a comprehensive plan, and its relationship to "official controls" are presented below, each is a new requirement, previously absent from state planning law.

The Comprehensive Plan Is The Standard For Land use Decision-making

Comprehensive Plans and Land Use Ordinances Can No Longer Be Inconsistent

Whether or not a jurisdiction is planning under GMA, its land use regulations (ordinances) must be consistent with and implement the Comprehensive Plan.

Projections of Population Growth Are The Basis For Establishing Urban Growth Areas

Official Population Projections Are the Basis Of The 20 Year Comprehensive

Plans

The State Office Of Financial Management will supply counties annually with official population projections to be used as the basis for determining land use needs for local Comprehensive Plans, including the need for land within Urban Growth Areas.

Locating New Urban Development

Distinguish between "rural" and "urban" areas and services

The county land use map must provide the framework for accomplishing the different roles of cities and counties. Generally, the map(s) must:

- Designate land areas adjacent to cities for the expansion of urban uses, infrastructure and jurisdiction over the next 20 years;
- Designate all lands outside of urban growth areas for lower (rural densities);
- Designate and by regulation conserve "natural resource lands" (agriculture and mineral resources) essential to the local and regional economy;

Assure Protection Of Public Health, Safety, and Welfare As They May Be Affected By Land Use Actions

Maintain the long-term integrity of biological resources and man's works

The county Plan must protect ground and surface waters, biological resources, and ensure the long term structural integrity of development undertaken in or near hazardous

areas:

- Designate and protect by regulation "critical areas" (aquifer recharge, frequently flooded, geologically hazardous, fish and wildlife, and wetland areas)

Internal Consistency Of Plans

Each Plan must be internally consistent

County Plans must have the following integrated "Elements" which function as a whole:

- Land use Element with designated land uses and intensities which all other Elements must serve;
- Transportation Element provides public transportation facilities to serve the land uses and densities of the Land Use Element at identified Levels of Service (LOS), which must be monitored and maintained over time;
- Capital Facilities Element identifies capital facilities project planning as well as funding mechanisms to construct necessary public services to meet the demands of the Land Use Map as it builds-out;
- Utilities Element which enables utility providers to assess with certainty the location and intensity of future land uses so that they may cost effectively plan, schedule, capitalize and construct sufficient utilities capacities;
- Rural Element showing rural land uses and densities for unincorporated lands outside of

Urban Growth Areas and agricultural lands designations;

- Housing Element which integrates the rural housing supply with the housing type and locational needs of rural land uses including agriculture.

Coordination With Other Plans

County and Cities to Adopt County-wide Planning Policies (see Appendix 4, item 1)

- Counties and their cities must coordinate their planning to avoid conflicts and ensure that infrastructures that cross jurisdictional boundaries are functionally integrated.

Joint Development Standards

- County must work with each city to prepare and adopt "joint development standards" to guide development on lands within UGAs but not yet annexed so that developers have a single review standard, and development of the land while still in the county does not prejudice the city's ability to realize its land use plan for that area when it does annex.

Availability of Transportation System Capacity

Concurrency

- Based upon variables including the projected levels of traffic from build-out of the land use map, the county must designate Levels of Service (LOS) on its major traffic

routes, and program its capital expenditures to maintain that LOS as traffic demand on those routes increases.

State Agencies Required To Comply With Local Comprehensive Plans

State Compliance

- State agencies must comply with local comprehensive plans and development regulations and amendments thereto.

The significant amendments to the 1985 Plan in response to the above changes in Washington state's planning law (GMA) are shown in Appendix 1, item 1-1, with a description of how the 1985 Plan has been implemented in this Plan, or changed to meet the requirements of current state planning law.

Differences Not In Direct Response To GMA

There are some differences between this Plan and the County's 1985 Comprehensive Plan that are not a direct response to new state planning law requirements. Significant among these are:

- new option to cluster rural residential densities in planned developments;
- an increase in "non-farm" residential densities for lands designated as Agricultural;
- the exclusion of lands previously designated Agriculture from the designation because of urban

encroachments and parcelization which has occurred within the past 10 years;

- an increase in the number of acres designated industrial;
- a greater emphasis on recreational trails, paths and other amenities.
- a detailed Economic Element integrated with an Economic Development Improvement Program (EDIP) which is not a part of the Comprehensive Plan.
- a Park and Recreation Element.

AMENDMENTS TO THIS COMPREHENSIVE PLAN

Comprehensive Plans are not written in stone for all time. They are a living document designed to be at once rigid enough to hold a chosen course over an extended period of new growth and development, yet flexible enough to accommodate a wide spectrum of both anticipated and unforeseen market conditions. A fundamentally good plan can do this for a relatively short period of time (5-10 years), during which monitoring and data gathering and analysis for the purposes of "fine tuning" and improving the plan by amendment should be an ongoing program. State law requires review and update of Comprehensive Plans every seven (7) years.

Frequency of Amendments

RCW 36.70A.130 requires that:

(1) (a) "Each comprehensive land use plan and development regulations shall be subject to

continuing review and evaluation by the county or city that adopted them.

Except as otherwise provided, a county or city shall take action to review and, if needed, revise its comprehensive land use plan and development regulations to ensure that the plan and regulations are complying with the requirements of this chapter according to the time periods specified in subsection (4) of this section. The review and evaluation required by this subsection may be combined with the review required by subsection (3) of this section. Any amendment or revision to a comprehensive land use plan shall conform to this chapter, and any change to development regulations shall be consistent with and implement the comprehensive plan.

(2)(a) Each county and city shall establish and broadly disseminate to the public a public participation program consistent with RCW 36.70A.035 and 36.70A.140 that identifies procedures and schedules whereby updates, proposed amendments, or revisions of the comprehensive plan are considered by the governing body of the county or city no more frequently than once every year. "Updates" means to review and revise if needed, according to subsection (1) of this section, and the time periods specified in subsection (4) of this section or in accordance with the provisions of subsections (5) and (8) of this section. Amendments may be considered more frequently than once per year under the following

circumstances:

(i) The initial adoption of a subarea plan that does not modify the comprehensive plan policies and designations applicable to the subarea;

(ii) The adoption or amendment of a shoreline master program under the procedures set forth in chapter 90.58 RCW;

(iii) The amendment of the capital facilities element of a comprehensive plan that occurs concurrently with the adoption or amendment of a county or city budget.

(iv) Until June 30, 2006, the designation of recreational lands under RCW 36.70A.1701. A county amending its comprehensive plan pursuant to this subsection (2)(a)(iv) may not do so more frequently than every eighteen months; and,

(v) The adoption of comprehensive plan amendments necessary to enact a planned action under RCW 43.21C.031(2), provided that amendments are considered in accordance with the public participation program established by the county or city under this subsection (2)(a) and all persons who have requested notice of a comprehensive plan update are given notice of the amendments and an opportunity to comment.

(b) Except as otherwise provided in (a) of this subsection, all proposals shall be considered by the governing body concurrently so the cumulative effect of the various proposals can be ascertained. However, after appropriate public

participation a county or city may adopt amendments or revisions to its comprehensive plan that conform with this chapter whenever an emergency exists or to resolve an appeal of a comprehensive plan filed with a growth management hearings board or with the court.

(3)(a) Each county that designates urban growth areas under RCW 36.70A.110 shall review, at least every ten years, its designated urban growth area or areas, and the densities permitted within both the incorporated and unincorporated portions of each urban growth area. In conjunction with this review by the county, each city located within an urban growth area shall review the densities permitted within its boundaries, and the extent to which the urban growth occurring within the county has located within each city and the unincorporated portions of the urban growth areas.

(b) The county comprehensive plan designating urban growth areas, and the densities permitted in the urban growth areas by the comprehensive plans of the county and each city located within the urban growth areas, shall be revised to accommodate the urban growth projected to occur in the county for the succeeding twenty-year period. The review required by this subsection may be combined with the review and evaluation required by RCW 36.70A.215.

(4) The department shall establish a schedule for counties and cities to take action to review and, if needed,

revise their comprehensive plans and development regulations to ensure the plan and regulations comply with the requirements of this chapter. Except as provided in subsections (5) and (8) of this section, the schedule established by the department shall provide for the reviews and evaluations to be completed as follows:

(c) On or before December 1, 2006, and every seven years thereafter, for Benton, Chelan, Douglas, Grant, Kittitas, Spokane, and Yakima counties and the cities within those counties."

Counties are allowed under RCW 36.70A.130(2)(b) to consider emergency amendments that conform with Chapter 36.70A, after appropriate public participation has been observed, whenever an emergency exists. During the 2006 Plan Update, the Board of Commissioners adopted a definition of emergency as: "The declaration by the Board of County Commissioners, based upon circumstances and facts at hand, that there is an eminent or expectant threat to one or more of: life, property, public health and safety, air or water resources, or the realization of economic objectives evident in the County Comprehensive Plan, and for which immediate action is necessary to end the threat."

Procedures For Accomplishing Plan Amendments

In July of each calendar year proposed amendments to the Benton

County Plan shall be brought to the Benton County Planning Commission for hearing and recommendation to the Board of Commissioners. In order for this to occur, proposals must be submitted to the Benton County Planning Department no later than December 1st of each year, so that the proposals can be packaged, analyzed for effect, and scheduled for hearings, etc.

Detailed procedures for amending the Benton County Comprehensive Plan are contained in Appendix 1, ITEM 1-2, and are adopted by ordinance in Title 16 of the Benton County Code (BCC).

HISTORY OF COMPREHENSIVE PLANNING IN BENTON COUNTY

1985 Comprehensive Plan

In 1985 the Benton County Board of Commissioners, after a several years long planning process adopted the 1985 Comprehensive Plan. Implementing Ordinances for the Plan were drafted through a public participation process, however the ordinances were never adopted due to changing economic and staffing circumstances in the early and middle 1980s. (See Appendix 1, item 1-3 for chronology of the 1985 Comprehensive Planning process as well the process engaged in under GMA to amend, or update the 1985 Comprehensive Plan).

The advice of the Benton County Prosecuting Attorney's office to the Planning Director in the mid-1980's was

that without adopted implementing ordinances the land use map and policies of the 1985 Comprehensive Plan could not be used as a standard for land use decisions. The Planning Director was advised to continue using the county's zoning district map and related zoning districts (ordinances) which predated the 1985 Comprehensive Plan. Actions taken by the Board of Commissioners to implement GMA will amend or replace these controls per current state planning law.

by having many of the public members who participated in the 1985 planning process also participate as Rural Planning Committee members in the preparation of this Plan.

Continuity Between the 1985 Plan and the GMA Plan

Though some of this Plan's amendments to the 1985 Comprehensive Plan in response to GMA are significant, they do not substantively alter the most important and fundamental elements of the 1985 Plan, i.e., the land use designations of its Land Use Map, and its Plan Policies. In addressing the requirements of GMA, county planning staff took the position that the policies and land use designations of the 1985 Plan were fundamentally sound and should be changed only where necessary to meet the requirements of GMA, or for update or improving clarity relative to changed circumstances.

Accordingly, for these fundamentals (the Land Use map and policies) there is direct continuity between the 1985 Plan and this Plan. The maintenance of this continuity was further assured

NATURAL RESOURCES CHAPTER 2

INTRODUCTION

This Chapter describes the physical and biological setting of the county as a whole, and for specific areas. It identifies in general terms how "opportunities and constraints" relate to land use characteristics. It identifies Critical Resources within the county, their "functions and values," and the current trends associated with regulatory protections for those resources. It presents the county's approach for protection of such resources.

NATURAL SETTING OF BENTON COUNTY

The natural setting of the Benton County typifies that of the larger Columbia Basin area. It is the product of seismic upheavals, volcanic eruptions, magmatic flows, glacial epochs and cataclysmic floods. The legacy of this history is the present geologic landscape: the basin of Hanford, productive soils on the flanks of anticlinal ridges, the Horse Heaven plateau, water resources of three major rivers, and the vertical columns and plugs of basaltic outcrops.

A thin layer of biology has adapted to the area's geologic base. The layer is relatively sparse and fragile on the dry uplands of shrub steppe and bunch grasses, but diverse and resilient along its reaches of river, tributaries, and creeks.

The climate, abundance of water, productivity of the soils, easy malleability of the landform, and location at the confluence of three major rivers make Benton County a very liveable place.

Opportunities and Constraints

The physical and biological environment of Benton County provides both "opportunities and constraints" to the use and enjoyment of the lands and resources base. Any given area of land within the county will have physical and biological features such as slopes, soil types, hydrology, geologic structure/stability, wind and sun exposure, etc., which will influence the range of potential uses which may enjoy success upon it.

It must be emphasized here that the words "opportunities" and "constraints" are not used herein as mutually exclusive opposites; if that were so the phrase would be opportunities or constraints. Instead they are seen as terms that convey the adaptability of lands and resources to categories of land use, which have definable attributes.

To use a human analogy: an athlete with a powerfully built short and stocky frame would have inherent "constraints" to success on the basketball court, or on a 10k race

course, but would have real "opportunities " for success on the rugby field or wrestling mat. In the same way, a moderately sloping, shallow soiled terrain may be a constraint to the construction of a non-sewered residential community, but a profitable opportunity for quality vineyards; similarly, riverine uplands in a complex of floodplain/floodway and wetlands offer constraints to all fixed developments, but provide unique opportunities for seasonal recreational use, low density residential use associated with agriculture, and indispensable opportunities for flood control, maintenance of water quality and supply, as well as biological diversity.

Climate

Benton County is located in the central part of the Columbia Basin, which has a landform surrounded by mountain ranges (see Map 2-0) that have a pronounced effect on the region's climate. The following are characteristics of the climate: (source National Weather Service)

Geomorphology and Weather

- The Cascade range to the west obstructs easterly flows of moist air into the basin;
- The Rocky Mountain Range and ranges in southern British Columbia protect the basin from the more severe winter storms;
- Occasionally an outbreak of severely cold weather will penetrate into the basin for damaging spring or fall freezes;

- Strong seasonal winds associated with rapidly moving weather systems.

Sunshine and Growing Season

- Growing season is approximately 185 days from mid-April to mid-October;
- Percent of possible sunshine each month is 20-30% in winter, 50-60% in spring, 80-85% in mid-summer;
- Number of clear days each month increases from about 5 in winter to 20 in summer.

Temperatures

- *Dry with mild winters and warm sunny summers, cool summer nights;*
- **Summer** temperatures in the warmest summer months can exceed 90 degrees from 26 to 77 days with nights dropping to 50's, day time temperatures can exceed 103' for about four days in two out of ten summers;
- **Winter** afternoon temperatures range from 35° to 45° with night time readings at 20° to 30°, minimum temperatures can be 6° or lower on four nights in two out of ten winters, afternoons remain below freezing on about 1/3rd of all January days;
- *It can get real cold. In 1949-50 night time winter temperatures were less than 0° on 18 nights, -15° or lower on 7 nights, and -23° on one night;*
- *Warm winters do occur, in 1957-58 lowest temperature was 19 above zero;*
- *Number of days with max. temperatures below freezing ranges from 2 to 46.*

Moisture and Precipitation

- Mean annual precipitation is from 5 to 10 inches, with from 10 to 15 inches in discrete areas on the Horse Heaven and Rattlesnake Hills (see Precipitation Map 2-1).
- Approximately 70 percent of precipitation occurs between November and April averaging one inch per month as either rain or snow in mid winter months;
- There can be no rain from 3 to 6 weeks at a time in mid summer.

Storms and Weather Events

- Thunderstorms occur on 10 to 15 days between March and October accompanied by usually light rainfall, but hail and heavy showers can occur;
- Winter season snowfall has ranged from less than 1/2 inch (1957-58) to 44 inches (1915-16), accumulations have ranged from 4 inches to 21 inches (Feb. 1916);
- Snow cover can melt rapidly by rain or warm Chinook winds;
- Severe winter and spring flooding of the lower Yakima River can occur as a result of snow melt and/or river icing conditions.

Topography

The topography of Benton County is characterized by basin and valley lowlands, separated by the upland plateaus and ridges of the Yakima Folds Belt. From north to south, the major topographic features of Benton County are as follows:

The Pasco Basin's basal plain comprises most of what is now the Hanford Site. Topography is flat to hilly, with elevation ranging from around 300 feet in the east to near 1,000 at the foot of Rattlesnake Mountain.

The Rattlesnake Ridge segment of the Yakima Folds separates the Pasco Basin from the Yakima Valley. The ridge extends in a southeasterly-northwesterly alignment from its beginning in eastern Yakima County where it is known as the Rattlesnake Hills to a point where it merges with the Horse Heaven Hills south of Finley. Rattlesnake Ridge is discontinuous through the middle of the County where it has been perforated by the Yakima River (resulting in Red, Candy, and Badger Mountains); and contains the highest unforested "peak" in Washington State: Rattlesnake Mountain. At 3,629 feet, Rattlesnake Mountain is also the highest point in Benton County.

The Yakima River bisects the County into north and south portions, and is responsible for much of the varied topography of central Benton County. The river has been cutting the valley sediments in this syncline that separates Rattlesnake Ridge from the Horse Heaven Hills for tens of thousands of years. The present valley floor ranges from about 300 feet above sea level at its confluence with the Columbia River at the City of Richland, to around 700 feet at the Yakima County line.

The Horse Heaven Hills plateau constitutes the southern half of Benton County. The elevations of the Horse Heaven Hills rise from the County's low point of 265 feet near Crow Butte to 1,600 to 2,200 feet along the ridgeline which overlooks the Yakima Valley and the Badger Coulee. The Horse Heaven Hills are unique among the Yakima Folds: it is the southern-most and longest running ridge in the system at some 60 miles; it is the most severely "lop-sided" of the ridges, becoming more of a monocline than an anticline in areas; and it takes a definitive, 90° turn to the south at Kiona which is at the center of the County. The ridgeline is highest at Jump Off Joe Butte south of Kennewick, and the plateau slides southward toward the Columbia River.

WATER RESOURCES

The purpose of water resources guiding principles, goals and policies in this plan are to guide the governmental entity of Benton County as it interacts with the Federal government, Washington State, external local government agencies and residents throughout Benton County. The principles and policies herein will provide a guide for Benton County elected officials and staff in addressing water and water-related responsibilities and issues affecting Benton County.

Benton County is located where the Snake and Yakima Rivers flow into the Columbia. Vast quantities of water, approximately 191,000 cubic feet per second or over 100 billion gallons

each day, flow past our county on its way to the Pacific Ocean. This river system serves multiple uses, including power generation, fisheries, endangered species habitat, agriculture, and recreation. The system is the center of the culture of both native and non-native Americans and while recognizing the connectivity with the Pacific Northwest, the purpose of the following policies is to focus on the needs of Benton County.

Water is one of Benton County's most valuable resources. It provides benefit for people and for recreational, residential, commercial, industrial, and agricultural growth. It also provides benefits for our natural environment and aesthetic amenities that contribute to the ambiance and lifestyle of the area. Water is a limited resource under numerous competing and changing demands, but improved management of the water resource system allows for managed growth.

It is the intent of Benton County to protect the quantity and quality of this resource for the many uses that make Benton County a desirable place to live, now and in the future. The following principles and policies provide fundamentals for the guidance of Benton County water resource management.

GUIDING PRINCIPALS

Following are the guiding principles and beliefs the Commissioners used when developing the water policies.

A. Benton County supports and

- promotes sustainable water resources management. Sustainable water resource management will allow for the preservation of current economies, population growth with improved quality of life, future economic expansion and diversification, all while protecting the quality and quantity of water necessary to support and enhance native fish and wildlife.
- B. Water resources should be used to promote economic and social well being in concert with reasonable environmental objectives. There must exist a realistic balance among water use benefits and economic costs.
 - C. Even though limited in some geographical areas, water resources physically exist within Benton County to meet current and future needs. Innovative strategies are required to allow beneficial use of these waters. Benton County will focus on improving water resource management at all jurisdictional levels by supporting the efforts of municipal and special purpose governments within Benton County and by promoting a legislative agenda at the federal and state level.
 - D. To promote the best interests of the citizen's of Benton County, intervening in state and federal decision-making processes may be required. This intervention may include policy, planning, administrative, and legal processes.
 - E. Benton County will support sustainable water resource management in rural and municipal areas. In unincorporated areas Benton County will take on a leadership role. Benton County will work with municipalities to develop joint standards in unincorporated Urban Growth Areas.
 - F. A water right is a property right.
 - G. The development of federal and state water regulations should be developed in full consultation with local governments.
 - H. Benton County supports securing long-term, sustainable water supplies sufficient to realize the build out of the land uses designated in its Comprehensive Plan, including its Hanford Comprehensive Land Use Plan.
 - I. Benton County will maintain a good working relationship with water users upstream and downstream from Benton County.
- Water resources goals and policies are found in Chapter 3.

Soil Resources

The soils in Benton County are generally suitable for both agriculture and structural development, with localized areas of constraint relating to slope, geo-hydrology or pockets of sandy soils and fines. Soils are very susceptible to wind and water erosion once stripped of their natural cover. However, in undisturbed condition the indigenous shrub steppe and bunch grass vegetative cover is adapted to hold basin soils in place. When

stripped of natural cover, prevention of erosion requires the application of deliberate and aggressive management techniques.

Agricultural Soils

Generally, but with some notable localized exceptions, the addition of water and fertilizer to soils anywhere in Benton County will result in productive agriculture. The principal exceptions are on steep erosive slopes, in pockets of very sandy soils, or where near surface basalt formations are accompanied by thin soils and poor hydrologic conditions.

Map 2-2 is a generalized depiction of the soils types and their locations within Benton County. Appendix 2-1 contains a textual description of the eight soil associations shown on Map 2-2. The descriptions are from the 1971 Soil Conservation Service survey (now the Natural Resources Conservation Service NRCS), and are therefore somewhat dated, especially as regards the use described for each soil association. For example, much of the Hazel-Quincy-Burbank association is described as range-land in 1971 and 1985, but has since been converted to irrigated cropland and orchard.

Soil Construction Limitations

With the above-mentioned localized exceptions the soils within Benton County do not apply significant constraints to most types of development. The NRCS has developed soil ratings that indicate the potential degree of limitations for different types of development on

different soil types. For example, a particular soil type might be rated as having slight, moderate, or severe limitations for the development of roads or dwellings. A variety of criteria are used in making such determinations, including such factors as depth to bedrock, shrink-swell potential, permeability, slope, etc.

It should be noted that even a "severe" rating would not necessarily mean that constructions would not be possible. Rather, it means that the potential limitation should be recognized, and that the construction techniques employed may have to take the special soil conditions into consideration. In all cases, NRCS emphasizes that on-site inspection or soil survey would be necessary before it can be determined for certain whether or not such soil characteristics exists at a specific site.

The following definitions from the Guide for Interpreting Engineering Uses for Soils (SCS, 1972), describes the SCS soil ratings:

Slight soil limitation is the rating given soils that have properties favorable for the rated use. The degree of limitation is minor and can be overcome easily. Good performance and low maintenance can be expected.

Moderate soil limitation is the rating given soils that have properties moderately favorable for the rated use. This degree of limitation can be overcome or modified by special planning, design or maintenance. During part of the year the

performance of the structure or other planned use is somewhat less desirable than with the soils rated slight. Some soils rated moderate require treatment, such as artificial drainage, runoff control to reduce erosion, extended sewage absorption fields, extra excavation, or some modification of certain features through manipulation of the soil. For those soils, modification is needed for those construction plans generally used for soils of slight limitation. Modification may include special foundations, extra reinforcement of structures, sump pumps, and the like.

Severe soil limitation is the rating assigned to soils that have one or more properties unfavorable for the rated use, such as steep slopes, bedrock near the surface, flooding hazard, high shrink-swell potential, a seasonal high water table, or low bearing strength. This degree of limitation generally requires major soil reclamation, special design, or intensive maintenance. Some of these soils, however, can be improved by reducing or removing the soil feature that limits use, but in most situations it is difficult and costly to alter the soil or to design a structure so as to compensate for a severe degree of limitation.

Due to the number and complexity of soil types involved, construction limitations have not been synthesized into a Countywide map. The information is available by soil type and is an important tool in the planning process. As stated in the

Guide for Interpreting Engineering Uses of Soils:

"In rating soils for non-farm uses, it is important to remember that engineers and others can modify natural soil features or can design or adjust the plans of a structure to compensate for most degrees of limitation. Most of these practices, however, are costly. The owner must be willing to live with a few limitations, providing the use does not violate community codes or regulations. The final decision in selecting a site for a particular use is a personal one and generally involves weighing the costs for site preparation and maintenance."

For the purposes of structural development, soil limitations are addressed in the County's Critical Areas Protection Ordinance (BCC Title 15.35). The ordinance requires that developments avoid potentially unstable areas, or adequately assess the degree of instability and locate, design and engineer the development to address the level of hazard.

Mineral Resources

Existing Conditions

In Benton County, mineral resources are "aggregates," i.e., sand and gravel deposits and crushed quarry rock. These resources are second in importance to agricultural land as a "natural resource land" in Benton County.

"Mineral resource lands" in Benton County are land areas with commercially viable mineral resource

deposits. Mineral Resource lands are required to be protected under provisions of GMA. The resources from these lands are typically utilized for building and road construction. Mineral lands represent a particularly important local resource opportunity because the cost effectiveness of any particular project requiring such materials is greatly affected by the transport distance from its source to the project site. The presence of these resources in the county at scattered locations in every region is an economic benefit.

The major use of aggregate resources is for urban and rural residential developments. Construction of both dwellings and road networks consumes substantial amounts of sand and gravel as well as quarried and crushed basalt.

Map 2-3, indicates the locations of known Mineral Resource deposits within Benton County. State planning law requires that such mineral resources of long-term commercial significance be protected from having their future exploitation prejudiced by adjacent developments that may be incompatible with the mining and processing activities associated with these resources on the site.

Constraints to the exploitation of these resources usually arise when incompatible land uses (e.g., residential or commercial) on adjacent lands have surrounded the mineral site, or when the site is in a

biologically sensitive area.

Sand and Gravel: Sand and gravel deposits are in high demand and limited supply. According to documentation for the County's 1985 Comprehensive Plan, the major high-grade sand and gravel deposits are found in the following general locations:

- in south Kennewick, south of 27th extending east as far as the south Finley area;
- in the east Kennewick, east of Oak at the Benton-Franklin Fairgrounds;
- in west Kennewick south and west of Clearwater;
- along the north and south sides of Highway 12 extending intermittently between Prosser and Benton City;
- at the southern boundary of the County along and in the Columbia River.

The importance of sand and gravel to the fishery resources of the Columbia River precludes the extensive use of this source for aggregate supplies. All of these general sites are producers of the kind of high-grade sand and gravel that is needed for the manufacture of cement and cement products used in the construction industry.

Crushed Rock: Unlike sand and gravel, quarry rock is in ample supply but not all is high-grade material or is close enough to ground surface to economically extract. Much of the quarry rock extracted is crushed for

use in street and road construction. The major high-grade basalt deposits are:

- in the north slope of the Horse Heaven Hills south of Finley in the vicinity of Finley Road and Nine Canyon;
- in the Horse Heaven Hills plateau in the vicinity of Sellards Road southwest of Prosser;
- in the vicinity of Four-mile Canyon north of Plymouth;
- south of Badger Canyon in the Horse Heaven Hills Plateau on Clodfelter Road; and,
- south of Prosser in the north slope of the Horse Heaven Hills east of the Painted Hills housing development.

Current Trends

Though the Hanford employment peak in the early 1990s has passed, the current trend has shown that high levels of use of these resources will likely continue, with the Hanford project activity related to cleanup, and other construction (off the Hanford Site).

Future Considerations

The principle considerations for the future use of these resources are: i) the identification of additional sites; and ii) providing the owners of known commercially viable sites the opportunity to apply the provisions of the County's Mineral Resources Protection Ordinance (BCC 15.10.45) to the sites. Such protection can prevent the sites from having their future exploitation compromised by

the location of incompatible land uses on adjacent lands.

CRITICAL RESOURCES

Existing Conditions

In 1991, State planning law was amended to require all cities and counties in Washington state to designate and protect Critical Resources by regulation.

Generally, Critical Resources are land areas with biological or physical features which provide functions and values essential to the public health, safety and welfare.

Critical Resources are found on the landscape throughout the county, in the main-stems, lowlands, tributary creeks, floodways and floodplains, and wetlands of the Yakima and Columbia river systems; on and within cliffs, talus slopes, and canyons; freshwater springs, seeps, wetlands; and perched waters associated with basalt outcrops.

Many critical resources are also primary habitats of species listed as threatened, endangered, sensitive, or candidate by the federal or state government. Maps 2-4 through 2-6 depict the general location of Critical Resource Areas in Benton County.

State Planning Law refers to five Critical Resources specifically as:

- Critical Aquifer Protection Areas
- Frequently Flooded Areas
- Geologically Hazardous Areas
- Wetlands

- Fish and Wildlife Conservation Areas.

Benton County's **Critical Resources Protection Ordinance**, adopted in 1994 works in conjunction with Goals 28 through 38 and related policies (Chapter 3), to protect Critical Resources. The ordinance has specific sections for each of the five resources, except that the main-stem rivers and their tributaries and creeks also have a section; this is appropriate given that the riverine environment in the Yakima Basin is the "core" of its Fish and Wildlife Conservation Areas.

Critical Resources Data Base: Though these resources are generally depicted on maps within this plan document, they are more specifically depicted on a database of maps, aerial photographs and digital images housed in the County's Planning Department.

Critical Resources Are Generally Niche Environments: Critical Resources are created by and occupy landscapes that are marginally useable for other than critical resource functions. These landscapes are generally geologically hazardous and/or frequently flooded areas. Generally several Critical Resources occupy the same location. As an example, within the Basin's desert environment, the Floodway and Floodplains of rivers are also the locations of principle Wetlands, major components of Fish and Wildlife Conservation Areas, and Aquifer Recharge Areas. Similarly, steep

slopes, unstable ground and basalt formations (i.e., Geologically Hazardous Areas) are also principal Fish and Wildlife Conservation Areas because they provide habitats essential in the life cycles of birds of prey.

Flood Hazards

Existing Condition

There are several types of landforms in Benton County that are subject to flood hazards. Most notably, the low lying lands along the Yakima River flood significantly under varying winter and spring conditions. However significant flooding and flood damage can occur off the river as well in the Yakima's tributary streams, "dry" canyons and other natural drainage features throughout the county which are susceptible to "flash floods", or heavy run-off from snow melt.

The size (magnitude) of a flood is described in terms of the likelihood of a flood *that size* occurring in any given year, or to put it another way, historically a flood of a certain size has occurred every so many years. For example, the likelihood of a 25-year flood in any year is one in 25; the likelihood of a 100-year flood, one in 100. This does not mean that once a 100-year flood occurs, another will not happen for 100 years. It is not unheard of to have two 100-year floods in one year, or to have two or more in a 10 or 25-year period.

Though this method of "sizing" floods is useful as a means of short-term measurement, it is only a tool and has

its limitations. For example, mankind has kept flood records in this region for only 100 to 150 years, therefore historical knowledge from direct experience is limited; also watershed conditions are changing constantly, and in the direction of more run-off per acre of the upper watershed, not less; and local and regional climates are determined by cyclic global oceanic conditions which are little understood at present.

Flood areas pose constraints to development because construction within them can put at risk both life and property, and require frequent and recurring expenditures of public funds for the repair of public and private property.

Floodways and Floodplains within the County are shown on the Federal Emergency Management Act (FEMA) flood maps, and on Map 2-4 of this chapter (for known flash flood areas in canyons and natural drainage ways). The flood areas on the FEMA maps indicate the magnitude of floods.

The most damaging floods in Benton County are associated with the Yakima River. This is because Benton County is the most downstream county in the entire Yakima River drainage, which contains 6,155 sq. miles, or four million acres. Annually, the snow pack on the east side of the Cascade Range melts and passes through Benton County within a river channel ("floodway") that is in some places less than 60 feet across. Depending upon the size of the snow

pack, the rate and timing of its melt, and the ground conditions within the water shed, the lower Yakima River floodway may or may not be sufficient to carry the flow. Where it is insufficient, water leaves the floodway and moves overland onto the floodplain.

If the snow pack melts gradually over the spring months the river channel may be full, but not flood. However, if a warm Chinook wind melts a portion of the snow pack in January, while the river and ground in Benton County are still frozen, the melt water will reach its ice clogged channel and leave the river to spread overland; or if warm temperatures come suddenly in early spring the entire watershed may thaw simultaneously and inundate the lower river valley.

The areas along the lower Yakima in Benton County especially vulnerable to flooding annually extend from Benton City downstream through West Richland, to the delta where the Yakima empties into the Columbia River. This area is characterized by low-lying river bottom lands and ancient river channels which are historically the river's natural floodway and flood plain.

Current Trends

The maximum known flood of the Yakima River occurred in December of 1933 with a depth of approximately 9.5 feet above the top of the riverbank at Benton City, its estimated recurrence interval is approximately 170 years. Other recent major floods and their recurrence intervals are 1948

(33 year), 1974 (36 year), and most recently, the flood of February 1996, when the river crested at 22 ft, which may have been a 100 year flood event. Major public and private residential property damage occurred between Benton City and Richland in the flood of 1996.

At present, there are limited flood control protection devices in operation or planned in the lower Yakima. Levees exist on both banks of the Yakima River at its mouth. Additionally, a levee has been constructed on the south bank from the Van Giesen Bridge at West Richland downstream for approximately one mile.

The likely trend is for the frequency and magnitude of floods within the lower reaches of the Yakima River to increase as the upper water shed continues to urbanize and its natural storage capacity is reduced by logging, agriculture, and stream modification.

Flood Management

One of the products of the Federal Emergency Management Agency's (FEMA) flood insurance program has been the mapping of flood hazard areas throughout the nation. The primary area of concern in this effort has been the 100-year flood hazard area. The 100-year flood has been adopted by FEMA as the base flood for purposes of flood plain management measures.

Encroachment on flood plains, such as placing artificial fill, reduces the

flood-carrying capacity and increases flood heights, thus expanding the area susceptible to flooding and increasing flood hazards in areas beyond the encroachment itself. One aspect of flood plain management involves balancing the economic gain from flood plain development against the resulting increase in flood hazard. For purposes of the National Flood Insurance Program, the concept of a floodway is used as a tool to assist local communities in this aspect of flood plain management. Under this concept, the area of the 100-year flood is divided into a "floodway" and a floodway fringe. The floodway is the channel of a river, plus any adjacent flood plain areas that must be kept free of encroachment in order that the 100-year flood be carried without substantial increases in flood heights. As a minimum standard, the Federal Insurance Administration limits such increases in flood heights to one foot, provided that hazardous velocities are not produced.

The area between the floodway and the boundary of the 100-year flood is termed the "floodway fringe". The floodway fringe thus encompasses the portion of the flood plain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood more than one foot at any point.

Future Considerations

The approach Benton County has taken to new residential development in the Floodway is that none is permitted, and that what exists now can be replaced only within the same

footprint, except that it must be elevated above predictable flood levels.

The approach on the 100-year Floodplain is to:

- update and digitize the flood maps from data taken after the most recent major floods;
- to initiate flood management studies;
- to keep densities low and apply site planning standards which influence the clustering of principal structures on the highest ground; and
- to accommodate and facilitate the "non-destructive" movement of flood water on the floodplain by appropriate engineering of culverts, ditches and public and private roads.

Geologic Hazards

Existing Conditions

Most of the geologic hazards within Benton County are associated with either basalt outcroppings or steep and unstable slopes. The latter are of principal concern as they are associated with landslides, slumps, unstable soils and severe erosion.

Map 2-5 shows there are two major areas of steep slopes (greater than 15 percent) in addition to numerous smaller areas. The two major areas are:

- The north and northeast slopes of the plateau of Horse Heaven Hills that extend across the midsection of the County from the Yakima

County line west of Prosser to the Columbia River southeast of the City of Kennewick.

- The Rattlesnake Hills, which run in a northwest-southeasterly alignment along the southwestern boundary of the Hanford Site, and extensions of which (e.g. Red Mountain, Candy Mountain, and Badger Mountain) extend to the western fringes of the City of Kennewick.

Steep sloped areas have the potential for mass movement and slope erosion hazards. Mass movement is the movement of rock or soil material down slope in response to gravity (hillsides). Slope erosion is the removal of soil or weathered bedrock that occurs as a result of sheet wash (no conspicuous channels), rill erosion (numerous small rivulets) or gully erosion (larger, more nearly permanent channels).

Steep slopes and unstable geologic structures pose a constraint to development because developments associated with them require more expensive design and engineering work. Additionally, a much greater land area per structure is necessary on steep slopes. Left in their undeveloped condition, the opportunities provided by these resources range from aesthetic (visual), to open space (for recreation), and for basalt outcroppings and steep canyons important habitats (nesting areas for birds of prey).

Slopes of fifty percent can be found in

both the Rattlesnake and Horse Heaven Hills. Due to the unique problems inherent in development in steeply sloping areas, special care must be exercised in the planning and development of such areas. The Comprehensive Plans' Land Use Map identifies lower rural densities for steeply sloping areas and the Critical Areas Protection Ordinance applies performance standards to development within these areas. While not prohibiting development, the ordinance does require that the nature and severity of the hazard be identified and that the siting, design and engineering for development directly respond to the identified hazards, so that long term structural integrity can be reasonably assured.

Benton County is located within Seismic Zone II according to the Uniform Building Code Seismic Risk Map. This indicates that earthquakes up to Intensity VII on the Modified Mercalli (MM) Scale can be expected to occur in the county. This would correspond with a 5.5-6.1 event on the Richter Scale. A Table in Appendix 2-2 provides a description of the range of earthquake intensities. The table lends perspective to the degree of risk found in Benton County. Seismic hazards are not seen as a significant risk to development in Benton County.

Current Trends

Typically, as land use intensifies over the landscape with agriculture and residential developments especially competing for ground, and as higher income households target view lots on slopes and ridges, new residential

developments will increasingly occupy the more geologically difficult terrain. These are the areas which present problems associated with geologic hazards.

Future Considerations

The approach to development in Geologically Hazardous areas is to:

- apply an overall rural density which reflects the geologic constraints of the land;
- encourage clustered developments so that as much of the the allowable density as possible on "unbuildable areas" of a parcel can be transferred to the "buildable" areas;
- require accurate technical characterization of site conditions; and
- require the application of design and engineering measures tailored to site conditions in order to assure long term structural integrity both on and off-site, and to protect public health, safety, and welfare.

Critical Aquifer Recharge Areas

Critical Aquifer recharge areas within Benton County are those areas where surface waters have "connectivity" to the underlying unconfined aquifer. Protection of the water quality within unconfined aquifers is a public health issue as the aquifer is used as a potable water supply. In many locations it has direct connectivity to river and near shore surface waters that are also used for wading, swimming, fishing, stock watering and other uses where human contact

occurs.

Accurate information on groundwater resources in Benton County is not currently available. For example, locations of groundwater recharge areas off the riverine corridor are not definitively known. Absent definitive data on groundwater resources, this plan, and the Critical Areas Protection Ordinance focus the issue of aquifer protection in areas of known or suspected surface/ground-water connectivity. These areas are as follows:

- within the riverine corridor;
- on the floodplain and in wetlands;
- in other areas of known surface hydrology per information gathered by the Benton Franklin Health District;
- along the unlined main canals of local irrigation districts.

Hanford critical aquifers: In order to prevent contamination of waters having connectivity to unconfined aquifers, plan goals and policies and specific provisions within the Critical Areas Protection Ordinance apply performance standards to certain types of development within and adjacent to the above listed areas.

Current Trends

Absent accurate groundwater studies and characterization, and the identification of recharge areas, (outside of Hanford) little can be said relative to trends for greater Benton County specifically.

Regionally however, though the

picture is complex, the trend is one of declining ground water levels in lower aquifers, and declining water quality in upper aquifers. This regional phenomena is largely attributable to expansions in the amount of acreage under irrigated agricultural production: water from deeper aquifers is withdrawn, augmented with agricultural chemicals, and applied to crops, where it then percolates through the soil column to low lying upper aquifers. This is occurring within portions of the Pasco Basin (which extends westerly into Benton County from the east and underlies the Finley plain, Badger Canyon and the Yakima River westerly to the Red Mountain anticline). As the Yakima Basin is heavily irrigated, the trend is also likely within the Yakima Basin lying to the west of Red Mountain.

Nitrate contaminations occur principally in upper aquifer wells drilled in the lower lying areas of the county. The spatial correlation between elevated concentrations of nitrates in groundwater and irrigated croplands indicates that the major source of contamination is applied fertilizers for irrigated crops.

A complicating factor in the nitrate picture is evidence that suggests that currently, seepage from irrigation district canals actually serves to dilute what would otherwise be higher nitrate levels within groundwater (U.S. Geological Survey, Water Resources Investigations Report 93-4060). As federal and state sponsored conservation projects reduce or eliminate this seepage, nitrate

concentrations in the upper aquifer may actually rise.

Future Considerations

For reasons relating to a broader range of issues than groundwater contamination, the groundwater resources within Benton County east of the Pasco Basin must be characterized. This should occur as part of the new state and local initiative to transfer management responsibilities for entire watersheds to local jurisdictions within them.

Such characterizations need to include:

- identification of hydro-geologic units;
- connectivity, including with surface waters;
- potential yields versus demand;
- recharge areas and water quality.

As this information is accumulated, provisions relating to critical aquifer recharge areas can be amended to local plans and their implementing ordinances.

Wetlands

Existing Conditions

Wetlands are wet environments based upon saturated "hydric" soils that support plant life that can exist only in those conditions. In contrast to rivers, water conditions in wetlands are still or stagnant. In contrast to pond or lake environments, water depths are shallow, which means that sunlight penetrates through the water column to depth, which means heat, light and organic matter create conditions rich and suitable for a unique range of

vertebrate and invertebrate activity. Because wetlands and their surrounding area are discrete concentrations of extreme conditions and transition zones, they support a rich diversity of plant and animal life. Relative to dryland, or rivers and ponds, a wetland and its surrounding transition zone promotes heightened biological diversity and uniqueness.

Wetlands also function to purify water.

Since they are often connected with ground and surface waters, this is a beneficial function; however, the connection to groundwater is also a pathway for the movement of contaminants into groundwater supplies should the waters of the wetland itself be contaminated.

Natural wetlands: Despite the arid character of the Benton County landscape, wetlands can be found throughout. Many of these wetlands naturally occur from the "daylighting" and collection of waters from basalt formations, springs, seeps, and within canyons on the land surface. Though there are significant natural wetlands associated with basalt formations upland of the river corridors and tributary creeks, the major natural wetlands in the county are found on the low lying floodplains and ancient abandoned floodways of the lower Yakima River. A good example of which is the 2000 -3000 acres of the lower river north and west of the "Twin Bridges" near West Richland.

Artificial wetlands: **Significant** acreage's of wetland within the

county are the product of irrigation water "return flows" which are waters freely moving down slope through the landform after having either leaked through the bottom of an irrigation ditch, or percolated through the soil column after application to crops. These waters collect in low spots and may create wetland conditions in those areas.

Natural/artificial wetlands: Since both natural groundwater, and irrigation water return flows will seek the same low places, many wetlands on the landscape are a product of both water sources. Examples of this are: wetlands along the Amon Wasteway; at the base of Badger Canyon on the south side of Badger Rd; and the perched waters on top of the shallow basalt north and northwest of Prosser, and above Finley.

Current Trends

The current regulatory trend is for the protection of wetlands as resources vital to sustaining biological productivity and water quality. While the regulatory effort to protect natural wetlands, which is decades old at this point, has been only marginally successful, there is an emerging technical trend to construct artificial wetlands as purifiers of industrial and agricultural waste waters.

Within Benton County, the most noticeable trend is the gradual loss of artificial wetlands resulting from water conservation projects by irrigation districts, and more efficient irrigation practices by farmers. Though there is no clear evidence of it to date, if the

result of these efforts is to leave more water in the rivers as instream flow, then the natural wetlands along the riverine corridor should benefit.

Future Considerations

By both policy and ordinance, the Benton County Comprehensive Plan protects natural wetlands from non-agricultural developments. It protects previously unfarmed wetlands even from new agriculture. It is expected that the database for wetlands within the county will be improved over time, and that such resources will be protected consistent with the requirements of state law and local interest.

Rivers and Creeks

Existing Conditions

The main-stems of both the Columbia and Yakima Rivers and their tributaries and creeks are the most vital and important "critical resources" within the county. In fact, they are directly related, and functionally essential to all the other state identified "critical resources except for Geologically Hazardous Areas. Within the central basin's desert environment, it is estimated that up to 75 percent of indigenous wildlife species depend upon these narrow riverine corridors for cover and other sustenance essential to their life cycle.

Yakima River: the current condition of the Yakima River, especially in its lower reaches in Benton County is degraded and poor: water quality is poor as a result of low summer flows, non-point source pollution, and high water

temperatures, all of which are functionally related. This condition jeopardizes both the native and anadromous fisheries, it threatens the long term survival of the agricultural economy, reduces recreational opportunities overall, lowers real estate values of river front property, and limits the utility of the river for municipal and industrial uses.

In 1994, the congress passed the Yakima River Basin Water Enhancement law in response to several severe water short years and disagreements over water entitlements. The law authorizes the expenditure of \$150 million in local, state, and federal funds to implement conservation efforts to save a maximum of 110,000 acre-feet of water to be used for fish and wildlife needs, and 55,000 acre-feet of saved water for irrigation needs. As of the writing of this document, a draft conservation plan is nearing availability for public review.

The current condition of the Columbia is good relative to water quality. However a major overriding issue for both the Columbia and the Yakima is the survival of salmon and steelhead. These fisheries are in decline. The principal reasons for declines are:

- water quality and habitat conditions within watersheds such as the Yakima;
- hydroelectric dams and pools on the Columbia which kill out-migrating "smolts;"
- declining water quality conditions

in the estuaries of the lower Columbia where juvenile salmon "acclimate" to salt water conditions before migrating out to the open ocean;

- ocean, and fishing pressure on the high seas around the globe, and within the river system itself when the fish return to spawn.

An increasing number of the anadromous species within the river system are being list as threatened, endangered, or candidate under the Federal Endangered Species Act (ESA).

Current Trends

Current trends regarding protection of rivers and creeks are divergent. On the one hand, regulatory requirements such as GMA and federal and state water quality laws require protection of these resources. Recent initiatives by local governments within discrete watersheds (e.g., the Yakima) to regionalize watershed planning at the local (counties) level have been met by new state legislation which makes this possible. There is a recognition that the problems are essentially "watershed-wide," cumulative, and much more complex than can be dealt with by the state unilaterally, or individual jurisdictions, even if they "coordinate" efforts. What is required is an integrated watershed plan covering all aspects of water and land use potentially impactive of water quantity and quality.

Simultaneously, declining fish species indicates that improvements to water

quantity and quality are not occurring, or if they are, not at a sufficient pace to reverse fishery declines.

Future Considerations

Within Benton County, the adopted critical area ordinance provides some protections against adverse impacts from some developments. It is anticipated that the other counties and cities within the watershed will do similarly per the requirements of GMA.

However, as important as these efforts are, they do not address the "macro" issues affecting water supply and quality within the basin. These issues are: agricultural and logging practices affecting erosion and base storage; conservation and demand/supply and artificial storage; and seasonal flows.

Relative to these macro issues, the Counties within the Yakima Watershed (Benton, Yakima and Kittitas) are in the process of working with the Yakima Watershed Council to prepare, adopt and implement a Yakima Watershed Management Plan. The counties have formed the Tri-County Water Resources Agency to work with the Council and help implement the watershed plan.

Fish And Wildlife Conservation Areas

Existing Conditions

In March of 1982, the Lower Valley Columbia Basin Audubon Society completed a study entitled ***Ecologically Sensitive Areas Of Benton County***, one of the primary purposes of which was to identify critical fish

and wildlife habitat in the county. The study was completed with the assistance of some 30 individuals, agencies, and organizations outside of the local Audubon Society, in addition to members of that organization with significant expertise of their own. Contributors included personnel from such agencies as the Washington Dept. of Game (now Washington Dept. of Fish and Wildlife), and the U.S. Fish and Wildlife Service. In accordance with the county's intent to protect its environmental quality, the portions of the study that identified and described critical fish and wildlife habitats were adopted as a component of the 1985 Comprehensive Plan. Since the maps and data within the study identify the general locations of those resources consistent with a more recent mapping accomplished as part of the new (1991) state planning law requirement, the maps, data and text of the study are also incorporated by reference into this plan.

Hanford: In 1996, Benton County assembled data constituting a biological resources inventory of the Hanford Site in order to designate Critical Areas as an early step in the Hanford Land Use Planning process. In 1997, the Benton County Planning Commission designated Fish and Wildlife Conservation Areas on the Hanford Site as part of a site-wide Comprehensive Planning Program for Hanford land. The Planning Commissions designations are awaiting hearing and action by the Board of Commissioners.

Barker Ranch

The 1982 study Ecologically Sensitive Areas of Benton County, prepared by a consortium of interests including scientific and ecology experts as well as agency scientists, Audubon representatives, and local and state and federal government representatives, identified the area of the Barker Ranch site as critical fish and wildlife habitats that should be protected from intensive use because of its unique fish and wildlife habitat and aquatic characteristics in the midst of an otherwise arid environment, and for its botanical inventory.

The Ranch is approximately 2400 acres of alluvial and glacial floodway and floodplain with extensive riparian shoreline, and wetlands that are a product of variously applied water, upwelling from subsurface hydrology, and seasonal river flooding. The ranch is located within the Yakima River migration zone primarily on the north side of the river extending up and down river from the Twin Bridges and the intersection of Snively and Grosscup Roads. The north boundary is the Horn Rapids Ditch, the south boundary is the ordinary high water line at the north side of the Yakima River. The site is in some measure an upriver extension of the Yakima River delta system.

The early owners of the ranch obtained a seasonal irrigation water right in 1899 with a point of withdrawal on the Yakima River at the Wannawish (Horn Rapids) dam. Historically a

system of ditches, canals, gates and culverts distributed the water throughout the ranch. For a hundred years prior to 1994 the land was grazed and cropped at varying intensities.

In the late 1990s the owners of the Ranch initiated a Conservation Plan for the ranch under the auspices and funding from the USDA-National Reserve Conservation Program's Wetland Reserve Plan (WRP). The Plan was developed with the landowner and assistance from Washington State University, Ducks Unlimited, and the Washington Department of Fish and Wildlife. The emphasis of the WRP is to protect, restore, and enhance wetland ecosystems to provide habitat for wildlife and migratory birds including threatened and endangered species. In order to provide water for the wetlands throughout the migratory bird season, in 1998 the State Department of Ecology granted a request to change the water right from seasonal to annual.

The Barker Ranch owners received a payment in exchange for their landowner rights to develop that portion of the property that is subject to the conservation easement. The exchange is the basis of the WRP easement, and gives control of management decisions to the United States government. Under the agreement the landowners will continue to manage the property for waterfowl hunting on the easement. The Yakama Tribe has used the area

for thousands of years and currently members of the Yakama Nation harvest soft-stemmed bulrush to make tule mats for log houses and other goods.

Today, under the federal Wetland Reserve Program (WRP) approximately 2000 acres of the site is under permanent conservation easement, with waterfowl and habitat production the primary management objectives. Limited grazing continues under a grazing management plan that is wildlife and habitat driven rather than cattle driven. The antiquated water distribution system that is used to supply a series of open water habitats with vegetated edges and variable water depths in wetlands for annual water fowl migrations is being renovated and improved with federal funds.

The management of the ranch under the WRP for habitat enhancement and migratory bird habitats/hunting has significant benefits to the lower Yakima River ecology. The ranch provides a major reach of shoreline wherein the natural riverine functions are intact. The forested and open wetlands and upland habitat are a biological oasis and a source of species out-migration into other areas of the lower river, where the shoreline and riverine functions are declining from a steady expansion of agriculture, rural gentrification of the shoreline, and urban expansion. In addition to its irreplaceable value as a wildlife habitat in the lower river, photographic and water quality

sampling evidence indicates that even during the late summer Yakima River flows, when low flows contribute to water temperatures in the main-stem that approach levels lethal to salmonids, the surface and hyporeic waters flowing into the river from the ranch provide a source of cool water that creates refugia and niche habitats essential for salmonid survival.

Benton County's **Critical Areas Protection Ordinance** sets forth procedures for development review and standards for siting and constructing new developments in a manner which protects fish and wildlife conservation areas, (including wetlands that are not a product of either conveyed or applied irrigation waters). The ordinance also contains procedures and mitigating impacts for state and federally listed species which have a "primary association" with lands located outside of those shown on Map 2-6. An inventory of currently "listed" species for Benton County is shown in Appendix 2-4.

Functions and Values of Critical Resources: The state legislature required the protection of Critical Areas because they are generally part of natural systems which cross-jurisdictional boundaries and are therefore of statewide interest.

The legislative requirement to protect Critical Resources is carried out by the county's adopted Critical Areas Protection Ordinance (**BCC Title 15** adopted in 1994). The basic approach of the ordinance is to apply

performance standards based on Best Available Science to development activities in order to protect the "functions and values" of these resources. Specific functions and values are identified in Table 2.0. Functions and Values are described generally below.

Functions are the roles that a critical resource plays in sustaining (or when dysfunction occurs, degrading), a natural system. For example one function of wetlands is to purify surface waters. Where the waters of a wetland have "connectivity" to groundwater, the wetland also functions to maintain groundwater quality and levels. In the obverse, a contaminated or drained wetland would function to contaminate groundwater or lower its water level. There are numerous functional "sub-components" within the overall function of a critical resource. For example, in a wetland, the water purification process involves a complex interaction between plants, acidic soils and organisms all specially adapted to anaerobic conditions (no oxygen); each of these components performs its own function. Within a river, the cobble bottom on the downstream end of an island has a different function for anadromous fish than a riffle at the upstream end of the island, or a deep hole in the river. The functions of the various features of the river bottom differ entirely from that of the riparian cover on the bank above the high water line, the disfunction of the riparian cover can cause functions of the river bottom to fail as well. A simplified rendition of

this is: the stripping of a bank on an anadromous river of its riparian cover destabilizes its banks, this causes the bank to collapse and erode, which spreads a layer of sediment over the spawning gravels of an anadromous fishery, which smothers and kills the spawn, which endangers the base populations of the salmonid species.

In, summary, the functions of all the individual components of a Critical Resource must operate as an integrated whole in order for the resource to sustain the fishery (or other values).

Values are the qualitative or quantitative benefits derived from the functions of a critical resource. For example, qualitatively we know that clean water is more beneficial and useful than contaminated water. It is also more cost effective because cleaning water for human or in-stream uses, or finding alternative sources of water is more costly than using a readily available clean supply.

It is not easy to quantify the values of critical resources, but it is done increasingly. For example dairies now create fresh water wetlands as water treatment systems for their dairy wastes. Dairy men can identify the cost of constructing and operating these systems, and they can measure them against the costs of the old ways of disposal, including the costs of compliance with clean water regulations. Health agencies can assign dollar values to improvements in the quality of public water supplies as a result of this use of wetland

technology. Resource agencies can assign dollar values as a result of improved in-stream conditions for fisheries; retailers of sporting goods may note increased sales related to use of that resource as it improves.

Values can be calculated as either benefits (when the resource is functioning on a sustained basis), or as the "avoidance of disbenefits" i.e., a degraded resource results in costs from lost productivity and opportunities, plus the additional dollars required to bring it back to sustainable use levels. It is advantageous to operate from the former rather than the latter condition. In economic terms the difference is that between already having an asset, or having to purchase it.

Table 2.0 identifies some of the important known functions of critical resources and their values. The far right column identifies in general terms the standards which the county's Critical Resources Ordinance applies to development activities in order to protect those functions and values.

Current Trends

The current trends relative to sustainability of Fish and Wildlife resources in Benton County, but also region-wide, is a mix of success and failure.

On the successful side, the Hanford Site, occupying five percent of the county's land area is a large and functional museum of indigenous biological resources. Under federal ownership for the past 50 years, it has

been left untouched by the far-reaching developments which have converted the landscape off the Site. The shrub steppe and wetlands complex of the Wahluke Slope to the north of the Columbia River, and the U.S. Army's Yakima Training Facility to the west add additional hundreds of square miles of indigenous habitat, potentially "connectable" as a single unit.

Additionally, within the lower, flood prone reaches of the Yakima River, where private development is relatively sparse and large acreages are within local or federal ownership, a rich riverine environment of islands, wetlands, braided channels and back water provide lush habitat and breeding and nursery areas for aquatic species.

Additionally, shore lands owned by the U.S. Army Corps and the U.S. Fish and Wildlife Service in south county along the Columbia river's hydro-electric pools provide significant fish and wildlife resources.

In contrast, biological resources which are not faring well are generally found outside of the Hanford Site. Specifically they are the native shrub steppe habitat which is being eliminated at a rapid pace by the expansion of urban and agricultural developments, and Yakima river's anadromous and resident fisheries, which are threatened by poor water quality mainly, due in large part to non-point source pollution combined with low summer flows. Overall, outside of publicly held lands, the

current regional and local trend, regarding biological resources and wet environments as habitat is a paradox, i.e., while federal and state policy and law increasingly seek protection through regulation, the actual trend on the landscape is one of severe losses through development and land conversion, including on State Department Of Natural Resource (DNR) lands in eastern Washington.

The continuing loss of biological resources is evidenced by fragmentation of natural habitat, declining water quality, and the growing number of terrestrial and aquatic species listed as candidate, threatened and endangered by the federal and state governments.

Within the larger watershed, there are also sub-trends. For example, there are projects for the conservation of surface water resources by Irrigation Districts under federal and state sponsored water conservation projects. The typical project is the lining or piping of antiquated irrigation water delivery infrastructure to reduce leakage loss. Additional programs seek to reduce the total of "applied" water. The impact of these programs is likely to be improved flow and water quality in river main-stems and tributaries, while eliminating the significant acreage of wetlands created by conveyed or applied water run-off.

Protection of Biological Resources On Privately Held Lands: Absent education, volunteerism, and

economic incentive for habitat preservation, regulatory requirements to protect such resources on privately held lands are not equal to the economic incentives for development. Additionally, the impracticality of enforcing regulations over the entire land and water resources base weighs against effective protection through regulation alone. Circumstances contributing to this condition are:

- An inherent resistance to regulation;
- Insufficient regulatory and enforcement budgets, especially where compliance becomes "process" which is costly;
- Gradual and imperceptible decline of the environment: most local non-agricultural developments are of relatively small scale, where the impacts associated with any one project may be marginal in effect, but cumulatively significant. Cumulative impacts are difficult to identify and address.
- Lack of effective monitoring: long term "post project" monitoring is difficult, satisfactory enforcement is rarely achieved and not cost effective;
- Potential "takings" issues: Commercial agriculture on privately held land is the major converter of natural habitat in eastern Washington. Yet, unlike other land uses, it remains relatively free from regulatory requirements to protect natural habitats and biological resources. This is because the cost to the

agricultural land owner who leaves lands out of production, for a public purpose, is a definable annual expense, which unless the farmer is reimbursed, becomes simply lost production, which the farmer can easily document for a claim of "taking."

- Shifting legal ground: Though protection of resources through the application of regulatory constraints to the use of property has generally been upheld by the state and U.S. Supreme Courts, recent court decisions have put the standards for doing so in flux, thereby raising a "cautionary flag" to regulatory entities, especially local governments which are reluctant to get involved in "takings" claims.
- Politics of land use regulation: Where the courts have failed to find that property rights are absolute, the issue has moved out of the courts on to the political stage.

Future Considerations

As the trend to conversion of raw land continues, fragmentation of natural habitats will further reduce biological productivity and diversity. Remaining productive terrestrial and wet habitats will be confined largely to floodways and floodplains, canyons, undevelopable terrain, undeveloped areas designated "Rural" on the Land Use Plan Map, and on lands in government ownership (other than state DNR).

In recognizing this trend, Benton

County believes that it is the public holdings, because of their size and uncomplicated ownerships, which hold the promise of successfully protecting eastern Washington's natural wildlife heritage. The acreage of these holdings may be augmented by private lands too constrained for economic use.

Given these considerations, an appropriate integration of mechanisms to sustain biological resources, i.e., fish and wildlife habitats is as follows. These actions should be pursued under a federal, state, and local partnership, with non-impactive recreational uses a goal secondary to wildlife protection:

- conserve for habitat purposes suitable acreages of existing public lands, augmented where needed by additional purchases, exchanges, conservation easements etc., to "connect" large tracts of habitat into functional systems;
- apply and monitor for effectiveness, regulatory provisions to protect and enhance near-shore riverine and wetland environments;
- apply water conservation standards to non-farm developments;
- increase upper watershed storage capacity to provide additional low season flows and reduce the competition between *in* and *out-of-stream* uses for available water supplies;
- in appropriate areas of the watershed apply land use

- practices which eliminate or significantly reduce non-point source pollution;
- in concert with state resources agencies, undertake local educational outreach programs including grant monies for demonstration projects on private lands associated with sensitive resource issues.

As shown in Chapter Four, Figure 4-13, there are significant acreages of

government owned land in Benton County outside of Hanford. Some of these acreages are inter-connected into relatively large tracts (e.g., north slope of Horseheaven Hills above Kiona). In the aggregate, these lands, estimated at 65,000 acres, represent the spectrum of upland and wet biomes in the Central Basin. If managed as an integrated whole, in conjunction with undevelopable private lands, they would be a significant biological resource.

TABLE 2.0 FUNCTIONS AND VALUES OF CRITICAL RESOURCES

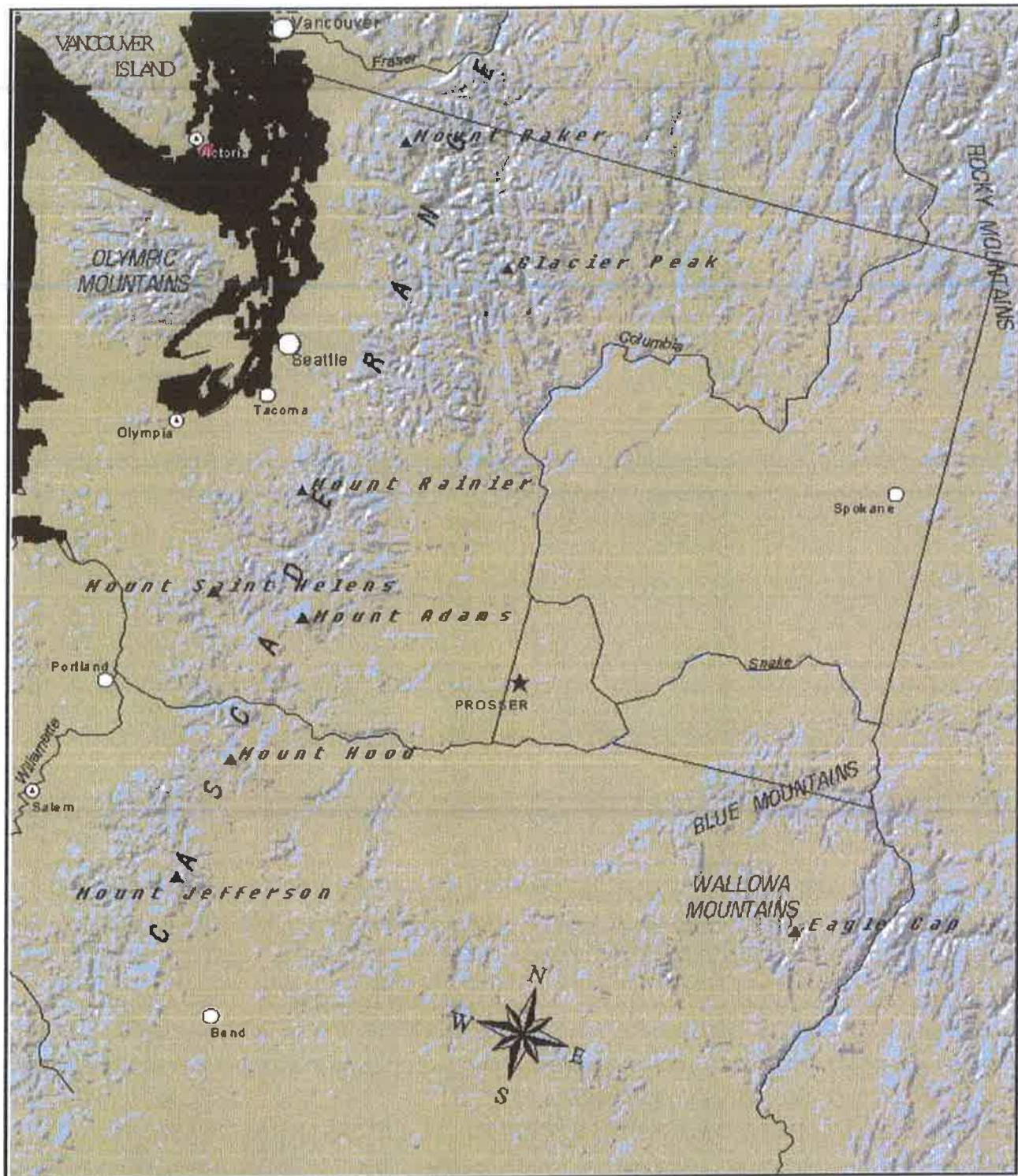
Resource/Component	Function	Value	Ord. Protection
Hazardous Areas			
Floodways (river channels)	-provides a defined path of least resistance for watershed flows and collects and holds a volume of water sufficient to allow diversions and discharges	-is a "vessel" of self cleaning water, of sufficient volume and quality to support irr. Crop production worth \$100s millions annually. - discharge of municipal and industrial waste worth \$millions annually. - sport and commercial salmon and steelhead fishery worth \$millions annually, and general water recreation	-no new construction or obstructions within -no modifications or breaching of floodway boundary -no contaminations (agriculture exempt)
Floodplain	-confines high water flows and energy to a predictable and non-destructive path, -natural flood holding basin stores and dissipates flood energy -recharges groundwater -replenishes "base" flow of river (i.e., water stored for release in summer flow periods	-avoids disbenefits associated with property loss and public expenditures from floods, provides opportunities to locate land uses with relative certainty. -in lieu of capital expenditures to do same, reduces flood damage by \$millions -provides an upper aquifer gw supply for ag. And residential use -improved water quality enables municipal and industrial discharges, lowers water temperatures for fish survival	-same as above -low densities, develop higher ground, no net increase in floodplain water level height -same as above

Resource/Component	Function	Value	Ord. Protection
	-creates off-stream channels, streams and wetlands which are biological nurseries	-nursery areas for sport and recreational fisheries as well as other aquatic biology which can be replicated only at cost	-protection of these features from filling, encroachment, contamination
Flash flood areas	-convey run-off from short duration high intensity storms in defined channels	-serve as natural drainage facilities in lieu of capital expenditures to provide artificial devices	-prohibit obstruction by fixed above grade developments, designate by easements
Geologic Hazards cliffs, talus slopes, outcrops	-landscape features -nesting habitat for birds of prey -mineral resource	-aesthetic, real estate values, -natural insect pest and rodent control which costs to replace -crushed rock and basalt second highest value natural resource in county	-none -nesting and roosting areas of listed species protected -commercial aggregate sites are designated and protected from encroachment by ordinance
Steep (unstable) slopes	-open space, habitats, landscape	-value is in avoiding damage to life and property and liability for damage; aesthetic and wildlife value also	-ordinance standards require technical assessment of risks in order to locate, design and engineer in accordance with risk
Critical Aquifer recharge Areas	-recharge groundwater and surface water resources (they make the resource "renewable")	-replenishable water supplies have incalculable values over the long term, once contaminated at a "recharge" or "connectivity" point, they go from economic asset to economic liability	-manage the use, storage and transport of toxic products in the vicinity of known recharge areas, agricultural use of chemical exempt

Resource/Component	Function	Value	Ord. Protection
Wetlands	<ul style="list-style-type: none"> -natural water treatment systems -groundwater recharge -irrigation water supply -riverine wetlands are the nurseries for in-stream biology -riverine and upland wetlands play an essential life cycle role for >75% of terrestrial species in the desert landscape 	<ul style="list-style-type: none"> -the increased costs of maintaining water quality standards for in and out- of- stream uses without them -declining upper aquifer levels means increased well and pumping costs -for farmers and irrigation districts entitled to "return flows," the value is calculated either as decreased crop production absent the resource, or water replacement cost (if new water is available) -value of rivers for fisheries declines, costs of maintaining fisheries increases, including ESA costs which affect other economic sectors -bio-diversity has real estate value, recreational value, avoidance of regulatory costs value, pest control value 	<ul style="list-style-type: none"> -protect natural wetlands; require development setbacks
Fish & Wildlife Conservation Areas	<ul style="list-style-type: none"> -provide habitat for biological resources 	<ul style="list-style-type: none"> -aesthetics -education & science -recreational -maintain ecological balances -real estate value -avoid mitigation and recovery costs incl. ESA 	<ul style="list-style-type: none"> -coincident with Freq-uently Flooded and Geologic Hazards protection standards, riverine corridors and wetlands are protected, and impacts to "actual" listed species and

Resource/Component	Function	Value	Ord. Protection
Rivers and Creeks riverine corridors	-landscape feature	- aesthetic, provides extra real estate values along its reach	their "priority habitats" (outside of wetland and riverine corridors) are mitigated -ordinance provisions requiring development setbacks for river and creek corridors to maintain habitat and integrity of corridor
Water surface and column and river bed	-wildlife corridor with diverse habitats: riparian, wetland, upland, islands, water, supports >75% of indigenous species -cultural resource	-consumptive sport recreation (hunting, fishing) in \$millions, non-consumptive (hiking, nature observation) -tribal spiritual and subsistence resource of incalculable value;	-none specifically for cultural, but other protections coincidentally do protect -none ,except for designation of public access ways in Plan
Riparian Corridors	-a body of water for public access and use -habitat for salmonid and resident fisheries -shade cover lowers instream water temperature as does groundwater releases from vegetated shoreline	- public recreation , sales of recreational equipment -intrinsic value, sport and commercial recreational fishing equip. sales value in \$millions; -high temperatures are lethal to fish, especially salmonids. the value is in protecting the public's investment of more than \$100 millions in fisheries maintenance and enhancement -high temperatures cause algae blooms which deprive	-none for intrinsic value, ord. provisions to protect water quality -ordinance provisions for structural setback from rivers and creeks, protect riparian corridors

Resource/Component	Function	Value	Ord. Protection
	<p>-riparian vegetative corridor is natural weed control</p> <p>-root mass of riparian corridor stabilizes river banks</p>	<p>organisms of oxygen, and raise water temperatures same value as above</p> <p>-noxious weed abatement is an ongoing cost for gov't and agri-business. Rivers & Creeks are primary vectors for weeds, intact riparian cover hinders weed germination and growth</p> <p>-protects river banks against loss of property due to erosion;</p> <p>-improves water quality by absorbing nutrients which enables increased economic use of the water;</p>	
	<p>-riparian corridor provides insect food resource for fisheries</p> <p>-riparian corridor provides leaf litter and other organic matter to the river</p>	<p>- increases watershed base storage for low summer flows which provides economic uses</p> <p>-value is in maintaining natural processes so as not to undercut public investment in fisheries maintenance</p> <p>-same as above</p>	



THE COLUMBIA BASIN

PRECIPITATION*

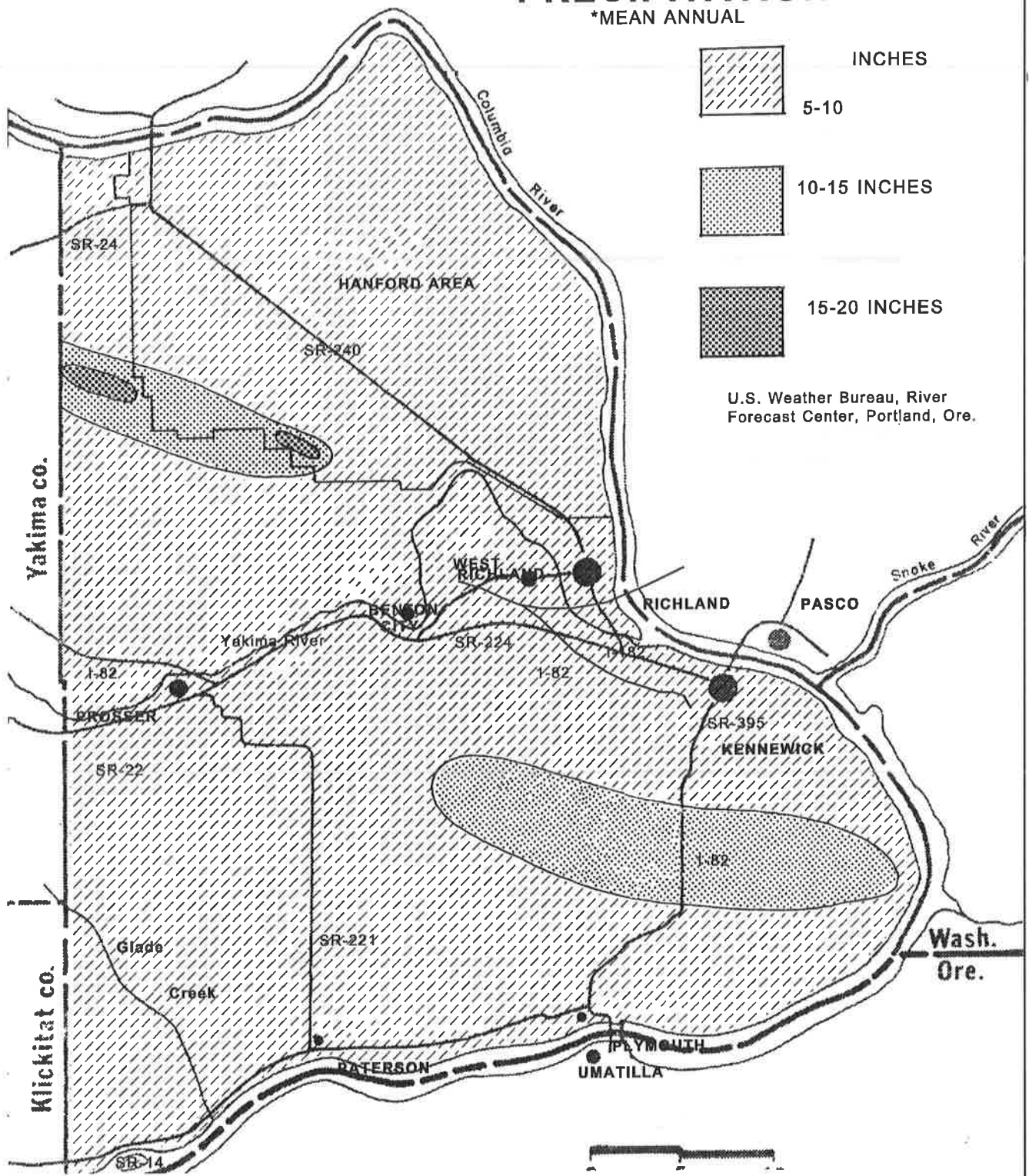
*MEAN ANNUAL

INCHES
5-10

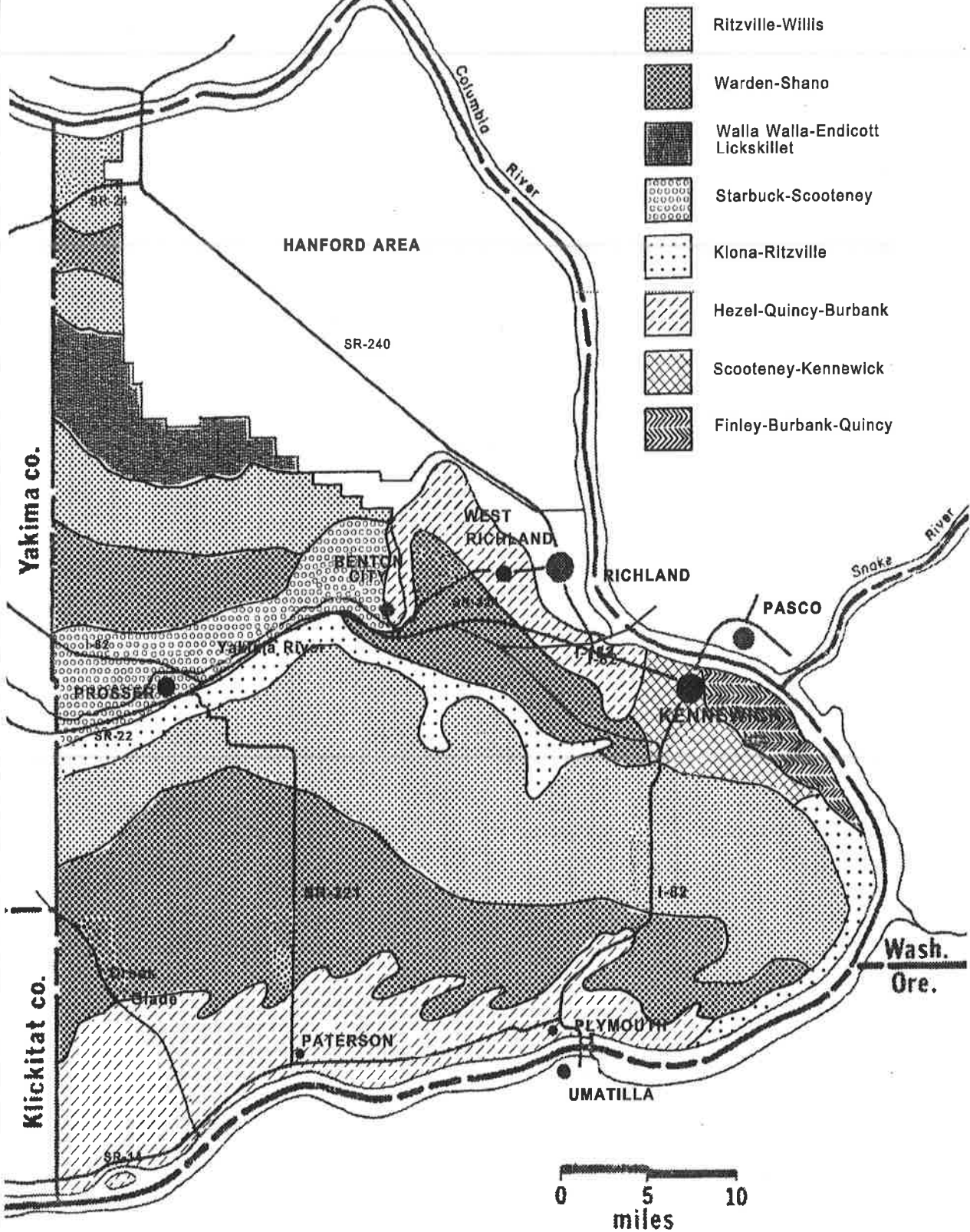
10-15 INCHES

15-20 INCHES

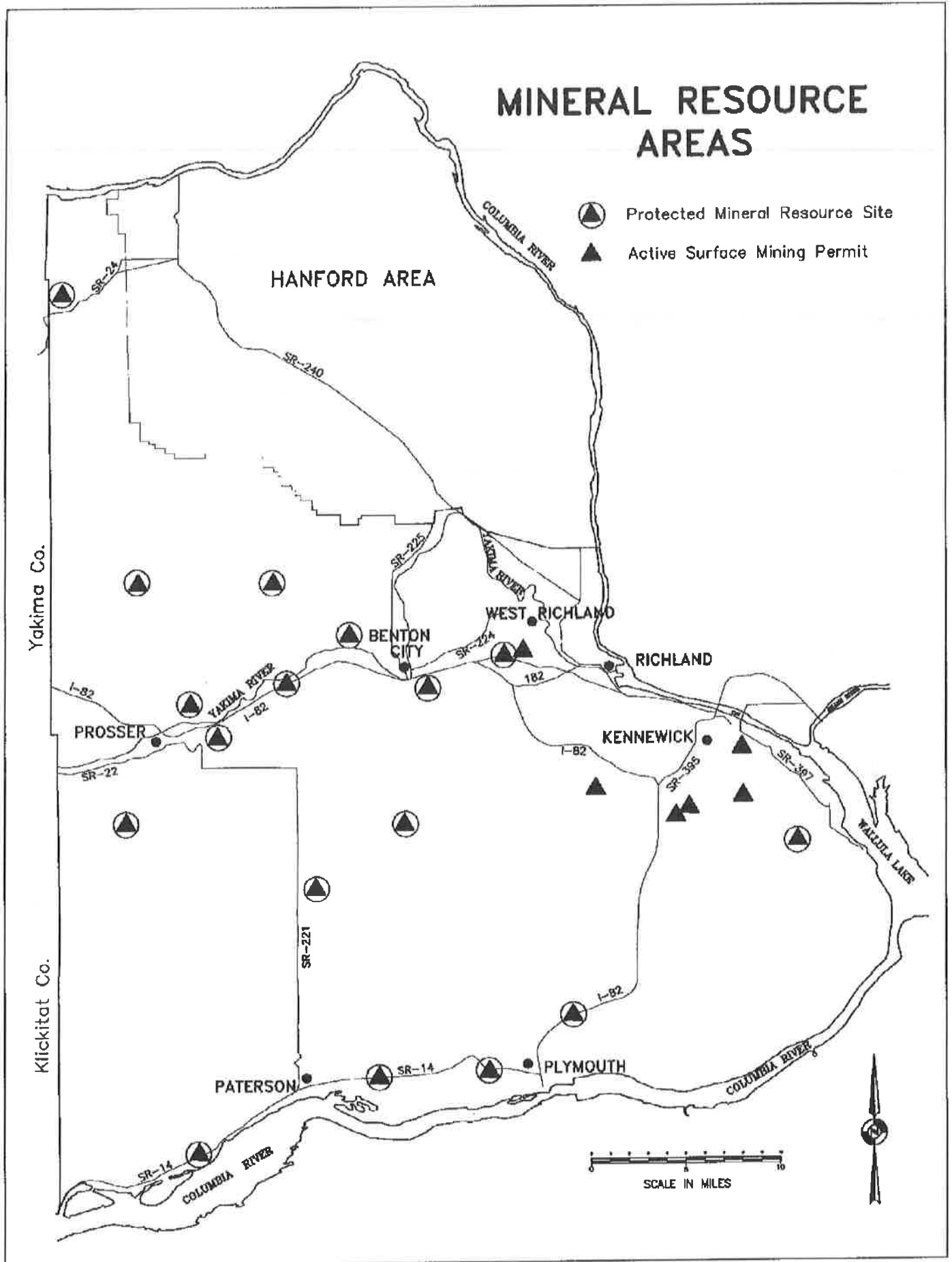
U.S. Weather Bureau, River
Forecast Center, Portland, Ore.



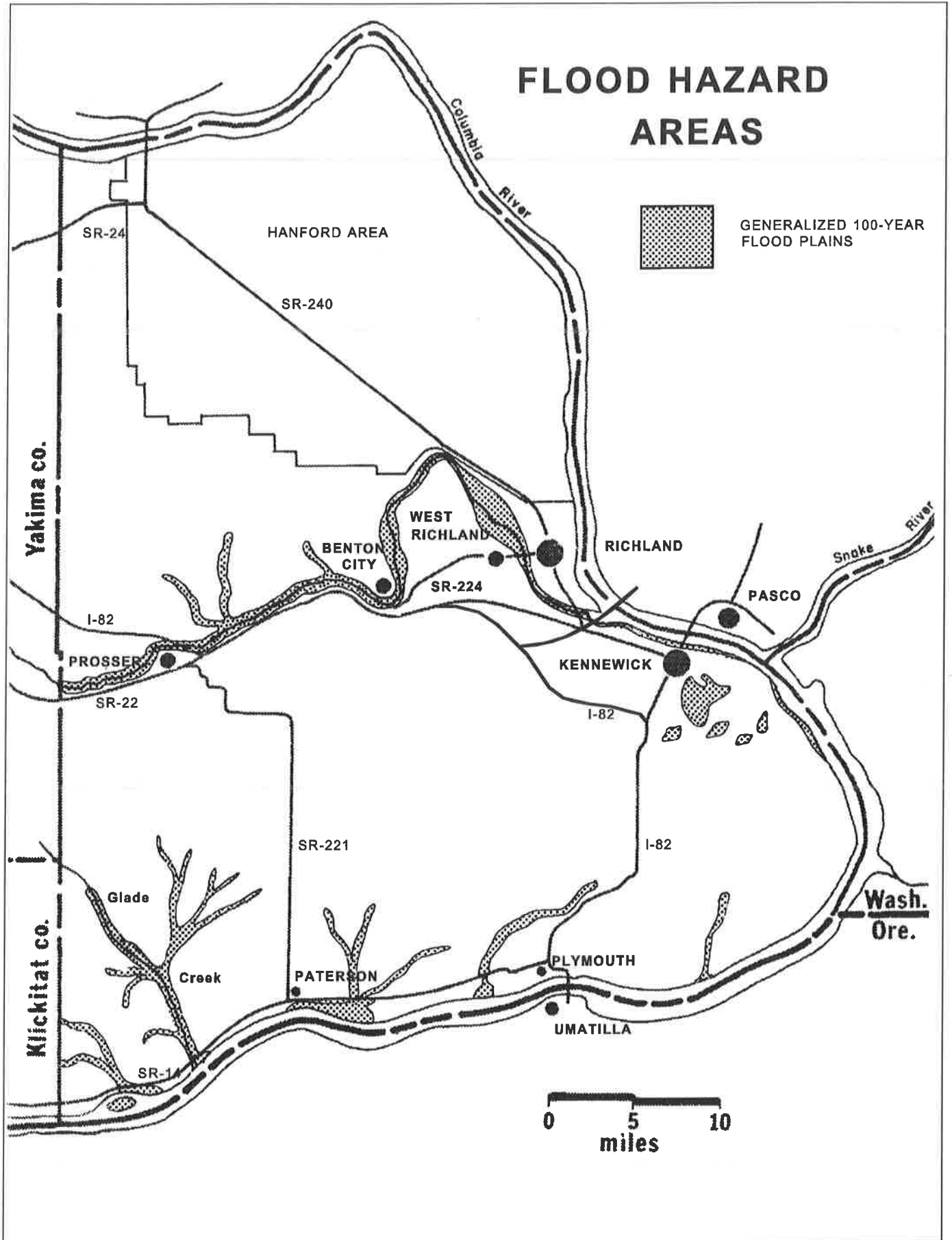
GENERAL SOILS



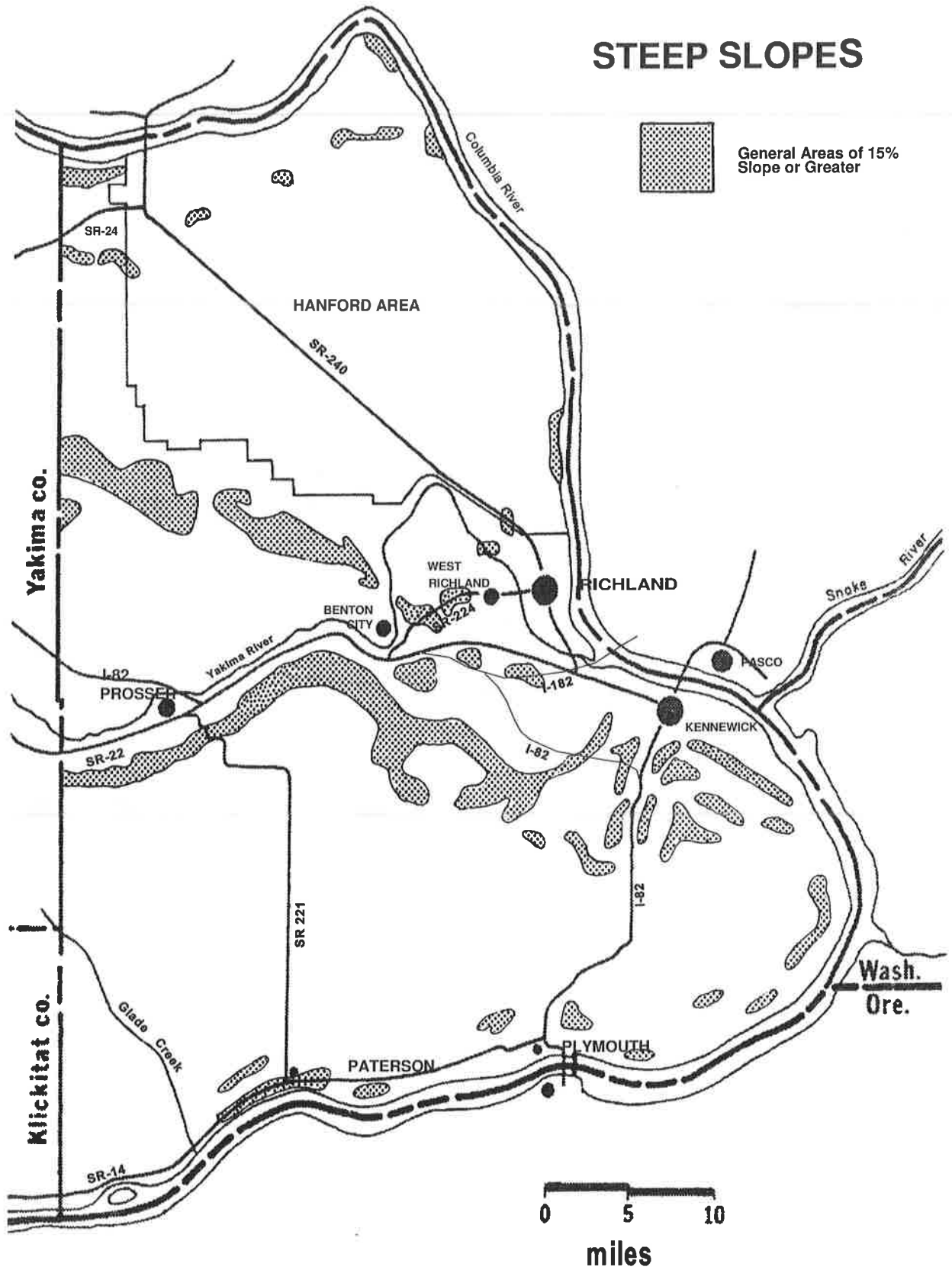
MINERAL RESOURCE AREAS

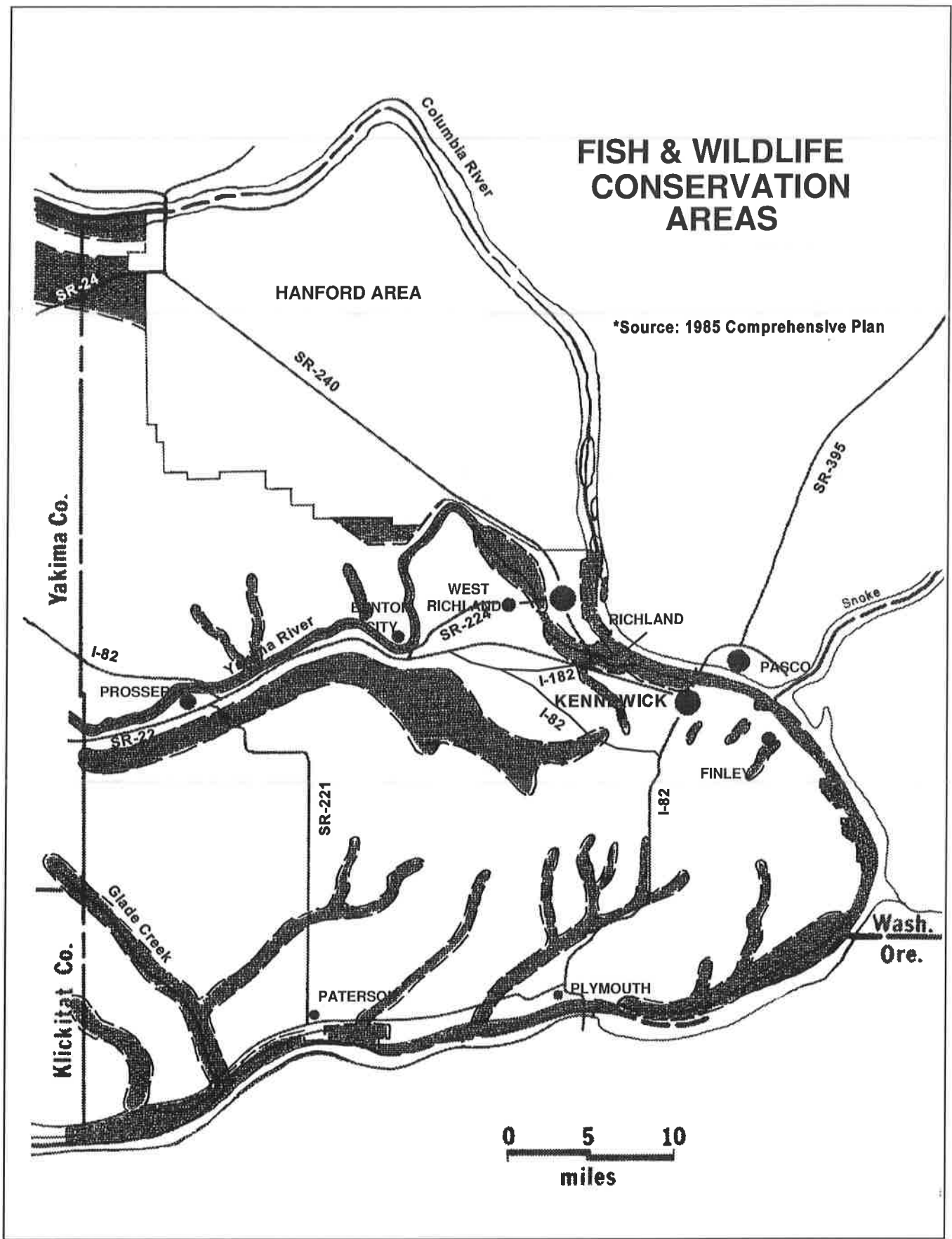


FLOOD HAZARD AREAS



STEEP SLOPES





**GOALS, POLICIES
AND ACTIONS** **CHAPTER 3**

PLANNING PROCESS

GOAL 1

To establish a land use policy framework and planning process to be utilized as a basis for all decisions and actions related to land use and to assure that such decisions and actions are based on factual information.

POLICIES

A. When a land use designation or zoning district boundary unintentionally bisects a parcel of record creating two different designations or zones for one parcel, the designation or district that covers the largest portion of the parcel shall apply to the whole parcel.

GOAL 2

Develop a comprehensive plan that implements State planning law, has stakeholder involvement, and includes development regulations.

POLICIES:

- A. That zoning and subdivision ordinances, performance standards and related implementation measures shall be used to implement the plan to ensure development and land uses that are compatible with surrounding uses and which do not create traffic, safety or health hazards, undue adverse economic impacts, or unnecessarily restrict the use of private property.
- B. That county-wide resource inventories shall be used and

maintained to assist in the determination of the suitability and capability of the land and its resources to support future development.

- C. That land use decisions shall be consistent with the Comprehensive Plan Land Use Map and with the inherent capability of the land to sustain that use without creating problems that require a publicly funded solution (e.g., flooding, landslides, etc.,).
- D. That the County's plans and programs shall be coordinated with those at local, regional and state levels.

GOAL 3

To develop and maintain a comprehensive plan responsive to growth and economic trends and which can be readily adapted to changing conditions.

POLICIES:

- A. Amendments to the Plan require a determination of facts, and findings that the amendment responds to a specific public need, is beneficial to the public interest, and is not inconsistent with the vision and goals of the Rural Planning Area within which the amendment is proposed.
- B. That the Comprehensive Plan shall undergo a major review every seven years commencing the seventh year after the 2006 state mandated review.

- C. An emergency is a declaration by the Board of County Commissioners, based upon circumstances and facts at hand, that there is an eminent or expectant threat to one or more of: life, property, public health and safety, air or water resources, or the realization of regional economic policy objectives identified in the County Comprehensive Plan, and for which immediate action is necessary to end the threat.

CITIZEN INVOLVEMENT

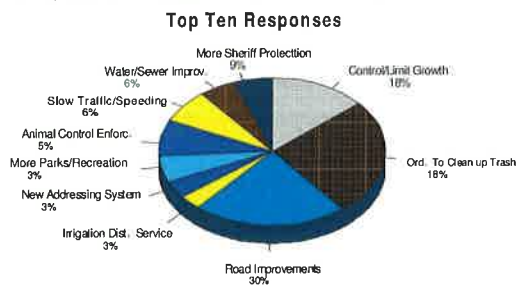
GOAL 4

To continue a citizen involvement program that insures the opportunity for full citizen participation in public decision-making.

POLICIES:

- A. That opportunity shall be provided for citizen involvement and input on issues in advance of making land use decisions.
- B. That citizens shall be provided with information through the news media to allow a maximum of citizen involvement during the land use decision-making process.

What Improvements or changes would you like to see in your Rural Community?



Benton County Rural Visioning Survey 1992

LAND USE

GOAL 5

To provide, consistent with the adopted goals and objectives of each rural community relative to quality of life and lifestyle, a diversity of land uses and an appropriate level of essential public and private sector services, while minimizing conflicts between different land uses to ensure the highest degree of public health, safety, and general welfare, without unduly jeopardizing the rights of the individual.

GOAL 5-1

To avoid, in the application of the County's land use controls, a reasonable assertion by any land owner that the County is "taking" property, and a court ruling that the County has taken private property without adequate compensation.

POLICIES:

- A. That all land uses in the county shall be classified with a land use designation and shown on the comprehensive plan map and that all implementing ordinances shall be in conformance with such map and Plan policies.
- B. That compatible mixed uses of urban intensity are appropriate in Urban Growth Areas where community sewer and water are available or provided, and outside of Urban Growth Areas within designated Rural Community Center areas and Commercial zones, and Planned Developments (PD's) when rural densities are clustered under Ordinance provisions.

- C. In order to maximize the opportunities for compatible development, within Land Use Designations there may be a diversity of uses where they serve, and are not incompatible with, the primary purpose and activity within the designation.
- D. Pending land use decisions, permitting decisions, and the development and adoption of official land use controls shall be considered for their potential to result in a successful takings action against the County.

URBANIZATION

GOAL 6

To establish Urban Growth Areas adjacent to the incorporated areas, within which an orderly and cost effective transition from rural to urban land uses and authority can be coordinated within the next 10-20 years.

POLICIES:

- A. A formal request to the County for inclusion of an area into a UGA shall be accompanied by a general assessment of the gross demands at build-out within the new UGA area for water, sewer, schools, power and circulation (roads), police, fire and safety services, measured against current and future capacity and supply; and also a detailed Capital Facilities Plan that includes funding sources for capital projects necessary to serve new development that would occur within the first six years Both the general assessment and the six year plan shall be based upon

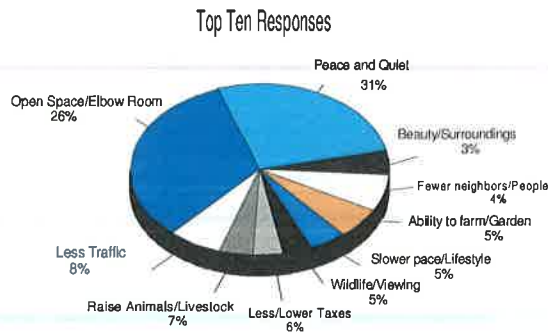
proposed land uses for the area of UGA expansion with minimum average residential density of six dwelling Units per acre.

- B. That development within the adopted Urban Growth Area as delineated on the plan map shall conform to city/county joint development standards where applicable, and facilitate the realization of the adopted circulation plans of the Transportation Element(s).
- C. That development on unincorporated lands within urban growth areas shall be consistent with the city's land use designation, and be sited and designed in a manner which does not preempt the ability of the city to realize the designated urban densities and planned municipal infrastructure for the site and general area.
- D. That established community councils and known citizen interest groups of unincorporated communities outside of urban growth areas shall be made aware of and be encouraged to comment on significant developments proposed within or adjacent to their communities.

Actions:

- 1. Determine the interest of County residents within unincorporated communities by establishing planning committees for participating in land use planning and decision-making within their respective areas.

What things do you feel make rural living most enjoyable?



Benton County Rural Visioning Survey 1992

GOAL 7

To concentrate urban development in and adjacent to existing urban areas.

POLICIES:

- A. That the urban growth area boundary line and existing incorporated areas is where urban services are available or are anticipated to be provided within the foreseeable future.
- B. That new urban development take place within adopted Urban Growth Areas.

RURAL LANDS

GOAL 8

To preserve rural lifestyles while accommodating new population growth.

POLICIES:

- A. That overall residential densities within areas designated as Rural Residential shall be low enough to insure the perpetuation of rural lifestyles, which are typically characterized locally by a predominantly open landscape inhabited by households

engaged in diverse, second income, and recreational land use activities related to livestock and crop production.

- B. Densities, when viewed in connection with a specific parcel, may be greater than that reflected in the rural Lands and Agricultural designations when a land owner wishes to decrease the size of his or her private residential parcel by transferring a portion of his or her property to an abutting land owner. This policy is consistent with the goal of preserving rural lifestyles because it does not allow an increase in the overall density of the area involved.

Actions:

1. Adopt, administer, and refine a Rural Lands Ordinance which responds to the life style preferences of rural residents as expressed in the Benton County Rural Visioning Survey Report (Spring 1993). The ordinance would respond to the expressed vision(s) of "rural character" through a combination of standards and options relating to density, site design, and development patterns (i.e., plat or clustering within Planned Developments).

2. Adopt new or enforce existing ordinance provisions where necessary to accomplish legitimate objectives identified in the Benton County Rural Visioning Survey Report (Spring 1993).

QUALITY OF LIFE

GOAL 9

Preserve Benton County's rural lifestyle which is characterized by:

- Open-space and elbow room
- Peace and quiet
- Fewer neighbors
- Farm heritage and rural character
- Healthy sense of community
- Natural beauty of rural lands
- Habitation by children, wage earning families, and retired people
- Ability to farm, raise animals and livestock
- Availability of wildlife
- Compatibility of land uses
- Rural freedom, opportunity and property rights and values

permitted configurations (e.g., single family residential lots, MH Parks, or planned subdivisions).

HOUSING

GOAL 10

To provide a variety of dwelling unit types and densities within the County with maximum choice of living environments, considering the needs of the public at all economic levels.

GOAL 11

To provide for a variety of residential uses/densities consistent with rural character and lifestyles.

GOAL 12

To preserve existing, viable, rural residential areas.

GOAL 13

Enable the provision of farm worker housing by and for the agricultural community.

POLICIES:

- A. That the rural housing stock include a variety of dwelling unit types and densities.
- B. That site-constructed, modular, and factory manufactured housing are needed and functional housing types in all

- C. That the county and cities are to work together to provide housing for all economic segments of the population, and shall seek to create the conditions necessary for the construction of affordable housing at appropriate densities within each of the jurisdiction types (i.e., rural and urban).
- D. That high, medium and low urban residential densities shall be located exclusively within urban growth boundaries.
- E. That consistent with the Land Use Map of the Comprehensive Plan, higher than rural densities are appropriate within the core areas or adjacent to the communities of Finley, Plymouth, Paterson, Whitstran and Kiona.
- F. That Plan provisions for the location of rural residential development shall be made in a manner consistent with preserving agricultural lands and maintaining the rural lifestyles of the County while minimizing conflicts with commercial agricultural activities.
- G. That existing viable single-family residential areas be protected from incompatible land uses.
- H. That outside of existing Community Center Areas, urban densities located outside of urban growth boundaries shall be allowed only pursuant to RCW 36.70A.350, unless they are encompassed by the expansion

of an existing urban growth area.

COMMUNITY DEVELOPMENTS

GOAL 14

To allow for the provision of Planned Communities outside of urban growth areas in agricultural and industrial areas per RCW 36.70A.350.

POLICIES:

- A. That in developing agricultural and industrial areas the need for new communities shall be recognized and that upon demonstration of demand and need, appropriate plan designations shall be applied to allow for the development of such communities.
- B. That new communities shall be developed on lands that have a marginal or low potential for agricultural production and where negative impacts on adjacent agricultural productivity will not be significant.

NATURAL RESOURCE LANDS

GOAL 15

To conserve and maintain commercially viable farmlands as the locally indigenous natural resource most essential for sustaining the County's agricultural economy.

GOAL 16

Influence the location, site planning, and density of new non-farm development outside of UGAs so that it protects existing agriculture from having to constrain otherwise normal operations in favor of incompatible adjacent land uses.

GOAL 17

To conserve, maintain and manage existing ground and surface water resources, in order to provide a long term dependable supply sufficient to sustain the expansion and evolution of the County's agricultural base.

GOAL 18

To acquire additional water resources.

POLICIES:

- A. That areas designated "GMA Agriculture" on the plan map shall be conserved for a broad range of agricultural uses to the maximum extent possible and protected from the encroachment of incompatible uses.
- B. In the event of a conflict between residential uses and normal and routine practices of commercial agriculture on lands designated as GMA Agriculture, the County support shall be in favor of the agricultural use where it is evident that the agricultural practice is consistent, with or equivalent to, recognized Best Management Practices.
- C. That only uses related or ancillary to, supportive of, complimentary to, and/or not in conflict with agricultural activities, are appropriate in areas designated GMA Agriculture.
- D. Proposed non-farm developments on parcels adjacent to lands designated GMA Agriculture, or adjacent to lands being farmed commercially within the Rural Lands 5. Zoning Districts shall be regulated to avoid or reduce

potential impacts associated with "land use incompatibility" to insignificant levels. Responsive site plans and landscape design features including clustered units, setbacks, berms, vegetative screening etc., are appropriate mechanisms to accommodate incompatible land use activities.

- E. To sustain the ability of the regional agricultural economy to expand and respond to new market conditions and opportunities, it is appropriate to apply development standards which conserve water resources when reviewing proposed new non-agricultural developments.
- F. That only compatible land uses should be established adjacent to areas designated as GMA Agriculture in order to minimize conflicts associated with farm activities such as overspray, underspray, dust, noise, odors, liability, vandalism etc.

Actions:

1. *That legal mechanisms should be developed and used to protect productive agricultural lands from urban and suburban growth pressures. Such mechanisms might include performance standards for developments within and adjacent to agricultural lands, zoning restrictions, property tax deferral programs, etc.*
2. *Develop a public education program and development performance standards that reduce the amount of water used by non-agricultural developments.*

GOAL 19

To identify mineral resource lands of commercial significance and protect

their exploitation from being significantly compromised by encroaching land uses that are incompatible with mining activity uses.

POLICIES:

- A. The ability to exploit mineral and aggregate resources of commercial significance shall be protected from compromise by the application of the County's Mineral Resources Protective Ordinance where the owner of the resource requests such protection and exploitation of the site has not already been compromised by incompatible adjacent land uses or development.
- B. That incompatible uses shall be discouraged from encroaching upon and compromising the exploitation of protected mineral and aggregate resources.
- C. That sites used for the extraction of mineral and aggregate resources shall be reclaimed in a manner consistent with applicable laws and ordinances.

TRANSPORTATION

GOAL 20

To provide safe, convenient, economic, and multi-modal transportation networks with new construction and other County public works projects designed to be compatible with the rural character and serve the transportation demands of the Land Use Element, at designated levels of service, and consistent with all other relevant provisions of the Comprehensive Plan.

GOAL 21

To provide adequate roads that safely handle anticipated traffic and serve a diversified area of industrial, agricultural, and residential uses.

GOAL 22

To provide County road right-of-ways wide enough for off-road walking, jogging, and horseback riding, from one area to another safely.

GOAL 23

Improve the cost effectiveness of capital spending by coordinating new road construction with all jurisdictions and service districts/providers.

GOAL 24

Minimize the segmentation, loss, and compromising of agricultural lands and productivity resulting from new road construction.

GOAL 25

To provide for the means to expand the existing road system so it will accommodate future growth in farm to market and industrial transport, and overall traffic.

GOAL 26

Provide an integrated network of trails and paths for non-vehicular recreation and travel throughout the rural areas and connecting to urban trails and paths, as part of an overall County/city trails system.

GOAL 27

To provide safe pedestrian ways and bicycle routes, separate from vehicle roadways where feasible.

GOAL 27-1

To protect public safety and property by establishing development regulations that discourage the siting of incompatible uses and airspace obstructions adjacent to general

aviation airports that serve the public.

POLICIES:

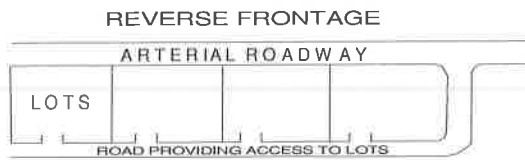
- A. Preserve, maintain, and develop air, barge, and railway transportation facilities which serve the Land Use Plan.
- B. That transportation planning and projects shall:

(1) Conform with and serve the Land Use Element of the Comprehensive Plan;

(2) Facilitate the flow of people, goods, local products, and services so as to strengthen and assist the expansion of the local and regional economy;

(3) Enable the conservation of energy.

- C. Avoid and/or minimize adverse social, economic and environmental impacts and costs;
- D. Avoid or mitigate conflicts and adverse impacts to rural character and planning objectives as those are identified in the Comprehensive Plan.
- E. Include local resident needs for pedestrian, bicycle and equestrian travel and recreational travel when those needs are identified in the Comprehensive Plan.
- F. That points of access onto major arterials shall be minimized where the primary function is through-traffic movement. "Reverse frontage" development may be required on arterial roads.



- G. That expansion of transportation capacity shall, where practical and feasible be planned to utilize existing facilities and rights-of-way within the County.
- H. That for public safety; the number of railroad crossings be minimized through such means as reverse frontage, installation of underpasses, or signalization.
- I. That an integrated network of safe pedestrian ways and/or bicycle routes shall be made along but not limited to arterial roadways.
- J. That before acquiring rights-of-way and funding the construction of pedestrian ways and bicycle routes, the following factors shall be considered:
 - (1) Inclusion of the proposed way or route on the circulation plan map;
 - (2) public safety;
 - (3) the cost of such facilities as compared to the need or probable use.
- K. That construction of pedestrian ways and bicycle routes should be in conformance with the uniform design standards for trails and paths as described in the Washington State Department of Transportation Design Manual, or standards developed and adopted by Benton County.

- L. New development shall be reviewed under the County's Environmental Policy (SEPA) ordinance for impacts to the designated LOS on County owned roads. If upon review for its impacts on LOS a project is shown to cause the exceedance of a designated LOS, then the project shall not be approved unless one of the following occurs:
 - a) The volume of trips is mitigated (i.e., reduced, or re-allocated spatially or temporally), so that LOS is not exceeded,
 - b) Transportation improvements to expand road capacity and regain LOS "C" are made concurrently with construction of the new development,
 - c) A financial commitment is in place to complete the improvements that will regain the LOS of "C" within six (6) years of the date of project approval, and the necessary road improvements and funding mechanisms are amended to the next Six Year Road Program.

Actions:

1. Periodically update guidelines for road design and construction in conformance with applicable federal and state laws and new technology.
2. Prepare and implement a comprehensive pedestrian/bicycle plan.
3. Include pedestrian/bicycle ways in the design and construction of new bridges and replacements of existing bridges where feasible and appropriate.

4. Include pedestrian/bicycle ways in the design and construction of new railroad crossings and reconstruction of existing crossings where feasible and appropriate.

5. Where appropriate pursue the acquisition of abandoned railroad and irrigation canal rights-of-way for use of pedestrian/bicycle and/or equestrian routes.

C. That lands subject to natural disasters and hazards be designated for uses which avoid or minimize exposure of life and property to hazards. Suitable designations are: agricultural, recreational, lowest density Rural Residential, and water dependent uses or other uses that will not fall costly victim to natural processes recognized as potentially hazardous.

CRITICAL RESOURCE LANDS

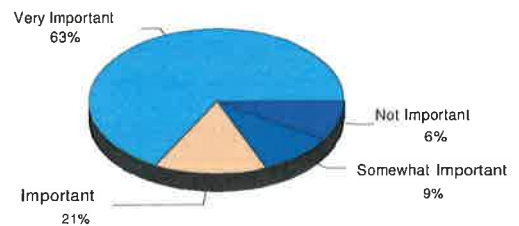
GOAL 28

To protect life and property and minimize the unnecessary expenditure of public revenues through the application of development standards which avoid inappropriate developments in areas susceptible to natural disasters and hazards.

POLICIES:

- A. That developments subject to damage or that could result in loss of life shall not be located in areas of known natural disasters and hazards (e.g. areas potentially subject to flooding, flash flooding, saturated soils or high groundwater, subbing, landsliding, creeping, eroding, rock fall, etc.) unless it can be demonstrated by the project proponent that the development is sited, designed and engineered for long term structural integrity, and that life and property on and off-site are not subject to increased hazards as a result of the development.
- B. That floodways and inherently unstable slopes are not suitable for development.

How important is....
The preservation of critical areas: river and creek environments
aquifer recharge areas, wetlands, and wildlife habitat?



Benton County Rural Visioning Survey 1992

Actions:

1. The planning department shall continue to work with other County departments and local, regional and state entities to identify and map hazardous areas as part of the ongoing construction of a Geographic Information System (GIS) database.

GOAL 29

To assure residents will live within areas that are clean, quiet, and non-polluted.

GOAL 30

Achieve sustain-ability of resource functions and values.

GOAL 31

Protect, and where necessary, apply planning and land use measures to

improve the quality and productivity of the County's environmental resources (air, ground and surface waters, and indigenous biology).

GOAL 32

Realize opportunities to integrate unbuildable hazardous areas, publicly owned lands, and biologically sensitive natural areas such as rivers, creeks, ridges and slopes, into a linked and contiguous pattern of open lands to serve multiple open space functions including: agriculture, buffers between incompatible uses, visual resources, recreation and wildlife habitat/corridors.

GOAL 33

To improve the water quality of the Yakima River and preserve surface and groundwater for the beneficial use of the rural area's citizens and wildlife.

POLICIES:

- A. Land use decision-making and development review shall protect the functions and values of Critical Resources within the County.
- B. The functions and values of Critical Resources shall be protected from adverse impacts of new agriculture in previously unfarmed riparian corridors and regulated wetlands and their buffers. The county also recognizes that new agriculture of all kinds in previously unfarmed lands within critical resource areas outside of regulated wetlands and riparian corridors may have an adverse impact; therefore, within these areas the county will apply and integrate its land use authority with technical,

financial and program capabilities of federal and state agencies involved in protecting those critical resources.

- C. Developments which have the potential for significant individual or cumulative impacts on ground and surface water quality shall be prohibited, or sited and designed to avoid or mitigate such impacts.
- D. Natural drainage areas within the County should be identified and protected wherever appropriate.
- E. That air quality be protected as a resource essential to public health, safety and welfare, and economic growth and prosperity.
- F. That surface and groundwater quality be protected as a resource essential to the public health, safety and welfare, and economic growth and prosperity.
- G. That noise levels should be restricted to those determined suitable for permitted land uses and activities using the Washington State Noise Abatement Regulations as minimum guidelines.
- H. Review and consider goals and policies of the Tri-County Water Resource Plan for adoption and inclusion in the County's Comprehensive Plan.

Actions:

1. *Require the filing of air pollution control plans with the Benton County Clean Air Authority for development activities that have the potential for significant adverse impacts on air*

quality.

2. Encourage the establishment and use of adequate waste management systems to prevent disposal of solid and liquid waste in areas other than approved disposal sites.

3. Identify natural drainage areas within the County and through the application of development performance standards and monitoring, prevent their erosion or obstruction to the detriment of downstream interests.

4. Encourage public acquisition of significant natural wetlands.

5. The County will work with other agencies to define and map existing aquifers and recharge areas and to characterize their condition and level of function.

6. County staff will field check and update its wetlands database with the objective to classify wetlands according to the classification system in the Critical Areas Ordinance.

GOAL 34

To avoid conflict between beneficial cultivation of economic growth and prosperity, and support for the state and federal protection of threatened and endangered species, the County will strive to achieve balance among potential competing economic development and wildlife protection objectives in interactions with state, federal and local agencies and other County stakeholders regarding Endangered Species Act issues.

GOAL 35

To apply land use designations in a manner that avoids the fragmentation

of areas identified through best available science and designated by the County, after public hearings, as important for the protection of regional bio-diversity. Actions to protect biodiversity shall not interfere with the continued use, in the accustomed manner and in accordance with best management practices, of lands historically used for the production of food, agricultural products, grazing of livestock, or for the extraction of minerals.

For issues involving the need for "best available science", it is the responsibility of the Planning Department to identify "best available" and recommend alternative actions based upon it. For science to be "best available" it must also be practical and cost effective to apply it to the issue at hand.

GOAL 36

To sustain a diverse, productive, and high quality natural environment for the use, health, and enjoyment of County residents.

POLICIES:

A. That public agency acquisition of natural areas of scientific, research and educational significance shall be encouraged.

GOAL 37

To identify and protect critical fish and wildlife habitat from destruction or encroachment of incompatible uses.

GOAL 38

To preserve natural wetlands (marshes, sloughs, shorelines, etc.) that are important wildlife and game habitat or recreational areas, provided that such areas are not a detriment to public health.

POLICIES:

- A. That public acquisition of critical fish and wildlife habitats and lands essential to the protection of the functions and values of those resources shall be encouraged as the action preferable to applying regulations onerous to private use of property.
- B. Using Best Available Science the functions and values (Table 2.0) of designated Fish and Wildlife conservation areas shall be protected for the public health, safety and welfare.
- C. Unless specifically prohibited by state law, or County ordinance for reasons of public safety, the activities of hunting and fishing for game species during legal seasons and consistent with State and Federal game laws, are historic cultural activities that are protected on lands where such are allowed by any of the following: permission, public designation, public right of access, ownership, contract (e.g., conservation easement), treaty rights.

PARKS, RECREATION, OPEN SPACE, AND HISTORIC PRESERVATION

GOAL 39

To develop and maintain a park system for Benton County residents and visitors which provides a variety of recreational opportunities including: regional and local parks and trail systems for bicycle, hiking and equestrian use.

GOAL 40

Jointly, with cities and agencies owning public property, adopt the Tupteal Greenway concept Plan, and prepare and facilitate the realization of a Greenway along the riverine corridor of the lower Yakima River from just west of Benton City and extending downstream to Columbia Point and including Bateman Island.

GOAL 40-1

To conserve as undeveloped and unmarked for posterity, the visually prominent naturally vegetated steep slopes and elevated ridges that define the Columbia Basin landscape and are uniquely a product of the ice Age Floods.

POLICIES:

- A. That the Benton County Comprehensive Parks and Recreation Plan shall be the Plan for developing and maintaining a regional park and trail system integrated with city recreational resources.
- B. That the development of a system of bicycling, hiking and equestrian trails in the County shall be encouraged and coordinated with existing and/or proposed city systems.
- C. That developers of low density, large lot subdivisions and plats shall be encouraged to provide access easements for bicycle and horse riding both within the development and between contiguous developments, connecting where possible to regional trails, and to establish a means of maintaining such

easements through coordination between the County, developer and homeowners.

- D. That historically significant structures and sites shall be identified and should be preserved whenever feasible.
- G. That archaeologically significant sites be preserved by siting and designing development to avoid impacts, or by mitigating impacts.
- H. The County encourages the public and/or private acquisition of the prominent ridges within unincorporated Benton County as Natural Open Space, in order to preserve views, protect native habitat, and provide for public access and recreation associated with these landscapes.
- I. In concert with citizen initiative the County should pursue and be open to the application of a variety of means and mechanisms such as the preparation of specific and area plans, conservation easements, clustered developments, land acquisitions and trades, statutory requirements etc., that result in the protection of the natural landform and vegetative cover of the Rattlesnake uplift formation, notably Rattlesnake, Red, Candy and Badger Mountains, at or above elevation 900 ft.

Actions:

1. *Coordinate County parks and recreation programs with those of the cities to avoid duplicative efforts.*
2. *Coordinate County Planning Department and the County Parks*

Department planning activities to maximize compatibility.

3. *Within the County's subdivision ordinance, consider a provision for the dedication of parkland or fees in lieu of land by developers of new subdivisions within the County. Consider reservation of lands prior to issuing occupancy permits.*
4. *Consider that excess County land should be traded or sold to acquire additional parklands in locations where such parks are needed.*
5. *Consider locating neighborhood parks and playgrounds so as to provide safe and convenient access to their service areas.*
6. *Prior to the sale of land owned by the County, consider keeping the land reserved for use as public open space.*
7. *Study the need and possibility of establishing a nature trail on the north face of the Horse Heaven Hills.*

CAPITAL FACILITIES AND PUBLIC SERVICES

GOAL 41

Based upon the Land Use Element, anticipate the need and location of public facilities and services, and plan for their timely and cost effective provision.

GOAL 42

Consistent with rural land use designations and maintaining the rural character and objectives of rural residents as expressed in the adopted Comprehensive Plan, expand and diversify the rural economy and employment base through the construction of public facilities

capacities to serve as a framework and incentive for rural development.

GOAL 43

Realize locally the inherent economic opportunities and benefits associated with transition of the Hanford lands, infrastructure and resources from a military to a peacetime mission.

GOAL 43-1

Within appropriate land use zones in Benton County, provide for the location of "Essential Public Facilities" using siting criteria that are consistent with statutory requirements applicable to these facilities.

POLICIES:

- A. That plan provisions shall be made for the location and/or protection of anticipated and/or existing public uses such as parks, playgrounds, schools, essential public facilities, and other public, state or federal activities or facilities owned and operated for the benefit of the general public.
- B. That for each facility, eliminating existing deficiencies in a Level(s) of Service has priority over the expenditure of capital funds for new uses.
- C. That publicly funded capital projects be those necessary to accommodate the existing and projected demands of the Land Use Element of the Comprehensive Plan.
- D. That to sustain and improve the well being of unincorporated County residents, the priority recipients of capital facilities planning and expenditures are projects which accomplish one

or more of the following:

- 1. Are essential for public health, safety and welfare;
 - 2. Address and/or improve the quality and level of regional government services;
 - 3. Maintain designated transportation Levels of Service;
 - 4. Improve public and private sector productivity; and,
 - 5. Facilitate the maintenance and growth of the rural/agricultural economy.
- E. That relative to the public facilities/infrastructure, and resource needs of the residents of Benton County, land use and planning options, which utilize Hanford site resources, and which transcend the fed/local boundary at Hanford shall be continuously explored.
 - F. That future development of land adjacent to existing and proposed school and other public facilities shall be located and designed to be compatible with such uses.

Actions:

- 1. *Integrate the Hanford site with Hanford off-site capital facilities planning where possible. Integration of water and transportation (including rail) systems is a priority.*
- 2. *Identify the current and future capital facilities and resource relationships, needs, opportunities, and constraints associated with the Hanford site.*
- 3. *Team up with the port districts and the agricultural community to identify and implement planning and*

project efforts which improve agricultural advancement: strengthen and conserve the resource base (soils, water, labor, farm to market transport, support industries), expand the agricultural economy, diversify the rural lands economic base without negatively impacting agricultural productivity and options.

4. Initiate or contract a study to determine the marketability of a major water oriented "Destination Resort" within the unincorporated area of Benton County. If such a facility is marketable, analyze alternative sites for public facilities and service needs and costs.

5. Devise and implement a schedule for phased construction of the Master Plan for Horn Rapids Regional Park, consistent with the Park site's designated role and function as a focal point in the Tapteal Greenway Plan.

ECONOMIC DEVELOPMENT

GOAL 44

Plan for a diversity of living and working situations that will provide residents with an opportunity to make economic and lifestyle choices.

GOAL 45

To strengthen and diversify the County's economic base: create a stable balanced community economic situation by promoting industries that are diverse, agriculturally based and that process what we sell.

GOAL 46

To identify and apply land use planning and development standards which influence a sustainable use of the natural resources base.

GOAL 47

To facilitate economic growth and prosperity while preserving the existing rural quality of life and character, as it is defined by rural residents.

GOAL 48

To promote and protect tourism related to viticulture and other agricultural activities.

GOAL 49

To provide adequate, accessible commercial areas while minimizing impact on surrounding uses.

GOAL 50

Expand employment opportunities.

POLICIES:

- A. That economic growth and diversification in the County shall be planned for and encouraged.
- B. That the agricultural economic base of Benton County shall be maintained and protected.
- C. That locations for commercial retail and service activities serving urban and regional markets shall be made exclusively within Urban Growth Areas. Commercial development serving rural communities is appropriate on commercially designated lands within or adjacent to the communities of Finley, Plymouth, Paterson, Whitstran, and Kiona. Highway commercial development is appropriate for areas designated for such at highway interchanges. Master planned resorts and tourist-oriented visitor destinations are appropriate county-wide.

- D. That commercial activities develop in "nodes" or clusters as opposed to strip-type configurations.
- E. That where practical, commercial development utilize a frontage road or a circulation system that will prevent the occurrence of numerous driveways opening onto arterial roadways.
- F. That uses locating within areas designated "Interchange Commercial" be those which serve interstate freeway traffic.
- G. That commercial developments be planned, constructed and landscaped so as to be visually and physically compatible with surrounding areas and uses.

Actions:

1. *Establish parking standards that provide adequate off-street parking for all commercial developments.*
2. *Apply buffers where necessary to prevent conflicts between incompatible uses.*
3. *Develop landscaping and design criteria for commercial developments.*
4. *Establish performance standards to control odor, noise, light and glare, dust, fire and explosive hazards, toxic materials and other potential nuisances within commercial areas.*

GOAL 51

To provide areas for the location of light and environmentally acceptable heavy industrial uses, while minimizing impacts on surrounding rural uses.

POLICIES:

- A. That established industrial sites in compliance with the Plan and on lands designated for industrial use be protected from being compromised by the encroachment of incompatible uses through the use of performance and/or site design criteria on adjacent lands not designated Industrial.
- B. That non-agricultural related industry be located on sites not designated as "GMA agriculture".
- C. That map designations be made for the location of a diversity of light and heavy industrial uses consistent with maintaining environmental quality and infilling or building out rural community center areas, or taking advantage of locational opportunities such as shoreline and rail access.
- D. That light and heavy industrial uses be encouraged to locate in areas where:
 1. Access can be provided by major transportation networks such as road, rail, air and water;
 2. Existing development is characterized by and/or compatible with industrial activity;
 3. Utilities; including electric, gas, water and sewer, can be adequately provided, either as extensions of municipal facilities (e.g. by service contract) or by on-site facilities.
- E. All lands designated heavy industrial be governed by

performance standards set forth within the zoning ordinance and by the following restrictions:

1. Compliance with all State, local and Federal laws and regulations with regard to the disposal of pollutants of any nature into the water or the reservoirs.
2. A maximum decibel level of 65 beyond the boundary of the industrially used property, except where levels exceeding 65 decibels are only occasional and incidental as opposed to constant or frequent.
3. That no activity or use shall be carried on, or permitted, which would generate obnoxious odors, fumes, dust or create other conditions in violation of local, State, or Federal air pollution laws and regulations.
4. No use shall be permitted that will result in the disposal of pollutants of any nature, floatable or nonfloatable, into water courses, watersheds, reservoirs, by stream, floods, or otherwise which could be detrimental to public health, safety, and welfare, including the degradation of the functions and values of natural resources.
5. Service infrastructure and capacities necessary to support such industrial uses shall be limited to those necessary to serve build-out of the industrial designation and shall not permit low density sprawl in rural areas.

Actions:

1. *Establish performance standards to limit dust, odor, glare, smoke, noise, gases, traffic and other potential nuisances at levels compatible with surrounding uses.*

UTILITIES

GOAL 52

Achieve a household water and sewer system that is affordable yet is not based on densities that change the rural character.

POLICIES:

- A. That provisions for adequate fire protection water supplies shall be required in all developing areas.

Actions:

1. *Devise, adopt, and implement joint service agreements between special districts and counties and cities for lands within Urban Growth Areas.*
2. *Develop and adopt joint city/county development standards for lands within Urban Growth Areas, with input and advisement from special districts such as schools, fire, police, transit, and waste collection, as well as development and land owner interests.*
3. *Satisfy the urgent need for a land-fill site(s) and/or transfer station(s) in the County and enforce illegal dumping and littering laws.*

GOAL 53

Facilitate the cost-effective accessibility of utilities in land use and development.

POLICIES:

- A. Support development regulations

that are flexible and receptive to innovations and advances in cellular technology and act upon the knowledge that moving information rather than people yields benefits of conservation and cost efficiencies.

GOAL 54

Facilitate maintenance and rehabilitation of existing utility systems and facilities and encourage use of existing transmission/distribution corridors.

GOAL 55

Encourage multiple uses in utility corridors where practical.

POLICIES:

- A. Encourage utility providers to make every effort to jointly use existing utility corridors before seeking locations for new rights-of-way.

Actions:

1. Review existing and new regulations to ensure there are no unintended or unreasonable constraints on the provision of utilities.
2. Allow for passive recreational use of utility corridors when practical.

GOAL 56

Reduce the potential for accidents near liquid gas pipelines.

POLICIES:

- A. Include pipeline operators in Comprehensive Plan review and amendment processes, and reviews for subdivision and short plat developments when within 500 feet of a potentially hazardous transmission pipeline easement.

Actions:

1. For proposed developments that are sensitive receptors (e.g., schools, events facilities, hospitals) in proximity to a high-pressure transmission pipeline, consider the practicality and effectiveness of improving safety conditions by requiring a setback from the pipeline.

2. Influence the selection of new pipeline routes away from developed areas.

3. To maintain public safety, incorporate into the County's land use planning and permit review systems the establishment of a "consultation zone" extending outward from the easements of pressurized gas transmission lines that carry hazardous materials, and within which any land use activity that would modify terrain elevations, grade or loading, be reviewed and commented upon, by the pipeline operator to the County, so that necessary precautions to maintain pipeline integrity are applied before commencing the activity, or receiving a permit.

GOAL 57

Develop and adopt provisions as necessary that streamline and support an efficient and effective transition to electric vehicles.

POLICIES:

- A. An electric vehicle charging station equipped with slow and medium speed charging equipment shall be permitted outright as an accessory or ancillary use to any principal use in all zoning districts.

- B. Electric vehicle "rapid charging stations" shall be an allowed use in all Interchange commercial, Industrial, and agricultural zones with limitations, and excluded in areas identified as critical resource areas.

WATER RESOURCES

GOAL 58

Secure long-term sustainable water supplies and apply effective stewardship of them.

GENERAL POLICIES

- A. When requested by municipal governments or other public water systems, Benton County will take such actions as are appropriate to support their efforts to secure long-term, sustainable water supplies that are consistent with the Benton County Comprehensive Land Use Plan or the Comprehensive Land Use Plans of the municipalities within Benton County.
- B. Benton County encourages water reuse, conservation and responsible stewardship through the development of voluntary conservation programs, educational outreach and alterations to current water policy that provides incentives for common sense approaches to stewarding water resources.

SURFACE WATER POLICIES

- C. Benton County encourages use of the Columbia River and its reservoirs as a key element in ensuring long-term availability of

water supply, barge transportation, power generation and flood control and support for population growth, agricultural production, industry, fisheries and economic development. Pursuant to the US Army Corps of Engineers John Day reservoir drawdown study, the reservoirs should also be maintained to protect wildlife habitat.

- D. Benton County fully supports the designation and allocation of reserved water for municipal, commercial, industrial and irrigation use from the John Day and McNary pools as per the authority under the Revised Code of Washington (RCW 90.54) and Washington Administrative Code (WAC 173-531A.040) to allocate Columbia River water resources.
- E. Benton County supports continued State primacy and future delegated local authority over any additional water withdrawals from the main-stem of the Columbia River.
- F. Benton County supports federal and state agencies in developing reasonable water resource policy decisions based on defensible science to meet the needs of people and wildlife. When appropriate, Benton County may challenge these agencies to defend policies that seem neither reasonable nor scientifically defensible, such as the NMFS "no net loss" water policy.

- G. Benton County supports management of the Yakima River consistent with the adjudication process and with the local watershed planning process established by the Tri-County Water Resources Agency. The County will oppose actions within the river basin that attempt to limit or exclude local government involvement over regional planning and decision-making process.
- H. Benton County supports the addition of off-stream reservoirs to augment river flows. Off stream storage is discussed in greater detail under Goal 59.

GROUND WATER POLICY

- I. Benton County supports ground water management strategies that permit the responsible development of ground water resources, while protecting the long-term sustainability of aquifers.
- J. Benton County supports selective continued issuance of new water rights from groundwater sources. It is the County's belief that areas and related aquifers exist where new water rights will not create impairments to existing rights or significantly affect aquifer levels. New water rights applications in these areas should be accepted and processed by Washington State Department of Ecology.

WATER USE

GOAL 59

Identify primary water service providers for planning jurisdictions, and reliable supply sources for major land use categories.

WATER USE POLICIES

- A. Benton County supports protecting the inchoate portion of existing water rights for municipal growth.
- B. Benton County endorses responsible stewardship of municipal water supplies.
- C. Benton County encourages the use of irrigation water for non-potable uses in housing units, parks, and other developed lands within municipal boundaries.
- D. Municipal governments or the primary water utility in the UGA are the best long-term source for providing water supply services within designated Urban Growth Areas (UGA). In those UGAs where small, non-municipal, public water systems are active, Benton County supports the utilization of Satellite Management Agencies or private water purveyors, via responsible public water purveyors, to meet the domestic water needs of those areas. Domestic water should be provided by the primary utility in the UGA.

RURAL DOMESTIC POLICIES

- E. When the need arises for a rural domestic water supplier, Benton County encourages considering service first from existing public or

private water purveyors.

- F. Benton County believes that public and private purveyors adequately provide for water needs in rural areas of the County. The County will not seek to become a residential water purveyor except where mandated by the state under RCW 43.70.195.
- G. Benton County encourages irrigation districts to consider providing not only water for irrigation purposes but domestic, commercial and industrial supplies as well as a Satellite Management Agency.

INDUSTRIAL POLICY

- H. Benton County supports efforts to secure long-term sustainable water supplies sufficient to provide for industrial activity on the Hanford site, in the Finley area and other industrial designated areas.

AGRICULTURE POLICY

- I. Benton County encourages efforts to secure long-term water supplies to support the county's strong and diverse agriculture economy.
- J. Benton County supports the withdrawal of additional water from the John Day and McNary pools, under reserved and new water rights, to service additional agricultural needs, including direct irrigation, food processing, and related ag-industrial needs.
- K. Benton County encourages the continued development of water

transfers and changes to meet changing agricultural production needs.

- L. Benton County supports and encourages water reuse strategies that allow for several uses of irrigation water before being returned to the river system.

WATER MANAGEMENT

GOAL 60

Increase total water supply by obtaining additional storage, and reducing demand through the application of water use efficiencies.

WATER STORAGE POLICY

- A. Benton County supports increasing water storage by increasing capacity in existing reservoirs, developing new above ground water storage capacity, and the development of storage capacity through enhanced aquifer storage and retrieval.

WATER MANAGEMENT POLICY

- B. Benton County encourages water management practices that will allow and provide incentives for reclaiming water resources that retain economic and recreational resources. Such practices include reclaiming waters used for food processing to irrigate crops or reclaiming wastewater to support developed open spaces, such as parks or golf courses.
- C. Benton County encourages voluntary conservation of water resources through xeriscape (low water use landscape plantings) and other low water use methods.
- D. Benton County will work to identify

opportunities for water conservation on county property and at county facilities.

- E. Benton County supports increasing water supply on the Yakima River Basin through pump exchange projects.

WATER RIGHTS TRANSFER POLICY

- F. Benton County encourages water marketing, the trading of water rights as commodities, providing there is sufficient controls in place to protect the basic needs of Benton County citizens and industries.

- G. Benton County supports the formation and utilization of Water Conservancy Boards to review water rights transfer applications.

REGULATORY ISSUES

GOAL 61

Protect existing water rights and opportunities for future additional rights; manage water resources demand and protect its quality so as to sustain the local economies and fish and wildlife resources,

GENERAL POLICY

- A. Where the direct interests of County residents are challenged by a loss of existing water rights or by an arbitrary or unsubstantiated attempt by federal or state agencies to deny County residents access to adequate water resources for future growth and well-being, or regulatory actions create a taking of private property, Benton County may examine engaging in federal and state

litigation.

ENDANGERED SPECIES ACT (ESA) POLICY

- B. Benton County promotes a balanced response to listings of threatened and endangered species that provides improved conditions for species maintenance and recovery, while maintaining and allowing sustainable development of water resources for economic growth.
- C. Benton County believes that equitable application of the ESA requires agencies to establish specific, measurable recovery goals and address human factors, economic costs and opportunity costs, when preparing science-based species recovery and species protection plans.

WATER QUALITY (CLEAN WATER ACT, SAFE DRINKING WATER ACT AND OTHER WATER QUALITY LAWS) POLICY

- D. Benton County supports the development and management of County-owned storm water systems that protect surface and ground water quality consistent with local conditions.
- E. Benton County supports Benton and Franklin County Health District in development and implementation of septic tank and drain field standards to protect surface and ground water quality, and human health.
- F. Benton County encourages educational programs and voluntary efforts of agricultural producers, processors, irrigation districts and municipal users to

responsibly manage return flows to improve surface and ground water quality.

- G. Application of state standards must reflect climate differences between various regions of Washington State.

WATER RIGHTS POLICY

- H. Benton County supports the extension of inchoate water rights beyond the 5-year "use it or lose it" boundary when the application of those rights is to support planned growth through municipalities and ports.
- I. Benton County supports changing the relinquishment and transfer/change statutes to allow effective water management practices.
- J. Benton County supports basing perfection on peak-use year, consistent with the quantity allowed under the permit/certificate, during this period.

MASTER PLANNED RESORTS

Goal 62

To provide opportunities for Master Planned Resorts (MPRs), consistent with the provisions of RCW 36.70A.360, and Small-scale Recreational or Tourist (SSRT) uses consistent with RCW 36.70A.(5) (d) (ii).

POLICIES:

- A. Development regulations for Master Planned Resorts and Small Scale Recreation or Tourist Use shall be consistent with provisions of the Comprehensive Plan and its regulations.
- B. New urban and suburban land

uses in the vicinity of a Master Planned Resort and Small Scale Recreation or Tourist Use are precluded, except in areas that are designated for urban growth per to RCW 36.70A.110 or for limited areas of more intense rural development, per RCW 36.70A.070 (5)(d).

- C. Master Planned Resorts and Small Scale Recreation or Tourist Use shall have the following:
 - 1. A defined outer boundary and designation on County land use maps;
 - 2. A master site plan that functionally integrates the various land uses with motorized and non-motorized circulation systems that are accessible to public transportation where available, and with open spaces for general public use;
 - 3. A policy set, for guidance during development and post-development phases;
 - 4. A zoning district to assure realization of the purpose and nature of the Master Planned Resort or Small Scale Recreation or Tourist Use;
 - 5. Design standards for building scale, exterior materials, landscaping, signage, lighting, and public spaces. Standards should reside partially within the zoning district and partially within covenants administered by property owners within the Master Planned Resort or Small Scale Recreation or Tourist Use.
 - 6. A capital facilities plan for potable water, fire suppression, waste disposal, power, vehicle circulation, parking, and public open space

7. An avoidance/ mitigation or "green infrastructure" plan to protect and enhance critical areas and to integrate them as landscape amenities, functional utility assets (e.g., hydrologic and drainage features), paths and trails, into the master plan.

- D. The primary purpose of Master Planned Resorts is to provide for carefully planned, self-contained and integrated destination resort facilities and amenities that are centered upon unique and commanding natural resource settings. MPRs may be amended to the Comprehensive Plan as Sub Area Plans.
- E. Master Planned Resorts and Small Scale Recreation or Tourist Use shall contain open space and open space amenities (paths, trails, scenic overlooks and viewpoints that are open to the general public).
- F. The boundaries of an Master Planned Resort may include lands that are designated as agriculture of long-term significance under RCW 36.70A.170 if: (i) the primary natural resource setting upon which the MPR is centered is the agricultural activity/culture and product that characterizes the predominant use of the acreage within the MPR; and (ii) a GMA agricultural zoning district tailored specifically to the MPR designation requires that:
 - (1. The purpose of the agricultural district is to protect and sustain the productivity of the agricultural land base within the MPR, consistent with RCW 36.70A .170;
 - (2. Agriculturally related accessory uses are not permitted on parcels, or contiguous parcels

under the same ownership, that do not also have a commercially viable scale of crop production on them;

(3. All non-agricultural commercial accessory uses within an MPR must be clustered on lands that are designated Visitor Serving Commercial;

(4. All land designated as Visitor Serving Commercial must have soils and/or micro-climates that have been expertly certified to be not suitable, or marginally suitable for commercial crop production relative to the average suitability of soils that are used to grow the agricultural product that is the principal resource attraction within the MPR;

(5. Visitor Serving Commercial land use designations must be concentrated in clusters located at junctures within the circulation plan;

(6. On parcels not designated Visitor Serving Commercial within the master plan, only agricultural related accessory uses are permitted, except that within structures principally used for agricultural related accessory uses, there can be limited food service, and over-night accommodations not to exceed five guest rooms.;

(7. The total acreage of the Visitor Serving Commercial (VSC) designation(s) within an Master Planned Resort must be specified on the master plan map. The total acreage so designated within the boundaries of a GMA Agricultural Zoning District shall not exceed one half acre for every 20 acres of land within the District.

Goal 63

To accomplish Master Planned Resorts and Small Scale Recreation or Tourist Use with locations, site design, building scale, lighting, and aesthetic standards that are subordinate to and aesthetically complimentary to the natural landscape.

attributable to the MPR are fully borne by the resort.

POLICIES:

- A. The location of a Master Planned Resort must be within, or within sight of the resource that is its primary attraction.
- B. Master Planned Resorts must not conflict with existing adjacent land uses and rural culture, and shall be separated physically and aesthetically from the nearest existing developed areas. Development Impacts from MPR's shall be avoided or mitigated.
- C. Master Planned Resorts are self-contained fully integrated developments that may constitute urban growth within a circumscribed boundary outside of Urban Growth Areas. The location, capacity, design, and provision of all capital facilities, utilities, and services for an MPR shall be limited to meeting needs within the MPR.
- D. The site plan, scale, architecture, exterior colors and lighting of a Master Planned Resort shall be subordinate to its natural setting and landscape.
- E. Necessary capital facilities, utilities and services may be provided to a Master Planned Resort by service providers from outside the boundary of the MPR, including municipalities and special service districts, provided that all costs associated with service extensions and capacity increases directly

LAND USE ELEMENT

CHAPTER 4

INTRODUCTION

The Land Use Element of the Comprehensive Plan consists of text and maps, which constitute a framework upon which future growth and development will occur consistent with chosen community objectives and the requirements of law.

The Land Use Element with its Land Use Maps is the "foundation stone" of the Comprehensive Plan. Its land use designations reflect the Plan's policy directions. The Land Use element must respond to and anticipate regional growth and economic conditions and trends. It is served by, and in turn serves, the other Plan Elements.

Other principal Plan Elements include the Rural, Capital Facilities, and Transportation Elements. Within these Elements, project planning, scheduling, and financing are targeted to provide the basic infrastructure services that enable the private sector to realize the land use designations on the Land Use Map. Ideally, the relationship between all the Plan Elements is one of functional interdependence and internal consistency.

The criteria for a successful relationship between the Plan Elements are that the land use designations must:

- be consistent with and carry forth the Plan's Policies.
- depict scale and densities consistent with the carrying capacity of the land, surrounding area and infrastructure;
- be cost effective relative to the

expenditure of public revenues to construct and maintain public infrastructure/service.

- reflect the suitability of the land for the designated land uses, relative to factors such as:
 - *location and land capability (re the local economic base and market forces);*
 - *availability of services, or economic feasibility of providing them;*
 - *economic and aesthetic compatibility with land uses and land use designations on adjacent and nearby lands;*
 - *local and regional transportation access;*
 - *water availability;*
 - *physical and biological characteristics.*

Managing Growth: Plan, Prepare, and Facilitate

Where the land use designations are products of the above criteria, the Transportation and Capital Facilities Elements (and Utilities Element) can serve them cost effectively by focusing their planning, scheduling, financing and construction provisions to provide the identified Levels of Service in advance of development, or upon demand.

Quality of Life

Within the broad context of "quality of Life" (i.e., residential environment, socioeconomic well-being, aesthetics, recreation, etc.), the Land Use Map and supporting text graphically represent what

the rural citizen's and interested parties who participated in the planning process have chosen as the desired ends for growth and development.

Certainty and Stability upon Which to Base Decisions

The adopted Land Use Map of the Comprehensive Plan provides a stable and certain landscape upon which the various business interests, special districts, public entities as well as ordinary citizens simply choosing a living environment can plan and invest their resources.

The Land Use Plan is a Living Document

The Land Use Element should undergo major review every seven years, along with the rest of the Comprehensive Plan, to reaffirm both the legitimacy of the Plan "Vision" and to make necessary mid-course corrections in response to new conditions or changing attitudes. Routine (annual) review as part of long range planning enables the community to monitor both the progress of meeting Plan objectives and the currency of the objectives relative to emerging issues/needs.

Requirements of State Planning Law

The Growth Management Act states that: "Each Comprehensive Plan shall include a plan, scheme, or design" for each of the following:

(1) A land use element designating the proposed general distribution and general location and extent of the uses of land, where appropriate, for agriculture, timber, housing, commerce, industry, recreation, open space, public utilities, public facilities, and other land uses. The land use

element shall include population densities, building intensities, and estimates of future population growth. The land use element shall provide for protection of the quality and quantity of ground water used for public water supplies. Where applicable, the land use element shall review drainage, flooding, and storm water run-off in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound (RCW 36.70A.070 [1]).

Siting of Essential Public Facilities (RCW 36.70A.200)

The Washington State Growth Management Act requires that the comprehensive plans of each county and city that plans under GMA include a process for identifying and siting essential public facilities. Essential public facilities include those facilities that are typically difficult to site, such as airports, state education facilities, and state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities, and inpatient facilities including substance abuse facilities, mental health facilities, group homes and secure community transition facilities. The Office of Financial Management maintains a regional list of such facilities that are required to be built within the next six (6) years. Because of their nature, these facilities may have requirements for: large parcels of land, unique siting needs, public services and transportation; or produce noise, and raise complex public health and safety concerns. These requirements and

impacts would be imposed upon those living and working in the surrounding area of such facilities. Benton County shall provide land use zones that are compatible, and development regulations that are consistent with the statutory requirements applicable to these facilities. The County utilizes a review process that allows citizen, city, and state agency input when such facilities are proposed. The process for siting is located in the Chapter Four Appendix, **Item 4-1, the Essential Public Facilities Siting Matrix.**

Airports and heliports operated for the benefit of the general public must be appropriately planned to assure that adjacent land uses are compatible. The Benton County Zoning Ordinance shall provide development regulations that protect life, property, and prevent the establishment of airspace obstructions and other hazards which interfere with safe airport operations.

Purposes and Utilities of the Land Use Element

The purposes and utilities of the Land Use Element, in conjunction with the Rural Element, are to:

- Provide the legitimate description of the outcomes which the community expects from growth and development;
- Provide certainty and predictability for development and financial interests, residents, and service providers;
- Serve as the policy and regulatory framework which ensures that through the passage of time and successive political administrations the cumulative outcome of growth and development consistently moves toward that chosen by the rural

community;

- Provide a reference point from which the community can deliberate, chart the course of change, and legitimize new directions, goals and outcomes in response to changing conditions and attitudes; and,
- Present, record, and legitimize the means by which local interests meet the mandates of state planning law, and relevant federal requirements consistent with the satisfaction of local needs and preferences.

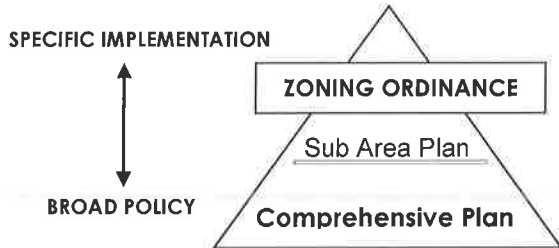
SUB AREA PLANS

The purpose of a sub area plan is to provide a framework for future decision making for select and unique geographical areas within Benton County. These plans may regard areas with special features such as: shorelines providing important functions and values, lands with exceptional soils and climate characteristics making them suitable for prime agricultural production requiring protection, or have other characteristics regarded by residents as valuable or unique for preservation or protection. Sub area plans contain statements of guiding principals to be followed, recommendations for strategies to achieve desired goals and objectives, and a plan of action to guide future land use development decisions in the area. Sub area plans are not regulations, ordinances, or laws of any nature. Sub area plans are prepared with substantial public involvement and represent the consensus of the residents.

Hierarchy of a Sub-Area Plan Document

The sub-area plan document fits between the broad policies of the Benton County

Comprehensive Plan and the Benton County Zoning Ordinance specific implementation tools as shown in the illustration below:



The following Sub-Area Plans are listed by their adopted title as found in the corresponding Benton County Planning Department files and are adopted by reference and incorporated as if fully set forth within.

Red Mountain American Viticultural Area (AVA) Master Site Plan (RM MSP)

The provisions of the RM MSP represent many hours of effort by the Red Mountain Alliance and interested citizens who live and work, or have a vested interest in the development of the area described by the Plan. They consider this plan to be a blue print to achieve their vision of the Red Mountain area to be "a place of beauty where wineries lie within a sea of vineyards against the backdrop of Red Mountain, reinforced by the natural character of the place: where topography, soils, and solar aspect have combined to make Red Mountain a special place to grow grapes and make wine. Thus, Red Mountain's agricultural working landscape is an important economic resource for the region and if development pressures are not managed well within the area, the unique qualities that currently exist on Red Mountain could be lost."

The County endorses the vision of the Red Mountain AVA Master Site Plan (RM MSP), but also notes that the Plan may contain provisions that may appear to be mandatory and beyond the authority of the Plan in attempting to control use of the property in the Red Mountain Area.

There may also be uses referred to in the Plan that may be found inconsistent with agricultural activities and may not be possible under the State's Growth Management Act at this point in time. It is important, therefore, that it be understood that the Plan and its provisions are advisory in nature and intended to guide future development of the Red Mountain site plan area.

The purpose of the Master Site Plan is to provide a "viticultural park" concept that reinforces the existing and future qualities of the Red Mountain AVA.

How the Plan is organized

This RM MSP is divided into seven chapters that reflect the fundamental components of this Sub-Area Plan. The chapters are as follows:

1. Introduction
2. Master Site Plan Elements
3. Visitor Projections
4. Design Guidelines
5. Steps toward Sustainability
6. Zoning
7. Next Steps

Each chapter refers to items and issues related to that category only. Endnotes and References are provided in Chapter 8, and an appendix follows.

The Red Mountain AVA Master Site Plan

Map, (Map Figure 4-14), shows the boundaries of the RM MSP, the Red Mountain AVA boundary, existing vineyards and wineries, potential vineyards and wineries, existing roads, and other proposed infrastructure.

Land Use Designations

The County's Comprehensive Plan adopted in June 1998, and updated in 2007, shows the land use for the majority of the area designated as Growth Management Act (GMA) Agriculture, with the land bordering south of State Route 225 and land adjacent to the east side of Demoss Road designated for Rural Lands Five (RL-5).

Current Zoning Classifications

Growth Management Act Agricultural District (GMAAD)

This zoning designation is designed to protect agricultural lands of long term commercial significance as required by the State Growth Management Act (RCW 36.70A). This protection is accomplished by establishing minimum lot sizes in areas where soils, water, and climate are suitable for agricultural purposes, and limiting activities within the designation to those non-agricultural uses compatible with agriculture, and by conditional use, those appropriate nonagricultural accessory uses that promote or sustain the continuation of the agricultural uses of a parcel. The minimum lot size in this designation is twenty acres.

Rural Lands Five Acre (RL-5)

The Rural Lands Five Acre District (RL-5) is designed to enhance and preserve Benton County's rural character, which offers rural open space, low densities, wildlife habitat,

public open space for outdoor recreational activities, and rural home sites on which a limited range of agricultural activities may be conducted. The minimum lot size in this designation is five acres.

Future Zoning Classifications

Red Mountain GMA Agricultural District

This zoning designation will be designed to conserve and protect agricultural lands of long term commercial significance as required by the State Growth Management Act (RCW 36.70A) and more particularly to protect the unique agricultural character and attributes of these lands on Red Mountain that are within the federally designated Red Mountain Viticulture Wine Appellation, from being developed in a manner that would preempt or impede the development of the lands into a planned visitor destination. Although vineyards, wineries for the production of wines, and tourism exist within the area, the agricultural land within this designation share common characteristics with other GMA Agricultural designations in the County by being suitable and valuable lands for commercial agriculture. Such characteristics include suitable soils, farmable topography, un-platted acreages of significant size, and existing or potential availability of water, suitable slope exposure and the absence of existing land uses that are known to be incompatible with agricultural operations.

The Wine Village

Red Mountain's "Wine Village" will provide an interpretive center with welcoming, educational, recreation and support functions. The Village is designed to both welcome and introduce visitors to Red Mountain and prepare them for what

they will see and experience, a place to plan their visit and enjoy other tourist related support services. The area is intended to create a 'Sense of Place' which is characteristic of premier visitor destinations. Among the uses included within the Wine Village are: a visitor interpretive center, small restaurants, bistros and casual food shops, art studios and galleries, wine retail, antique shops, demonstration vineyards, winery, and gardens and small lodging facilities not to exceed fifty rooms. Under current planning law these uses will most likely occur via a Master Planned Resort (MPR) designation.

A MPR designation, as allowed under RCW 36.70A.360, is defined as "self-contained and fully integrated planned unit developments, in a setting of significant natural amenities, with primary focus on destination resort facilities consisting of short term visitor accommodations associated with a range of developed onsite indoor or outdoor recreation facilities." The location for this designation must be on soils or in a microclimate where an essential capability for commercial agriculture production is compromised. The total acreage of the MPR district may not exceed one half (.50) percent of the total acreage of Red Mountain AVA, and be built to specific design criteria and standards.

Tourist Serving Area

In the southeast corner of the RM MSP, outside the AVA boundary and within the Rural Lands Five designation, is a location identified as an important future entry way into the Red Mountain AVA area. A coordinated site specific planning effort in

this area is needed to provide a development plan that allows for a limited range of short-term "visitor serving" activities, recreational, commercial and wine related conveniences for tourists and visitors to the vineyards and wineries of the Red Mountain AVA.

The future location of the Tourist Serving Area is described to occur near a northerly alignment route from a proposed Red Mountain I-82 Interchange that connects the interchange to State Route 224.

The Shoreline Master Program (SMP)

The Growth Management Act (RCW 36.70A.480) adds the goals and policies of the Shoreline Management Act as set forth in RCW 90.58.020 as one of the goals of the Growth Management Act.

The Benton County Shoreline Master Program was adopted by the Board of County Commissioners on June 3, 2014 and approved by the Washington State Department of Ecology on February 16, 2015. The Shoreline Master Program Policy Chapter within the Shoreline Master Program implements the goals of the Shoreline Management Act and is designed to be compatible with the Comprehensive Plan. The policy chapter is a sub area plan of the Benton County Comprehensive Plan, and is adopted by reference within this Plan. The policy chapter provides the framework for future decision making and a guide for future development of lands within the County's Shoreline Master Program jurisdiction boundaries.

As used in the Shoreline Master Program Policy Chapter, goals are the broad value

statements and reflect the community's broad vision for its shorelines. Goals are organized into different "elements." Policies are more detailed statements of the County's vision and complete and give detail to the goals. Policies serve as a bridge between the goals and regulations.

Detailed regulations are located in the Benton County Code. Together, the Shorelines Master Program Policy Chapter and the Shoreline Master Program Regulations constitute the entire SMP.

OVERVIEW: THE ECONOMY AND LAND USE WITHIN BENTON COUNTY

Economic History of Benton County

The economic history of this region is one of use, production, and trade of natural resources, and the commerce associated with the means of transporting resource commodities. The resources are, in the chronological order of human use and enterprise: fish and native flora and fauna, fur, livestock, irrigated agriculture, hydroelectric power and agricultural products and technology. Means of commerce have been boat, horse, river transport and barge, rail and road. A brief history is presented below.

Native American Culture And Trade (10,000 BC to the Present)

Native Americans were the first inhabitants of the Tri-Cities area and some archaeological findings have established evidence of occupancy dating back perhaps as much as 9,000 years. From the quality and variety of artifacts found, a picture of a stable culture emerges, one with leisure time, comprehensive religious beliefs, and extensive trade and

communications. Articles made from Olivella shells from the Pacific coast (beads), jade from British Columbia (adz chisels), and obsidian from Glass Butte, Oregon (arrow and spearheads and knives) have been found in the Tri-Cities, attesting to the extensiveness of trade.

The principal source of food for the Columbia River tribes was salmon, mainly taken during the annual spring salmon run. Dried on open-air racks, the fish would be stored for winter food or used for trading with other tribes. Aside from salmon (and steelhead), seeds, roots, and berries were important dietary elements. Indian tribes occupying the Tri-Cities area were also hunters, and would often travel to the mountains outside the river country in search of game.

The Fur Trade (1811)

After Lewis and Clark traveled through the junction of the Snake and Columbia Rivers in 1805, it was just a matter of time before the onslaught of American, English, and French fur traders reached the area. In 1811, an Englishman, David Thompson, claimed the land around the confluence of the three great rivers for England. Working for the North West Company, he was the first of the traders and trappers representing the great fur companies. Not long afterwards, John Jacob Astor's Pacific Fur Company established Fort Astoria on the Pacific, representing the United States; from this hub, the company's agents spread throughout the Northwest and to the Tri-Cities area. However, after the end of the War of 1812, Astor's company began withdrawing from the area because of financial reverses, and was gone by 1813. The North West Company merged

with Hudson's Bay Company, which became the dominant force in the region.

In 1818 the construction of Fort Nez Perce began; it was located on the Columbia near the mouth of the Walla Walla River about ten miles south of the Snake River. Later known as Fort Walla Walla, the post remained the center of activity in the region until it was abandoned when the Hudson's Bay Company relinquished its presence in the region following the Indian Wars of 1855.

Trapping and trading for furs were the principal economic activities of these first white people. However, a political agenda was also involved; who would establish legal claim to the territory, the United States or Great Britain? While the British Hudson's Bay Company was the largest organized entity in the Northwest at that time, increasing numbers of U.S. settlers, with intentions of farming, were beginning to permeate the area, and had the active encouragement of the U.S. government and its Manifest Destiny policy. Eventually, Great Britain and the U.S. established the 49th parallel as the dividing line between British and American territory (1846).

Livestock Ranching and River Transportation (1850s to the Present)

The decline of fur trading and trapping in the Tri-Cities region was offset by the rise, in the 1850s, of steamship transportation on the great rivers. Steamships were necessary to support the emergent ranching enterprise; by the 1860s, cattle and horse herds dotted the area. This transportation also supported gold miners. With the discovery of gold in northeastern

Washington and Canada, prospectors from California and Oregon headed north, frequently through the Tri-Cities region. A fairly substantial number of prospectors also worked the sandbars of the Columbia although no great quantities of the metal were ever found.

Railroads (1870s to the Present)

After steamship transportation became firmly established, the railroads arrived. Beginning in the late 1870s, railway construction became an almost feverish activity in the region. The town of Ainsworth was laid-out and built in 1879 to house railroad construction crews. Located at the mouth of the Snake River, it was designated the county seat when Franklin County was established in 1883 by the Washington Territorial Government. Soon after, though, when construction in the Ainsworth area was completed, the town was vacated. By 1885 nothing was left - even the wood had been evacuated to build Pasco, another railroad town, which soon became the Franklin County seat. Northern Pacific's rail link from Spokane to Minnesota was completed in 1883, and local and regional links and spurs were built thereafter throughout the Tri-Cities. Significant railroad construction activity continued until the automobile began to supplant the railroads after WWII.

Irrigated Agriculture (1890s to the Present)

During the heyday of the railroads, farming began to increase in importance in the region. The major drawback to agriculture, though, was lack of water. The early farmers, who had purchased land with the belief that the railroads would bring prosperity to the area, had a tough go

of it. In the 1890s, first attempts were made to irrigate land by constructing canals and pumping water to farming areas. These efforts, mainly by private concerns, continued for several decades but never proved to be profitable. Even the establishment of publicly controlled irrigation districts did little to provide water at a practical cost. The price of water usually offset the profits made from crops. As late as 1900, travelers passing through by rail would mainly see vistas of sagebrush and open-range grazing of cattle and horses. The increase in settlement, though, was recognized when Benton County was established in 1905 from eastern portions of Yakima and Klickitat counties. Named after the Missouri senator, Thomas H. Benton, the county's 1910 population was 7,937.

Federal Dam and Reclamation Projects (1930s to the present)

Lack of water still remained the major obstacle to agricultural and economic development. During the 1930s, though, the federal government assumed a major role in land reclamation with the construction of, among others, the Grand Coulee Dam. The Columbia Basin Irrigation Project of the 1950s expanded the amount of water going to the Tri-Cities. The McNary Dam was completed in 1954. Dam building continued, irrigation increased, advances in agricultural chemistry made dry-land farming a successful enterprise, and the Tri-Cities region bloomed as an agricultural center. Not only did agriculture boom, but its related food processing industry also flourished - all those crops had to be prepared for marketing.

The Hanford Nuclear Reservation (1943 to the Present)

In 1943, driven by the need to produce a fission bomb before Nazi Germany developed and used one against the Allies of World War II (WWII), the Hanford Nuclear Reservation of approximately 600 square miles in size was established by the U.S. Government. The lands of the Site were purchased where privately owned, and otherwise expropriated if owned by the state or other federal agencies or public entities. This brought a new kind of prosperity to the region. Beginning with a Naval Air Station for training pilots and ending with a plutonium production facility, the war completely transformed the Tri-Cities. The 1940 Census listed 18,360 people in Benton and Franklin counties - the 1950 Census showed 64,933 - over a 250 percent increase.

The driving force behind the growth, of course, was the plutonium production facility at Hanford. As part of the Manhattan Project, plutonium from Hanford went into the first atomic explosion at Alamogordo and into the atomic bomb, "Fat-Man", that was dropped on Nagasaki to end WWII.

To produce such materials a new labor force was required with a new city to house the workers. Hanford was built at the site of the old Hanford agricultural town (population less than 300) to house the labor force that constructed the nuclear plant. The new Hanford included barracks, mess halls, and all other necessary facilities for a work force that peaked at 51,000. The nearby city of Richland was also taken over by the U.S. government to house the operators of the

nuclear reactors being built.

The region grew at a tremendous pace during the war years but did not slump back to pre-war levels at the conclusion of hostilities like many other communities. The cold war and the threat of nuclear war kept the Hanford project thriving. Plutonium production for use in nuclear weapons continued at "N" Reactor until it was halted amid controversy and publicity following the Chernobyl disaster. Through the 1960s and 1970s, Hanford also became a center for research and application of nuclear energy to non-military purposes. This strong effort into basic and applied nuclear research continues to the present.

Another Hanford related construction boom hit the Tri-Cities in the 1970s. The Washington Public Power Supply System (WPPSS) had selected the Tri-Cities for construction of three nuclear reactor plants to generate electricity (another two plants were to be built at Satsop in Grays Harbor County). Although only one was ultimately built and put into operation, construction employment payrolls swelled through the 1970s and 1980s. The abnormally high employment levels fell back when WPPSS halted construction of four of the five plants in 1982 and defaulted on its bonds for two plants in 1983. The Hanford Plant 2 reactor was completed and opened in 1984. Contemporaneously with WPPSS the Basalt Waste Isolation Project (BWIP) also generated additional employment. This was an exploratory project to assess the suitability of the basalt formations underlying Hanford for long term storage of high level nuclear wastes produced for

military and commercial purposes within the country. This project terminated in the mid 1980s.

In 1988-89, the dissolution of the Union of the Soviet Socialist Republics (USSR) rendered the plutonium production mission at Hanford an anachronism, and it ended. Yet another economic boom began in the early 1990s from the federal and state program to "**Clean-up**" the 50 years of hazardous waste contamination on the Site. At its peak in 1994, the Hanford budget was over 2 billion dollars, dropping to just over 1 billion in 1997.

Roads, Automobiles and Trucking (Post WWII)

The aftermath of WWII saw a boom in road building throughout the area (and the nation). The rise of the automobile spelled the decline of the railroads and these farm-to-market roads helped open up the region as much as the railroads did. The 1990s have seen a strong resurgence of rail transport as a basic element of international and transcontinental commerce.

Agricultural Chemical Industry (1950s to the present)

Beginning in the 1950s, an agri-chemical industry was born along the banks of the Columbia near Kennewick. The chemical production industry evolved into a major component of the region's economy; the largest producers of fertilizers in the Pacific Northwest came to be located in the Tri-Cities (the above "history" has been excerpted from: Tri-Cities, The Mid-Columbia Hub, by Ted Van Arsdol, and only slightly edited, and augmented re: WPPSS and BWIP and Cleanup).

The Contemporary Economy

Benton County's economic base is "bi-modal", i.e., it is principally supported by two independent legs: a Hanford leg on the Hanford Site, and the commercial agriculture leg, off the Site. The landscape of the county reflects this bi-modal characteristic.

Agriculture

The agricultural leg occurs within the unincorporated lands outside of the Hanford Site. Here, the principal land use is commercial "dryland" and "irrigated" agriculture with its related industries such as storage, shipping, processing, and sales of chemicals and equipment.

Commercial agriculture, undertaken at a scale directed at the export market, is an intensive land use requiring:

- vast acreages of land (especially for dryland crops);
- dependable and large supplies of water (for irrigated crops);
- an absence of adjacent incompatible uses;
- major storage, processing and transportation infrastructure at strategic locations;
- a supply of employees.

The agricultural industry in the Pacific Northwest generally, and in eastern Washington specifically, has these resources as well as direct rail and water transportation routes to major saltwater ports. As a result it is ideally situated to serve the huge populations of the Pacific Rim countries. The last twenty years has seen a steady growth in the area's

agricultural economy.

Major crops in Benton County are wheat, corn, potatoes, apples, cherries, hops, mint, alfalfa hay, wine grapes and beef cattle. The industry is supported technically by an Agricultural Research and Experiment Station in the west county just north of Prosser. The employment base for this industry generally lives in the outlying rural areas of the county, in small cities such as Prosser and Benton City, and in unincorporated rural communities such as Finley, Paterson, Plymouth, and Whitstran.

The agricultural leg of the local economy is at present the smaller of the two legs, though it is also the more stable: it is market driven with an ever expanding customer base; its resource base (soil and water) is renewable; at the regional level it is an integrated cluster of economic components.

Since around the start of the new millennium, vigorous retail commercial, tourism, and retirement sectors of the economy have become significant growth factors, with the growing wine industry regionally, and in Benton County specifically adding a boost to the tourism sector.

Hanford

The Hanford leg of the area's economy is the federally funded program activity that occurs principally on the Hanford Site. The Site contains large industrial areas supported by billions of dollars of federal investment in infrastructure related to both the past and current missions. Of note are:

- rail and road transportation systems;

- massive water pumping and distribution systems;
- reactor number 2 of the Washington Public Power Supply System (WPPSS);
- the Fast Flux Test Facility (FFTF), the worlds only sodium cooled nuclear reactor;
- eight decommissioned nuclear reactors;
- numerous hazardous waste storage, disposal and processing facilities; and
- new hi-tech structures such as the Environmental Molecular Sciences Laboratory (EMSL), and the Laser Interferometer Gravitational Observatory (LIGO).

The Hanford leg of the local economy, under the present level of funding provided by Congress, currently represents approximately one in four jobs in the Tri-cities region.

Within the non-agricultural sector of the Tri-cities area of Benton and Franklin Counties, Hanford employment is the principal driver of the residential and commercial construction and service sector industries. However, the uncertainties characteristic of annual congressional budgets for Hanford programs can create periodic anxieties for those industries as well as local governments and special districts who must plan for and finance capital improvements.

Though not completed at present, it is the intent of the County to include the Hanford Site in this Comprehensive Plan as a separate geographic component, or "Sub-Area Plan" with its own Land Use Plan. Please refer to Figure 4-6 for the

location of the Hanford Planning Region or Sub-Area.

Current Land Use Trends

Beginning in the 1990's there has been a condition of sustained population and economic growth in eastern Washington. For the present, the cyclic booms and busts in the local economy characteristic of the 1960's through late 1980s has been replaced with a seemingly steady and prolonged period of population growth and conversion of raw land to agriculture and related industries, urban uses, and rural residential development.

Locally, since 1989-90 both the farm and construction/development sector of the non-farm economy have enjoyed relatively favorable market conditions (refer to Chapter 7, Economic Element).

During the current decade, all of eastern Washington is experiencing significant population and economic growth for reasons beyond local influence. It is anticipated that the current regional growth trend will continue into the near and mid-term future (to year 2025).

In addition, global markets for eastern Washington farm products are expanding. At the local level the commercial retail sector within the Tri-cities has reached a scale of regional significance with new retail stores being constructed. Even at diminished levels, Hanford Cleanup budgets are likely to remain sizeable enough (approximately 1.5 to 2 billion annually) over the next 5-10 years, to support local economic growth.

The land use trend on the Hanford Site can

be broadly described as the gradual reintegration of major portions of Hanford's resources (land, water and infrastructure) into the economy, custom and culture and regulatory authority of local jurisdictions within which the Site lies. Today the roughly 429 square miles of the Site within Benton County are being cleaned up for future uses, that in addition to federal missions will likely include non-defense related private and public sector uses.

Local jurisdictions are preparing Land Use Plans for the portions of the Hanford Site within their boundaries. The proclamation of President Clinton in 1999 creating the Hanford Reach National Monument is expected generate additional visitors and

tourists to the site and surrounding communities.

Land Use Element Strategies For A Sustained Economy

It is essential that the Land Use Element contain strategies and provisions that accommodate current land use trends that support sustained economic growth of the key economic sectors of the local economy. Significant land use trends current or emerging within Benton County and the region are listed in TABLE 4.0. The right column of TABLE 4.0 presents the strategies within the Plan to accommodate and facilitate those trends.

TABLE 4.0 PLAN STRATEGIES TO ACCOMMODATE CURRENT AND EMERGING LAND USE TRENDS

LAND USE TRENDS	PLAN STRATEGIES TO ACCOMMODATE TRENDS
Agriculture	
Expansion of agricultural acreage: conversion of undeveloped or rangeland to dryland/ irrigated crop production;	1. Policy and Map Designations which conserve lands suitable for commercial ag. Production; Within the ag. designation, implementing ordinances encourage all ag-related uses while minimizing non-ag. uses.
Conversion of lands to irrigated agriculture; New irrigation technologies which enable the same amount of water to irrigate larger acreages; Water resources management at the local and watershed level.	2. Strategy #1 (above), plus Policy and Ordinances directed at conserving water in non-ag. developments; Policy requiring protection of surface water quality implemented by Critical Resources Ord. provisions re: rivers, streams, wetlands; Project future water needs for planning and watershed management purposes.
Increase in "value added" processing.	3. #s 1 & 2 (above), and sufficient and well located industrially designated acreage in and outside of UGAs.
Emergence of vineyards and wineries and wine grape growing areas that are Federally designated as Amercian Viticulture Areas (AVAs)	4. #s 1 and 2 above, including projects to Master Plan and adopt Sub Area Plans such as for the Red Mountain AVA. Adopt Master Plan Resort policies and an implementing ordinance to enable the development of Master Planned Resorts.
Growth in agricultural related tourism.	5. #s 1 2, & 4(above) plus Ag. and Rural Residential zoning districts which encourage the widest range of ag/visitor uses (e.g., bed & breakfast, wineries, resorts, micro-breweries, etc.)
Expansion of rail and waterborne transport	6. Designation of Industrial zones, maintain rural (low

Chapter Four - Land Use Element

LAND USE TRENDS	PLAN STRATEGIES TO ACCOMMODATE TRENDS
systems for agricultural products; Growth in the agricultural chemical manufacture and shipment industry;	densities) adjacent to them; coordinate with Transportation Element to insure adequate road, rail, and water access; Do "advanced planning" & SEPA analysis for selected industrial areas (e.g. Finley, Paterson, Hanford) in order to "fast track" industrial development proposals.
Latent demand, and new state requirements for farm worker housing;	7. Ordinance provisions for farm worker housing in the Ag. zone, and to accommodate lower income housing in the Rural Residential zones. Ordinance provisions for clustering of housing and enabling of Satellite Management Agencies for small water systems.
Commercial	
Development of major highway interchanges to highway commercial uses;	8. Land use designation for Interchange Commercial clustered at major interchanges.
Continued growth of commercial retail centers;	9. No direct provision in County Plan.
Visitor/Tourism	
Visitor serving water-front developments along the Columbia and lower Yakima Rivers;	10. # 5 (above) plus Plan policy to encourage such uses in rural areas. "Action" to study possible sites. Ordinance provisions to enable such uses including "Resort" golf courses, within the Ag. and Rural zones and on Hanford. "Action" to develop county's Horn Rapids Regional Park to its Master Plan in concert with, and as an integral element of the Tapteal Greenway. "Action" to consider further empowerment of the Tapteal Greenway Foundation.
Private Sector interest in developing Destination Resort/Conference and convention facilities;	11. # 4 above, Policy to encourage such uses, Resort/visitor Serving Land Use Designations, Ordinance provisions for such uses in Ag. and Rural Designations. "Action" to explore siting/suitability.
Construction of residential/golf course communities;	12. Policy and Ordinance provisions for such developments.
Development of regional public recreation and access facilities;	13. # 10 above, plus Policy, Land Use Designations & Ordinance provisions for linking bikeways and paths between jurisdictions and to recreation areas. "Action to coordinate and jointly fund with other jurisdictions." "Action to jointly obtain a "grant writer" for funding."
Industrial	
Interest in well located and large light and hi-tech industrial sites;	14. Policy to encourage such uses in areas having direct transportation access and/or supporting infrastructure. Industrial Land Use Designations including on the Hanford Site. "Policy & "Action" to coordinate planning & development with Port Districts.
Rural Residential	
Rural Population growth;	15. Rural Residential District enabling housing growth at rural densities on large lots or in clustered smaller lots, with supporting commercial services in rural "Community Centers". Clustered non-farm housing within the Agricultural zone.
Hanford	
Cleanup of soils and water, and consolidation of hazardous waste;	16. Prepare a Hanford Comprehensive Land Use Plan which will be a "Sub-Area Plan of the Benton County

LAND USE TRENDS	PLAN STRATEGIES TO ACCOMMODATE TRENDS
Federal, private and local governmental efforts to "privatize" Site activities and resources; Transfer of lands and facilities to other public entities; Enlargement of the list of land uses from the historic single use to multiple uses; Identification of the local and regional economic value of existing Site infrastructure;	Comprehensive Plan. Policy and Land Use Designations which direct future uses such as Industrial, R & D, Recreation, etc., for specific areas on the Site, based upon each area's natural, physical and man made "opportunities and constraints." Land use designations to be applied under a principal assumption that with few exceptions the Site will eventually be cleaned to an unrestricted level <u>on the surface</u> .
Increased efforts to inventory, assess regional value, and protect important biology and habit;	17. Designate suitable areas for Preservation as Fish and Wildlife Habitat.
Increased public interest for access to the Site and use of the river corridor;	18. Plan Policy, use designations and Implementing Ordinance for managed public access/recreation within the river corridor and other preservation areas. Land use designations providing higher intensity recreational and visitor uses in suitable areas not designated for preservation.
Recognition of the need to protect artifacts and sites for both cultural and economic value;	19. Land use designations for visitor destinations e.g., tourism, science, education.
Multi-jurisdictional planning for future Site use;	20. For consistency "joint" and coordinated planning by cities and counties that share the Hanford Site boundary.
Increased attention to heightened assertions by the Tribes of Tribal rights on the Site.	21. Plan Policy and Implementing Ordinances addressing Cultural Resources and Tribal uses.
Riverine and Aquatic Environments/Species	22. Form regional (river basin-wide), and/or Water Resource Inventory Area (WRIA) bodies of general purpose governments, and/or bodies consisting of general purpose gov'ts and special districts, to create Watershed Management Plans, Sub-basin Plans and Salmon Recovery Plans, that coordinate state and federal requirements of local governments to regulate for the protection of resources with the voluntary provisions within those plans that seek to restore water resources and habitat and biodiversity.
State and Federal requirements and State enabling legislation and funding for local governments to plan for, regulate, and manage land and water resources so as to assure adequate water resources for all uses, and protect and restore aquatic habitat and bio-diversity, including anadromous and resident fish, both those listed under ESA, and those not listed.	

**PLANNING FOR AND MANAGING POPULATION GROWTH
Counties as Regional Governments**

Principal among the legislative objectives of the Growth Management Act (GMA) is to make real, i.e., "put on the landscape", the distinction between the role and purposes of county and city government that are found in state law.

In GMA the legislature affirmed that

counties are regional governments responsible for the provision of regional services and the conservation of Natural Resource Lands, while cities are municipal governments responsible for the cost-effective provision of urban services for population growth. The legislature observed that absent planning law which implements this distinction, county and city governments across the state were competing for the same roles, to the

detriment of the overall environment and the long-term economic well-being of the state.

occurs.

The essence of GMA for counties then, is to identify and protect those natural resource lands (agricultural, mineral, and biological) that are essential to sustaining the state's and the region's economy over the long term, and to work with the cities to influence the majority of new population growth onto other lands, preferably urban lands within Urban Growth Areas, but also onto rural lands not essential or productive to the economic base of the region or state.

The OFM projections are forwarded to each county, which in consultation with the cities within the county must apportion the projections amongst the cities, and to itself (i.e., the county). See **Chapter Four Appendix 4, Item 4** for Benton County population growth and 20 year projection. County Wide Planning Policy #2 provides direction for how the county and cities must accomplish this apportionment (see adopted County Wide Planning Policies, **Chapter Four Appendix, Item 4-2**). In 2002, the county and cities agreed that, for current land use planning purposes, OFM projected population growth would be apportioned to each of the jurisdictions as follows:

New population growth outside of Urban Growth Areas should be at rural densities that reflect the limited abilities of county government to provide urban level services cost effectively.

<u>Jurisdiction</u>	<u>% of total</u> ¹
Benton Co. Unincorporated	23
Benton City	02
Kennewick	38
Prosser	03
Richland	28
West Richland	06

In order to plan for and accommodate the bulk of new population growth in urban areas, however, reasonably accurate population projections must be available.

In order to set aside or designate lands necessary for future population growth (beyond those undeveloped lands already within city boundaries) GMA requires that counties designate "Urban Growth Areas" (UGAs) outside of but adjacent to the corporate boundary of each city. The identification of the amounts of land to be converted to urban uses, and its locations within UGAs has important economic

State Office Of Financial Management Projects Population Growth

Under the Growth Management Act, the State Office of Financial Management (OFM) has the responsibility to project population growth rates for local GMA planning purposes. OFM projections are the basis upon which cities and counties work to identify the amounts and locations of rural land which will be needed for conversion to urban use as urban growth

experienced a greater accumulation of overall population growth than indicated above.

¹ The above percentages should be revised regularly to reflect the most recent growth characteristics. For example, the 1990's have shown that the small cities within the county, and the unincorporated areas have

implications to both cities and counties.

Urban Growth Areas (UGAs)

The phenomenon of the enlargement and expansion of city boundaries into rural county lands will continue with the growth of population. GMA endeavors to set standards and mechanisms whereby legitimate needs for new urban lands are met consistent with the protection of rural communities and resource lands (agricultural mineral, and forestlands).

UGA's are the land areas that though not currently within a city's corporate limits, are designated by the county for conversion to urban use and administrative authority in the normal process of urban growth. Cities can neither annex lands, nor generally extend municipal services to lands outside of UGAs. UGAs should be large enough to accommodate a 20 years urban growth projection.

The size of UGAs is not determined solely by projected rates of population growth. Other considerations such as a city's need for commercial and industrial zoned lands to meet the economic goals and objectives as identified in its Comprehensive Plan, may also be factors in the placement of land within UGAs.

Counties Have The Responsibility To Designate Urban Growth Areas

GMA gives counties the responsibility to select by designation, which lands are suitable for conversion to urban uses by including them in UGAs. In so doing, a county also decides which lands it considers not suitable for conversion to urban uses by excluding them from the

UGA. Lands may be considered not suitable because of their agricultural or other resources value or constraints, including their value to local residents as unique low density rural communities.

It is also the responsibility of each county to periodically review the land use demands for urbanization and where necessary to meet those demands, to designate additional rural lands for inclusion into UGAs. This must be accomplished by amending both the County and City Plans after public participation and hearings. In applying its responsibility to designate and subsequently enlarge UGAs, the county must be receptive to needs identified by each cities' Comprehensive Plan, and must consult with each city to assure that not only are the City's land use objectives considered, but that a city's proposal to expand its UGA includes the information that is required by the GMA and to prepare the necessary analyses of the proposal. Such information includes:

- 1) Per County-wide Planning Policies (CWPP) #3 (w/attachment A), and #4, the identification of additional land and service capacity needs to meet the official 20 year OFM population growth projection;
- 2) Per CWPP#5, for any area proposed for inclusion within a UGA, a six year capital facilities plan for water, sewer, roads, parks, and utilities (when provided by local government e.g. electrical service) that identifies the necessary infrastructure upgrades and additions to capital infrastructure, the sources and timing of necessary new supply/capacity; the impacts on LOS;

and the funding sources for new infrastructure and upgrades of existing infrastructure;

- 3) An open space plan of linked and functional open space; said space can and should be an integration of undevelopable areas (e.g., steep slopes), green infrastructure spaces (e.g., natural drainages, utility corridors, buffers and setbacks from natural resource lands and critical areas, bikeways and paths);
- 4) land use maps with acreages per land use designation and a minimum average residential density of six units per acre; and,
- 5) a SEPA review.

The adoption of UGAs, and the designation of land uses and intensities within them is of critical importance to cities and public utilities, which use them to plan, to capitalize and construct service infrastructure, and to purchase lands and pursue economic plans. The Urban Growth Areas for the Cities in Benton County are shown as Figures 4-1 through 4-5.

Joint Planning Within Urban Growth Areas

Unless annexed, lands within UGAs remain under county land use and regulatory authority. This leaves open the possibility that while these lands remain unincorporated they may be put to land uses or land use patterns which render it difficult or impossible for cities to annex them for "build-out" as the city Plan intends. Where this occurs, the function of the UGA as a mechanism to plan and capitalize new infrastructure is undermined.

The legislature recognized that such situations would undo at a very basic level, the local ability to manage growth by deliberately preparing the way for it within UGAs. Therefore, GMA requires that the Comprehensive Plans of a city and county be consistent and that cities and counties jointly prepare development standards for lands within UGAs. Joint development standards are incorporated into the County's subdivision and short plat ordinances and an Urban Growth Area Residential District (UGAR) has been created for the un-annexed portions of UGAs.

Notwithstanding exceptions that may be specifically noted, Benton County recognizes primacy of its cities' land use designations for un-annexed lands within UGAs and will work with each city to adopt standards that ensure the cost effective and smooth realization of the cities' urban design for such areas. Figures 4-8 through 4-12 at the end of this Chapter present the county's land use designations for within the Urban Growth Areas of each City.

Random Expansions of Urban Boundaries Can be Costly to the Rural Economy and Character

The annexation of land by cities can only occur with the accompanying loss of unincorporated lands within a county. Historically, the annexation process has been unplanned and haphazard. In the wake of urban expansion and low density sprawl it has been routine for agricultural lands valuable to the local economy to be converted to, or compromised by urban uses which could have been located on

other lands not suitable for agriculture.

In addition to the loss of agricultural productivity, unique rural communities have disappeared under urbanization that in itself is less than functional because it must "fit around" established rural land use patterns. When this occurs municipalities, utilities, and special service districts must overextend their capabilities for the construction and operation of capital facilities into areas not yet "ripe" or even unsuitable for urban development. Less than efficient transportation, utility, and service delivery systems add to public and long-term consumer costs for essential services in such areas.

Countywide Planning Policies Influence the Rate and Location for Expanding UGA's

Benton County and the five cities within it have jointly adopted a set of Countywide Planning Policies (CWPPs are shown in appendices), which form the framework for the preparation, implementation, and amendment of their Comprehensive Plans in a manner which provides for integration and consistency where necessary.

Included within the CWPPs are a uniform methodology for the county and cities to calculate the amounts of additional land needed by cities to accommodate the population growth projections provided by the State Office of Financial Management. Other CWPPs establish standards for selecting additional lands to be included within the UGAs, and for joint county/city planning on un-annexed lands within UGAs.

The Process of Urban Expansion

Outward Into Rural County Lands

Of primary importance to the initial establishment and future expansion of Urban Growth Areas into unincorporated areas is the projected need for additional lands in relation to the existing available supply of undeveloped land already inside an Urban Growth Area of a city. Equally important is the maintenance of low enough densities outside the UGA to enable logical and cost effective expansion of the UGA in the distant future (30-70 years).

Within the County Plan, **five principle factors** apply to future interrelations between the cities, and between the cities and the county relative to the build-out of and expansion of Urban Growth Areas. Each of these factors is discussed below.

1. Total Vacant Land Within Benton County's Metropolitan Planning Area

The cities of West Richland, Richland, and Kennewick are contiguous and within one Urban Growth Area. Historically, each has aggressively pursued annexation of unincorporated lands, largely in response to land speculations driven by the extreme boom and bust cycles of Hanford program activities. Between the time of the adoption of the County's 1985 Comp Plan and the adoption of its 1998 GMA Comprehensive Plan, 18,107 acres were annexed while each of these cities still had over half its incorporated acreage still undeveloped. In many instances these annexations have generated persistent conflicts between City administrations and rural community residents, and between urban development and commercial agriculture.

The legacy of these cities' historic pattern of annexations was that within their contiguous boundaries there were, in 1998, numerous islands of unincorporated residents, and thousands of acres of vacant incorporated land designated for residential use. Kennewick alone had 6,000 vacant or undeveloped acres designated for relatively low density residential use (4Du/acre); West Richland had 13,641 acres, some actually designated for rural densities (1-2 Du/acre) and lower; Richland had 1,356 acres.

Even at the relatively low residential densities that each of these cities prefers, there was sufficient land within the West Richland, Richland and Kennewick UGA to support an urban population of several hundred thousand people. In recognition of this, the City of Richland had placed significant lands within its Urban Growth Area adjacent to the Hanford Nuclear reservation (where such adjacency carries with it unique land use and development considerations relating to the legacy of Hanford operations) into a designation called "Urban Reserve" after having annexed over a thousand acres. The adoption of the County's 1998 GMA Comprehensive Plan, and the adoption of each of the cities' plans, require that the expansion of urbanization, with its conversion of rural lands to urban uses be an orderly cost-efficient process, based on population projections, protection of rural neighborhoods and natural resource lands. Though there are no local studies to affirm it, there is evidence that the UGA process has influenced a reduction of urban sprawl, the annexation of unincorporated islands with the cities, and greater cost effectiveness for development within

UGAs.

2. Urban Densities Within Cities and Their Urban Growth Areas

In response to market demands, the fluid development of urban densities within UGAs is essential if the UGA is to function as intended, i.e., as a tool to achieve cost effective provision of urban services, and to protect agricultural lands and the rural community outside of the UGAs. To achieve this, densities within the UGAs should be high enough (e.g. average 6 dwelling units/acre) and encourage infill of existing urban growth areas.

Low densities within UGA's will influence developers and land speculators to continuously seek out large tracts of lower cost and unencumbered acreage, preferably in single (or uncomplicated) ownership, in order to achieve the economies of scale they seek in response to market demand. Consequently, unless UGAs require at least an average minimum density within them, or there is a minimum average urban density "city-wide" wherein less than 5Du/acre density in the UGA is offset by higher densities, in the urban core for example, the paradox of looking beyond the Urban Growth Area for new "urban" land will continue. The issue between the County and Cities of identifying minimum required average densities for within cities is an emerging one, simply because UGAs cannot expand perpetually over the landscape without limitation. Relative to long term stability and sustainability, the GMA gives to natural resource lands, and rural lands and communities, a status equal to that of urban cities, and requires their protection.

3. Objective Criteria For Determining When, and How Much To Expand UGAs

Policies 3 & 4 of the Countywide Planning Policies (CWPP's) sets forth uniform criteria and methodology for calculating the amounts of land necessary in a UGA to accommodate projected population growth. The policies reflect methodologies identified in current planning literature (as well as recent GMA Regional Hearings Board decisions) for identifying the appropriate size of Urban Growth Areas relative to population projections. Other CWPPs direct how locations of new urban growth areas are to be selected to avoid rural communities and agricultural lands.

4. Site Designs That Reserve Rural Lands Outside of UGAs For Future Urbanization

The Land Use Map of the Comprehensive Plan designates rural densities outside UGAs. Densities are based on a "minimum lot" size. Implementing ordinances will encourage Planned Developments (PDs) that allow "clustered" housing with reserved open space upon which urban densities can be constructed, when such lands are ultimately included with a UGA.

5. Joint Development Standards Within Urban Growth Areas

If UGA's are to function as the land resource for urban growth, then impediments to development within them must be minimized and incentives maximized; development must occur almost fluidly. For this to occur, the following conditions are needed:

- densities must be high enough to attracts builders who would otherwise look elsewhere;
- planning, design and aesthetics must assure marketability;
- transportation planning and construction must be timely, with adequate rights-of way and efficiency in moving traffic;
- interim developments under county standards must not prejudice cost effective realization of designated urban densities;
- infrastructure must provide adequate service levels; and,
- the landowners and residents within the UGA must support, not resist annexation and urbanization.

"Joint Development Standards", (JDS) for development within Urban Growth Areas developed and approved by consensus in cooperation with the cities, will enable Urban Growth Areas to urbanize fluidly, and in so doing; reduce the pressure to locate urban developments in rural and agricultural areas prematurely.

Population Projections For Benton County

The latest population projections from OFM, using the "high" series estimates, indicate that Benton County can expect a population increase of 67,008 over the next 20 years. This will result in a year 2025 population of 225,108 which is an increase of 33 percent over the current population of 158,100².

Estimated Lands Needed To Accommodate Rural Population growth

2 2005 OFM Estimate

Approximately 23 percent of the total county population, or 36,075 people (2005 OFM), reside in the unincorporated area of Benton County. The number of rural residents in 2005 shows an increase of 8 percent since 2000.

Projected Growth of New Residents in the Rural Areas

Based upon historical growth rates within the unincorporated area, it is estimated that 18,606 additional people, will seek housing in unincorporated areas of the county between now and the year 2025. This growth represents a 52 percent increase over the current rural population. Should this growth materialize the rural population would be 54,681 people, roughly equal to the City of Kennewick in 2000. A rural population of 54,681 people in year 2025 would closely maintain the current rural population as 24 percent of the projected countywide total.

New Housing Units Needed for Projected Rural Population Growth

At an estimated 2.68 persons per household, an increase of 18,606 people in rural Benton County would require up to 6,943 new homes in the next 20 years.

Table 4.1, following, shows that the "Rural Lands" designations (i.e. lands outside of UGAs and the Agricultural District), of the Land use Map are sufficient to accommodate 9,712 additional dwelling units, almost one and a half times the projected rural demand. The Table shows that if the additional densities that can be achieved in the Agricultural District are added to those within the Rural lands, 40,713 new dwelling units could be built. This number exceeds the projected

demands by almost six (6) times.

Additional Land Needed For Projected New Rural Population Housing Needs

There are currently 77,968 acres designated for new Rural Residential density within the five Rural Planning Areas of Benton County (outside of Hanford and the agricultural district).

As a means of estimating land needs for the 6,943 new projected households: if ten (10) percent of the need were satisfied on lands with one acre density, and ninety (90) percent by lands with 5 acre density, an—additional 31,938 acres would be needed. This is approximately 40 percent of the available land supply within the Rural Lands designations. It is four (4) percent of the Rural and Agricultural lands base combined.

Combined, the Agricultural and Rural Residential Designations have unused density exceeding almost six times the projected 20 year demand for new rural households. At full build-out to Plan densities, a population of approximately 112,820 in the unincorporated County would be approximately 3 times the current population.

In 2007, the County Board of Commissioners implemented a significant reduction in the total potential residential density that could be accommodated within the County's Rural Lands (RL) designations. This reduction was accomplished by amending the County Land Use Maps (4.0, 4.1, 4.2, 4.3, 4.4, 4.5, and 4.6) to eliminate all of the acres designated Rural Lands RL2.5 in the 1998 plan. The eliminated RL 2.5 land was re-designated

as RL 5 (1Du/5 acres). The effect is to reduce the potential rural residential density by half on approximately 58,000 acres of unincorporated lands. Table 4.1A

shows the reduction in the RL 2.5 acreage, with the corresponding increase in the RL 5 acreage.

TABLE 4.1 CAPACITY OF LAND USE PLAN MAP TO ACCOMMODATE NEW DWELLING UNITS IN COMPARISON WITH PROJECTED 20 YEAR DEMAND FOR UNITS

Rural Planning Area	Residential Acres ³	No. of DUs Possible In Each Density Category (e.g. 1Du/1Du/5 ac.) ⁴			Minus existing DUs	Total New DUs Available	Projected Demand For New DUs
		1-3Du/ac & 1 Du/ac	1Du/5ac	1Du/20ac			
Prosser/Whitstran	22,577	64	4,503	---	1,573	2,994	---
BentonCity/Kiona	18,451	---	3,690	---	1,590	2,100	---
Richland/W Richland	22,504	1,058	4,289	---	1,601	3,746	---
Kennewick/Finley	13,354	567	2,270	91	2,526	402	---
Paterson/Plymouth	516	108/63	83	---	47	207	---
	566	267	95	---	99	263	---
SUB-TOTAL	77,968	2,127	14,930	91	7,436	9,712	6,943
Agricultural District	643,432	---	---	32,172	1,171	31,001	---
TOTAL	721,400	2,127	14,930	32,263	8,607	40,713	6,943

3 Does not include UGA's

4 Lot size is determined by minimum lot size

requirements; i.e., how many units are allowed per given acreage.

4.1A RURAL LANDS ACREAGE/DENSITIES

PRE AND POST 2006

Rural Lands Density Dus/Acre	Designated Acres	
	1998 Plan	2006 Plan
3 DU's/aAcre	325	314
1 Du/acre	3,158	1,185
1 Du/2.5 acres	58,622	0
1Du/5 acres	17,965	74,655
1Du/20acres	0	1,814
Totals	80,070	77,968

Differences between 1998 totals & 2006 totals is the result of more accurate G.I.S. calculations

In the 1998 Comprehensive Plan, Paterson and Plymouth, as well as the small rural villages of Whitstran in west County and Finley in southeast County were designated as "Community Core" areas (now called Community Centers) to reflect a localized pattern of residences on less than 5 acre lots and small-scale local commercial service areas consisting variously of grocery, service stations, eateries, taverns, post offices, auto repair, etc., that served not only the Community Centers but also the surrounding rural population (see Chapter 5, Rural Element for descriptions of these rural "centers"). To reflect generally these land use patterns, densities and activities that existed in these communities at the time, the Citizen Advisory Committees for the 1998 Comprehensive Plan determined that the areas of these properties be designated as 1-3Du/acre density. Community Centers are seen as the equivalent of "limited areas of more intensive rural development" authorized by RCW36.70A.070 (5)(d). The size of the Community Centers in Paterson, Plymouth and Finley are 36, 89, and 189 acres, respectively. Also considered the equivalent of limited areas of more intense

rural development are several pre-existing urban/suburban areas designated Rural lands one acre (RL-1) that are dispersed in several locations throughout the County.

Because of the location of these areas and/or the united opposition of their residents against inclusion within a UGA, they were given a density in 1998 that reflected the trend within them relative to the discernable boundaries of their built environments and were consigned to infill. Characteristics of these areas are: that they are small and discrete; most share a boundary with city limits or a UGA, or are within a "Community Center", (i.e. Whitstran); they are adjacent to major travel corridors (e.g. State routes); the predominant parcel size is smaller than what is interpreted as "rural" under GMA; the culture is one of "neighborhood" or landowner association; potential infill would not negatively impact adjacent rural lands; and they are not contiguous with (except in Paterson), nor would they negatively impact designated agricultural lands if they in-filled to the one acre density. Though different in culture and land use mix than the Community Centers, these areas are appropriately considered equivalent to limited areas of more intensive rural development enabled by RCW36.70A.070 (5)(d). The RL-1 location and size of these areas as revised in 2007 are listed below:

- Paterson, 63 acres Located within the Paterson Community Center.
- Prosser/Whitstran, 64 acres located within in the Whitstran Center.
- Richland/West Richland, 1059 acres in three locations that are essentially unincorporated islands as follows:
 - 1) Rancho Reata: a 722 acre 20

- year old subdivision, near fully-developed to an average parcel size of approximately 1.25 acres;
- 2) River View neighborhood: 243 acres with average parcel size of 1.36 acres along the Yakima in West Richland, developed to approximately 1 acre lots;
- 3) Valley View neighborhood: 93 acres with average parcel size of 1.53 acres on the Yakima River shoreline

COUNTY PLANNING REGIONS

There are five geographic **Planning Regions** within Benton County. Each is configured according to geographic and land use characteristics. Each Region contains at least one smaller Rural Planning Area. With the exception of the Horseheaven Hills Region all contain some urban (city and UGA) areas. **Table 4.2** presents the acreages, by land use designation, within the Planning Regions. The Regions and their Rural Planning

Areas are described below. The Regions are shown on map **Figure 4-6** and Planning Areas on map **Figure 4-7**.

Rattlesnake Mountain Region

Prosser/Whitstran Rural Planning Area
Benton City/Kiona Rural Planning Area

Horse Heaven Hills Region

Paterson/Plymouth Rural Planning Area

Red Mountain Region

Richland /West Richland Planning Area

Finley Region

Kennewick/Finley Planning Area

Hanford Region

Vernita Terrace Planning Area
Columbia Horn Planning Area
Southern Plain Planning Area
200 Areas Planning Area

TABLE 4.2 PLANNING REGIONS: ACREAGE BY LAND USE DESIGNATION

Planning Region	Acres ⁵	Urban Area	GMA Ag	Rural Lands	Industrial	Commercial	Public
Rattlesnake Mountain	205,559	10,334	148,540	40,841	552	161	5,121
Horseheaven Hills	502,086	0.00	489,083	3,270	1,607	204	7,922
Red Mountain	72,368	44,062	5,853	21,519	188	71	675
Finley	29,268	16,829	0	10,358	1,286	28	767
Hanford ⁶	266,220						
Total Acres	1,075,501	71,235	643,476	75,988	3,633	464	14,485

* Computer calculations are + or - 1%

⁵ Does not include right of ways

⁶ The Hanford land uses have not been determined at this time and will be addressed and amended in Chapter 13 of this plan.

Rattlesnake Mountain Planning Region Boundaries, Natural Characteristics and Size

The Rattlesnake Mountain Region covers the drainage areas of the south and southwest flank of Rattlesnake Mountain, and the western slope of Red Mountain, as they descend to the Yakima River. The Region contains approximately 205,559 acres, or 321 square miles. It represents 19 percent of the county's total landmass. It lies in the northwest portion of the county, extending from the Yakima County line in the west to the ridge of Red Mountain in the east. The Region's southern boundary is the crest line of the Horse Heaven Hills as they rise above the south bank of the Yakima River. To the north the boundary extends to the Columbia River just downstream of Priest Rapids Dam.

Prominent physical and biological features are Rattlesnake and Red Mountains, and the network of canyons, creeks and swales, basalt outcrops, cliffs, and perched waters that extend down to the Yakima River. The waters and tributaries of the river are the principal support of both man and wildlife in the Planning Region.

Predominant Land Uses

The predominant land use within the Rattlesnake Mountain Planning Region is commercial agriculture on lands designated for Agricultural Use, which comprise approximately 72 percent of the land area, or 148,540 acres. Irrigated orchards and other specialty crops including apples, cherries, currants, hops, mint, juice grapes, pears, peaches and wine grapes are grown on the irrigated lands called the "Roza." A few dairies and

areas of forage crop production are scattered along the upland terraces of the Yakima below the Roza. Dryland wheat and barley production occurs on the higher unirrigated elevations above the Roza. Livestock grazing is ubiquitous throughout the Planning Region, but mostly on marginal lands below the Roza, or above the Roza on rangelands.

Farm sizes range from less than a hundred acres to over 5,000 acres on the Roza. On an acre for acre basis the Roza is one of the most productive irrigated agricultural areas in the 600,000 acre Yakima Valley Irrigation Project, or in Eastern Washington.

Another farming area emerging as an important wine grape region is the west slope of Red Mountain. The exposure, soils and microclimate of the west slope of Red Mountain grow exceptional wine grapes. Here approximately 2400 acres scattered with vineyards ranging from 20 to a few hundred acres in size are producing award-winning wines.

The small cities of Prosser and Benton City and the low-density rural residential and small-farmed acreage around those cities are also predominant uses along with rail and highway transportation corridors.

Prosser-Whitstran Rural Planning Area:

The Prosser-Whitstran Planning Area lies along the Yakima River in the southwest portion of the Planning Region outside of designated agricultural lands.

This Planning Area consists of approximately 23,357 acres, and occupies approximately 13 percent of the Planning

Region. Predominant land uses within the Planning Area are the City of Prosser with a population of approximately 5,000 and public service infrastructure supporting an agricultural processing industry, and low-density rural residential areas surrounding Prosser. The small rural residential community of Whitstran lies to the northeast of Prosser. Scattered high value agriculture, principally orchard crops, is interspersed with rural housing and small dairies along the run of the Yakima River terrace to the east and west of Prosser. The I-82 Highway corridor and Burlington Northern/Santa Fe (BNSF) rail line bisect the Planning Area from east to west along its southern boundary.

A full description of the Prosser/Whitstran Rural Planning Area is presented in Chapter 5, the Rural Element.

Benton City/Kiona Rural Planning Area:

The Benton City/Kiona Rural Planning Area consists of approximately 23,708 acres outside of designated agricultural lands. This Planning Area represents 12 percent of the acreage within the Rattlesnake Mountain Planning Region.

Predominant land uses within the Planning Area are: Benton City, which has a population of approximately 2,840 located just north of the Yakima River 15 miles east of Prosser; the rural community of "Kiona" south of the river opposite Benton City; low density rural residential housing around Benton City to the north and east along the river floodplain; and agriculture, principally cherry and apple orchards some of which are in early season micro-climates. Some of the earliest producing cherry orchards in the state directly abut

Benton City's north and west boundaries. Additional orchard acres are on lands south of Kiona at the northern end of Badger Canyon.

A full description of the Benton City/Kiona Rural Planning Area is presented in Chapter 5, the Rural Element.

The combined acreages of the Prosser/Whitstran and Benton City/Kiona rural planning areas represent approximately 25% of the total acreage within the Rattlesnake Mountain Planning Region.

Horse Heaven Hills Planning Region

Boundaries, Natural Characteristics and Size

The Horse Heaven Hills Region contains approximately 502,086 acres, or 784 square miles. It represents 47 percent of the county's total landmass. It covers the entire southern half of the county. The Region's western boundary is Yakima and Klickitat Counties, from which it extends easterly, being confined on the south by the sweep of the Columbia River to Wallula Gap, where it follows the crest of Horse Heaven inland and to the north, and then west again back to the county line.

The landform of the Horse Heaven Hills Planning Region is that of a vast ambulating mesa, that slopes gradually to the south, where it falls off more rapidly down to the Columbia River. Drainage patterns are subtle on the top of the mesa, but become more pronounced as the gradient drops more steeply to the Columbia River in the south.

Predominant Land Uses

The predominant land use within the Horse Heaven Hills Region is agricultural production from lands designated for agricultural use. The Region is characterized by large-scale agricultural operations with thousands of acres in dry land wheat and barley, as well as irrigated crops such as apples, corn, carrots, onions, potatoes and wine grapes. Irrigation is done largely by circles. The density of supporting industrial uses is increasingly evident: wineries, corn, potato, and onion storage and/or processing facilities are relative new comers on the landscape.

Paterson-Plymouth Rural Planning Area:

The Paterson-Plymouth Rural Planning Area consists of 7,563 acres on the Columbia River uplands outside of lands designated for agricultural use. This acreage of the Rural Planning Area occupies approximately two percent of the Planning Region.

Predominant land uses within the Planning Area are the small low-density rural enclaves of Paterson and Plymouth, and the publicly owned wildlife and recreation lands along the north shore of the Columbia River.

A full description of the Paterson/Plymouth Rural Planning Area is presented in Chapter 5, the Rural Element.

**Red Mountain Planning Region
Boundaries, Natural Characteristics and
Size**

The Red Mountain Region contains approximately 72,368 acres, or 113 square miles. It represents seven percent of the county's total landmass. It lies within the

east central portion of the county. The region's western boundary is the Rattlesnake Region from which it extends easterly to the Columbia River and Columbia Center Boulevard into the City of Kennewick. The southern boundary is the crest line of the Horse Heaven Hills above Badger Canyon. Its northern boundary is the Hanford Region.

Predominant Land Uses

The Red Mountain Region is the most urbanized region within the county. The predominant land use within the Red Mountain Region is the urban complex of the cities of West Richland, Richland and southwest Kennewick. Outside of the Badger Canyon area, most of the acreage within the Planning Region is within the boundaries of the cities of West Richland and Richland. Interspersed among the irregular boundaries of these cities lie scattered agricultural operations and low-density rural residential areas.

The urban complex within this Planning Region had its beginnings, and is today concentrated at the Columbia and Yakima Rivers. Since their beginning however, these cities have aggressively pursued annexations to expand their boundaries randomly south and east.

Richland - West Richland Rural Planning Area:

The Richland-West Richland Rural Planning Area consists of 23,220 acres (outside of lands designated for urban and agricultural use.) This represents approximately 32 percent of the Planning Region.

The random annexation patterns of the adjacent cities in combination with the

high geologic relief of the landform have created a rural area which is characterized by disconnected rural enclaves, each with its own character. Areas such as Riverview, Willamette Heights, Candy Mountain, Valley View, Rancho Reata and Badger Canyon reflect a diversity of rural lifestyles.

Predominant land uses within the Richland-West Richland Rural Planning Area are low-density rural residential and commercial agriculture, with the significant remaining acreages of agriculture located principally in Badger Canyon. Badger Canyon is the largest remaining unincorporated acreage within the Planning Region. Its landscape is currently a mixture of large and small-scale commercial agriculture interspersed with rural housing. Above the canyon floor, on the slopes of Badger and Candy Mountains, orchard and vineyard plantings are a recent occurrence.

A full description of the Richland-West Richland Rural Planning Area is presented in Chapter 5, the Rural Element.

**Finley Planning Region
Boundaries, Natural Characteristics and
Size**

The Finley Planning Region contains approximately 29,268 acres, or 46 square miles. It represents three percent of the county's total landmass. It lies within the most easterly portion of the county between the Columbia River and the crest-line of the Horse Heaven Hills. Southeasterly it extends to Hover Park on the River. It includes most of the City of Kennewick which occupies its northwest corner.

Predominant Land Uses

The Finley Planning Region is the most diverse, intense, heavily populated and active of all the regions in the county. As a result of the City of Kennewick's aggressive pursuit of annexations in the past, the line between rural, urban, and agriculture in the west portion of the Planning Region is convoluted and difficult to administer. Along the river corridor in south Finley lies the greatest concentration of industrial uses and industrially zoned land in the county outside of the Hanford Site. The industries are primarily agriculture or energy related. This industrial complex generates heavy truck and rail traffic along a narrow and inadequately designed travel corridor, shared by daily resident traffic. It is anticipated that industrial transport along this corridor will increase significantly in the future.

As the landform within this Region rises away from the river, where there is irrigation district water a demand for rural building lots competes with demand for valuable "early season" orchard ground, with the success of the former pursuit detrimental to that of the latter.

Kennewick-Finley Rural Planning Area:

The Kennewick-Finley Rural Planning Area consists of 15,506 acres excluding lands designated for Urban and Agricultural use. The Rural Planning Area represents approximately 53 percent of the Planning Region.

This planning area has the highest population density of any rural area within the county. Its large acreages of vacant or

under-utilized industrially zoned land, coupled with its proximity to the City of Kennewick represent perhaps the greatest challenges relative to growth, road infrastructure and maintenance of quality of life. Unlike the disconnected rural enclaves characteristic of the Red Mountain Region for example, the Kennewick/Finley Area is a relatively unified rural community.

The predominant land uses within the Rural Planning Area are rural residential, with densities as high as 1Du/acre; industrial uses, which currently occupy only a small portion of approximately 1,000 acres of industrial zoned land; and railroad infrastructure. Other land uses are commercial agriculture and open space recreation along the undeveloped riverfront parks.

A full description of the Kennewick-Finley Rural Planning Area is presented in Chapter 5, the Rural Element.

Master Planned Resorts (MPRs) and Small-scale Recreation or Tourist Use (SSRT)

Master Planned Resorts (RCW 36.70A.360) are developments with urban characteristics that may be located outside of urban growth areas. A Master Planned Resort is a fully integrated, self-contained planned unit development in a setting of significant natural amenities, with its primary focus on destination resort facilities consisting of short term visitor accommodations and a range of developed on-site indoor and/or outdoor recreational facilities. Capital facilities, utilities, and services, including those related to sewer, water, security, fire

suppression, and emergency medical provided on-site shall be limited to meet the needs of the master planned resort.

Small-scale Recreation or Tourist Use (SSRTs) per RCW 36.70A.070 (5) (d) (ii) can be an intensification of recreation or tourist uses on existing lots, or new development of small scale recreational or tourist uses, including commercial facilities to serve those recreational or tourist activities that rely on a rural location and setting, but that do not include new residential development, and are not intended to principally serve the existing or projected rural population.

Significant differences between the Master Planned Resort and the Small Scale Recreation or Tourist Uses are: scale, the MPR is perceived as a destination resort of potentially very large size whereas the SRT is relatively small and concentrated; residential uses, the MPR can have them as a secondary use, but the SRT cannot; municipal services, although MPRs can be outside of a UGAs, at the developer's expense, a MPR can connect to City services, whereas the SSRT cannot

The spectacular geologic and human history evidenced over the Benton County landscape, plus the mild year-round climate, provide opportunities for an array of recreational and tourist activities in the rural Benton County. Agricultural lands with wheat fields, livestock operations, vineyards, and associated wineries provide unique farm and viticulture experiences for agri-tourism. Visitors to these amenities create a demand for visitor services such as short-term accommodations, recreation, and food

services. Master planned resorts and small-scale recreational and tourist uses can fill this need.

The County's Comprehensive Plan contains policies that provide guidance for the development of Master Planned Resorts and Small Scale Recreation or Tourist Uses as authorized by the State Growth Management Act (RCW36.70A). Development regulations that are consistent with the goals and policies contained in this plan will be established for the approval of MPRs or SRTs.

EXISTING LAND USE IN THE COUNTY

Benton County consists of a total of 1,115,673 acres, or 1,743 square miles. Of this, 416 square miles of its northern portion, or 24% of Benton County, is occupied by the U.S. Department of Energy's Hanford Reservation (Map Figure 4-6). An additional 65,375 acres are owned or managed by other public entities (port districts, state, federal, and local government lands). Total public ownership represents 30% of the acreage in Benton County.

The existing land use activities within unincorporated Benton County are principally agriculture, rural residential, rangeland and open space, agricultural related industry, and Hanford industrial uses on the Site. A rough depiction of the current allocation of land use within the county is presented in **Table 4.3**.

Table 4.3 indicates that agriculture (irrigated and dryland) is the largest single

land use within the county. It occupies approximately 50 percent of the total land area. Next largest is "range land and undeveloped", which accounts for approximately 16 percent. The five cities and their Urban Growth Areas occupy 71,235 acres (111 sq. mi.), or six percent of the total land area.

Industrial Lands

Existing Conditions

Outside of the Hanford Site, there are currently 3,929 acres of industrially designated land within unincorporated Benton County, approximately 14 percent of which is developed. Though a broad range of industrial uses is appropriate for these lands, the principle current use is for agriculturally related industries such as chemicals processing and shipping, cold storage, fruit and vegetable processing and shipping (refer to Map 4.0, and individual Planning Area Maps 4.1 thru 4.6 for industrial designations).

On the Hanford Site there are approximately 73,050 acres designated as suitable for industrial development. A percentage of this land will be developed to federally "programmed" industrial uses which either support the current cleanup mission or were part of the terminated Cold War Plutonium Production Mission. With some small exceptions, the lands and infra-structure on Hanford suitable for non-federal industrial uses are not yet available to the private sector, but are a major potential resource for the future.

TABLE 4.3 CURRENT LAND USE BENTON COUNTY⁷
(2006, City annexations updated 2006)

<u>Land Use Type</u>	<u>Acres</u>	<u>Square Miles</u>	<u>Percent</u>
Cities and Urban Growth Areas	71,235	111	6
Hanford Site	266,220	416	24
Unincorporated Area			
Irrigated Agriculture	251,406	393	23
Dryland Agriculture	309,373	484	7
Rangeland & Undeveloped	183,973	288	16
Residential (rural)	22,342	35	2
Public	5,945	9	1
Commercial	3,035	.5	0
Industrial	1,526	2.3	0
Aggregate	367	.57	0
Unbuildable	251	.39	0
Total Unincorporated Area	778,218	1,235	
Total County Area	1,115,673	1,782	99

Essential Requirements: Industrial uses do require certain "macro" essentials relating to size of area, location and infrastructure. Therefore, it is essential in preparing a Comprehensive Plan to make the selection of lands for Industrial designations "early on" in the process when there is the greatest discretion to meet locational needs, and to allocate the necessary lands and infrastructure, services, i.e., make these choices before the essential resources have been committed to other land use designations. This has largely been done in the sparsely populated unincorporated areas of the county, though there are existing major developed

industrial areas, such as south Finley, where additional foresight relative to transportation access and land use compatibility would prove beneficial today.

When planning for the provision and utilization of industrial sites, more is required than just designating and zoning the land. For example, it is essential to assess land for its "net acres available." This requires that such constraints as existing rights-of-way, easements, critical resources, setbacks from adjacent incompatible uses, vegetative and landscape screening etc., be subtracted

⁷ Using County Assessor's current land use categories and computer generated calculations (accuracy within 1%)

out to determine the "net" available land. Where sites have a history of industrial use, areas of contamination need to be located, cleaned or subtracted out. On partially developed sites, existing uses and ancillary use areas need to be subtracted from the net.

Often, jurisdictions perceive that they have sufficient acreages of industrial zoned land to attract developers. However, the industrial developer may not agree that the industrial lands base is in fact sufficient. The reasons for this include the following:

- designated lands typically are short of readily available infrastructure and utility service;
- there has been no prior assessment of environmental and other constraints;
- jurisdictions do not commit to the larger designated area by being willing to wait for industrial projects (i.e., they often rezone for other uses upon request before industrial projects are proposed).

Such limitations help define the essential requirements for providing a marketable industrial lands base. These requirements are:

- infrastructure and utility capacity have to be readily available;
- net useable areas need to be identified and assured (i.e. all probable constraints have to factored out);
- there has to be a long-term commitment to the designation.

Industrial uses have specific locational requirements which address their operational needs, as well as the public's

need to realize the benefits of such uses while minimizing potential adverse impacts to other economic sectors and adjacent land uses. These requirements are listed below:

- the areas for such uses should be large, ideally in the hundreds of acres for heavy industrial uses, with less acreage required for light industry. Large acreages enable individual businesses to meet their space needs and to expand operations over time; and they make possible the realization of other economies, such as "cogeneration", which result from concentration of different industrial uses;

INDUSTRIAL LAND IS DIFFERENT. THE MARKET IS NOT DRIVEN BY LOCAL ECONOMIC ACTIVITIES. IT IS DRIVEN BY CHANGE AT THE MACRO LEVEL. LOOK BACK 20 YEARS AND THERE WAS NO MICROSOFT. IT IS DRIVEN BY TRADE, WHICH INFLUENCES TRANSPORTATION, PORTS, WAREHOUSING ETC.

THE REAL PROFITS DON'T OCCUR WITH THE LAND TRANSACTION, BUT RATHER FROM THE USE. SO INDUSTRIAL LANDS ARE MORE LIKE NATURAL RESOURCE LANDS (I.E., THEY NEED TO BE CONSERVED).

Paul Roberts, Planning Director, City of Everett

- the buildable terrain should be relatively flat with sufficient acreage overall to "site plan" around sensitive biological or archaeological resources and other constraints;
- there should be direct access to major regional transportation facilities such as road, rail and water-borne, as well as utilities such as electric and natural gas;
- there should be good proximity to other industries and suppliers, and a labor pool;
- because of their typical round the clock outputs of noise, odor, dust, traffic, and potential hazards, which often extend

beyond the immediate limits of the industrial sites themselves, they need to be in areas of low human density and isolated from other land use categories with which they are incompatible;

- availability, or close proximity to water and utilities.

**Other Planning Considerations
Associated With Industrial Lands:**

Lands designated for industrial uses also require the application of extraordinary land use planning considerations "area-wide." Consideration for adjacent and surrounding lands include land use designations, appropriate densities, measures relating to public services needs such as schools and emergency management, transportation, emergency services, and site development standards.

Port Districts: Port districts are major players in the industrial lands base of Benton County. The industrially zoned acreage is predominantly owned by the Benton and Kennewick Port Districts, which are taxing districts under Washington State Law. Port Districts are authorized to purchase lands for marketing, development, lease and eventual sale to commercial interests with the objective of improving the local economy. Port District holdings include lands in the rural areas of Paterson, Plymouth, and Finley, and in or adjacent to the cities of Richland, Kennewick, Prosser and Benton City.

Typical Port enterprises include: the construction of small "incubator" space for "starter" businesses; the lease of land or buildings to commercial enterprises, which may in turn purchase the real

property from the Port; and facilitating the assemblage of major industrial/commercial projects requiring collaboration by numerous interests such as utilities, local and regional governments and private enterprise.

Port districts are given additional "special district" status under federal law. For example, federal property may be transferred directly to local Port Districts by a federal agency rather than that agency having to pursue transfers through the normally convoluted Government Services Agency (GSA) procedure. The GSA procedure requires that lands declared "surplus" by one federal agency be offered to a hierarchy of potential recipients starting with other federal agencies at the top. The Port of Benton is heavily involved in the effort to privatize and transition surplus Hanford lands and infrastructure north of the City of Richland. The Port has recently obtained access to Hanford lands for private enterprise, both as leased lands and as ownership in fee.

Port District boundaries are shown on Map Figure 10-8 in Chapter 10. Detailed descriptions of the County's industrial land resources can be found in Chapter 7 (The Economic Element).

Current Trends

Within the past ten years, significant land use trends relative to industrial uses within unincorporated Benton County include:

- scouting forays by national industries for suitable industrial sites upon which to relocate or expand regional operations;
- increase of farm production within the county and region-wide;

- increase in irrigated lands acreage;
- the construction of additional space for cold storage and processing of crops;
- increases in the volume of agricultural chemicals production, sales and shipments;
- emerging industries for the production of bio-fuels
- significant expansion of rail transshipment of agricultural products from and through the region, and expansion of rail capacity and infrastructure;
- progress on the cleanup of Hanford lands resulting in the availability of those lands and infrastructure to local/private non-federal enterprises;

Future Considerations

Considerations within this Plan that relate to the industrial sector include the following:

- the designation of industrial locations for light industrial zoning attractive to hi-tech and Research and Development industries (see Chapter 4 Land Use Map 4.0);
- in the Finley Industrial Area take the following actions within an overall plan, a first step of which is accomplish a "useable" lands inventory:
 - in coordination with the Ports and private industry, continue assessing the feasibility of an industrial wastewater treatment capacity;
 - accomplish some advanced planning for the overall industrial complex, including SEPA analysis, with the goal to make projects "planned actions".
- a Hanford Land Use Plan with

industrial designations for the transition of Hanford lands and infrastructure from federal program uses to private sector enterprise, and integration into the larger area-wide economies.

Agricultural Lands

Map 4.0 shows those lands designated for Agricultural Use in Benton County. Table 4.2 indicates the amount of acreage designated for agricultural use. Table 4.3 shows the amount of acres within each Planning Region by method of use, e.g., irrigated, dryland or rangeland.

Generally, lands designated for agriculture are already in agricultural production, or are areas of raw land where conversion to agriculture is anticipated or likely.

A general description of the GMA Agricultural District zone is that it conserves agricultural lands by establishing a 20-acre minimum parcel size, and (with major exceptions e.g., Resort Destinations, wineries) limits the range of other land uses to those which are dependent upon, supportive of, ancillary to, or compatible with, agricultural production as the principal land use. A residential density of 1Du/10 acres is conditionally permitted when the units are tightly clustered and located to avoid conflicts with the principal land use. This density provision allows landowners to gain a return on marginal agricultural lands within their holdings from the sale of non-farm residential value.

Existing Conditions

Suitable Characteristics: The predominant land use and economic activity within Benton County outside of the Hanford Site

and cities, is commercial agriculture and its related or dependent industries, housing, commercial establishments, and rural lifestyle.

Lands designated for agricultural use within Benton County are those lands with suitable location, soil characteristics, microclimates, slopes, water supply availability (for irrigated crops), parcel (acreage) sizes, and remoteness or separation from non-farm residential developments.

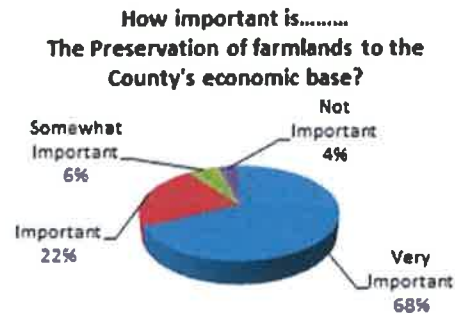
Economic Importance: The most recent statistics for total estimated agricultural production value in Benton County show "farm gate" income at \$400,571,000 with crop sales accounting for \$366,342,000 of the County's total value in 2002. The "farm gate" can conservatively be multiplied by a factor of 4 to get the total annual economic value of the agricultural sector in the County; this would put the 2002 value at over 1.6 billion dollars. More recent labor statistics show agriculture employed an average of 5,000⁸ residents annually. The net cash return from agricultural sales reached 110.9 million dollars for 2002, a sharp increase from 1992.

Due to the dominance of the local economy by the Federal budget at the Hanford Site over the past 50 years, the agricultural sector of the Tri-Cities economy is the only viable private sector "economic cluster" within the region today (DRI/McGraw Hill, The Tri-Cities Challenge - A Strategy for Economic Transformation, Feb. 15, 1996). The total

annual dollar value and employment base from agriculture is second only to that of the Hanford Cleanup Project, which is programmed to decline, and end.

Public Benefits versus Costs: Studies in recent years by the American Farmland Trust (AFT) describe the comparative fiscal impacts of agriculture and rural residential development to local governments. These studies show that farms generate more in local tax revenues than the services they demand cost the local taxpayers (\$0.29 in costs for every \$1.00 generated), while residential developments cost more to serve than they generate in revenue (\$1.13 in costs for every \$1.00 generated). The conclusion of the studies is that tax revenues from farms subsidize services to the non-farm residential land use.

Local Support for Agricultural: County residents apparently recognize the value of agricultural land use both as an economic base and as a culture within which to work and live. The "pie chart" below, presents the response of rural residents to a survey question on agricultural land use.



Dryland Agriculture:

Of the total acreage within the Agricultural

⁸ Washington Ag Statistics Service 2002

designation approximately 309,000 are primarily in dryland wheat production, principally in the Horse Heaven and Rattlesnake Planning Regions. Dryland production has an economy of scale requiring large operations, typically in the thousands of acres.

Irrigated Agriculture: Irrigated crop production is located throughout the Agricultural Lands designation. It is estimated that there is 251,000 acres of irrigated land within the designation.

Crops grown include "specialty" berries and orchard crops, mint, hops, and juice and wine grapes grown most notably by diversified large and small farming operations in the Rattlesnake Planning Region.

Corporate acreages of asparagus, potatoes, wine grapes, and corn are grown in large operations under "circle" irrigation systems found throughout the county but most notably on the south slope of the Horseheaven Region above the Columbia River. Significant acreages of hillside orchards are found in the Red Mountain/Badger Canyon and Kennewick/Finley areas.

Agricultural Lands Outside of The Agricultural Designation: There are significant acreages of existing commercial agriculture both within and outside of irrigation districts which are not within the Agricultural Designation. It is estimated that there are approximately 51,000 such acres. Some of these lands are found in fertile soils in random areas of the county where subdividing is prevalent; hence their long-term viability has been

compromised by non-agricultural land use activities on or adjacent to them.

Typically, as encroaching non-farm uses intensify, agriculture will be forced to alter operations and practices until it become marginally viable as an economic use. Farmers then give over the land to the encroaching use. Agriculture on these lands is therefore considered an "interim" use, ultimately to be displaced, primarily by rural residential use. Notable examples of existing agriculture on such lands are:

- orchards on the east face of Badger Mountain overlooking Keene Road in the City of Richland's UGA (approx. 1,100 acres);
- forage crop production in Badger Canyon SE of Dallas Road on acreage platted to rural lot sizes (approx. 320 acres);
- orchard and forage crops north of old Hwy. 12 to the Yakima River (excepting the west face of Red Mountain) on acreage annexed within or adjacent to the city of West Richland (approx. 650 acres);
- orchards to the west of Benton City, some of which the acreage is platted to rural lot sizes (approx. 2,750 acres);
- orchards, forage crops and dairy operations along the north side of the Yakima River between Benton City and Prosser, on acreage platted to or encroached upon by rural residential developments (approximately 226 acres);
- Forage crops, between the Yakima River and I-82, two miles west of Benton City on land short-platted to rural lot sizes. (Approximately 400 acres);

- East of Prosser (three miles) several pockets of agriculture use on the north and south side of the I-82 freeway. (Approximately 160 acres of orchard and 80 acres of forage crop.)

TABLE 4.4 LANDS DESIGNATED "GMA AGRICULTURE" BY PLANNING REGION

Planning Region	Total Acres	Irrigated Acres ⁹	Dryland Acres ¹⁰
Rattlesnake Mt.	148,540	41,638	106,902
Horseheaven Hills	489,083	191,662	297,421
Red Mt.	5,853	3,749	2,104
Finley	0	0	0
Hanford*			
Total GMA Agriculture	643,476	237,049	406,427

* Designations have not been finalized.

Current Trends

Competition for Suitable Lands:

Generally, the conditions which make land unsuitable for agriculture are constraints as well to the development of other land uses, such as "residential" and "commercial."

Therefore, with some exceptions (e.g., view lots on steep slopes, and dryland areas without underlying groundwater), there is an unavoidable competition between farmers and developers for the same types of land. Over time, the result of the competition for land is often a landscape pattern of mixed agricultural and non-agricultural uses. Typically, the pattern has evolved randomly without regard to land use incompatibilities, which are mitigated somewhat by the provisions in this Plan intended to meet the requirements of GMA to conserve agricultural lands. However, market forces in a growth economy are immutable

and competition among different land use types for good land will persist.

Incompatible Land Uses: Land uses can generally be lumped into "categories" (i.e.; Industrial, Residential, Commercial, etc.). Conflicts erupt when incompatible land uses become neighbors.

For example the urban or suburban "residential" land use categories include a variety of housing types and densities complemented by appropriately scaled retail and commercial services and recreational amenities. These exist in a relatively clean, quiet, orderly, safe and predictable environment, kept that way by ordinance standards tailored to do so. In such areas, families gather and recreate on their property or in neighborhood parks; peak activity occurs during the daylight hours, residents sleep during summer nights with the windows open to cooling

⁹ Acreages for both irrigated and dryland are approximate as of the date of this Plan. The ratio of irrigated to dryland is in a constant state of change.

¹⁰ For this Table, dryland includes rangelands.

breezes. Quality of everyday family life is the pre-eminent consideration.

By contrast, commercial agriculture is a land use with characteristics of the "Industrial" category. Scale and orderliness are based upon needs related to production efficiency; operations occur "round the clock". Seasonally there is dust, sprays, smoke, noise, odor, pollen, erosion, run-off, workers, and heavy vehicle and/or rail traffic. Farmers expect the unpredictable by way of weather, biology, and market conditions; they are ready to deal with it by any means necessary to save their crop. Every season, production and economic survival is the pre-eminent consideration.

Recently within the county, significant land use issues involving incompatibilities between distinctly different land uses have arisen. In Finley it is truck and rail transport of agricultural products and subdivision approval next to existing orchards; there is an agricultural runoff issue in the Rancho Reata area; and the planting of raw DNR land into vineyard production next to an elementary school in West Richland.

Other current regional issues associated with agricultural production are: nitrate loading of groundwater resources, non-point source pollution of surface waters, and windblown dust.

Continued Growth of Agriculture:

Current trends in agricultural land use are:

- continued expansion of irrigated acreage converted from rangeland, dryland agriculture and undeveloped lands, with concomitant growth of

- storage, processing and shipping uses;
- increased agricultural related water demands;
- growth of the agricultural related tourism;
- continued competition for land and multiplication of compatibility conflicts between agricultural related and non-agricultural land uses.

Future Considerations

Principal land use considerations are:

- accommodating additional land needs of both agriculture and non-agricultural uses while maintaining the economic potential of all economic sectors;
- properly locating sites and providing basic services for agricultural related industries;
- provision and maintenance of "farm to market" roads;
- facilitating the growth of the "agri-tourism" and "value-added" processing sectors;
- reduction of nitrate loading of potable groundwater supplies;
- provision of farm worker housing; and,
- assurance of adequate water supplies.

LAND USE MAP DESIGNATIONS

The Rural Lands Designation (RL-20) (RL-5) & (RL-1)

Location

Lands designated as Rural Lands on the land use map are those lands designated for "residential" as the principal use and which are located outside of Urban Growth Areas and the GMA Agricultural designation. (See Map 4.0).

The Rural designation is the second largest use category on the Land Use Map,

agriculture being the largest. Rural Residential is expansive and countywide, generally it surrounds other discrete areas designated as Industrial, Commercial, and Agriculture.

Definition and Purpose

The intent of the Rural Lands is to enable rural residential living, consistent with the historic custom and culture of that lifestyle within the county. Generally these are areas within which the predominant land use is not large-scale commercial agriculture, though isolated commercial farms may exist within rural residential areas and almost always abuts them and serves as an employment base.

Actual use is a leading indicator of where lands are suitable and desirable for small acreage residential parcels, farms, ranchettes, and other uses that can be developed in harmony with rural character. "Rural Character," is further defined in the Rural Element, Chapter Five of this Plan.

"Rural character", as the residents living it perceive it; is different among the various rural communities across the county. For example, rural residents in the West Richland/Richland area have distinctly different preferences than those in Finley or Paterson-Plymouth. There are also fundamental commonalities shared by residents in all of the rural areas; they are:

- low density;
- the ability to keep large animals;
- open spaces for recreation and wildlife;
- peace and quiet;
- no city;

- control growth;
- good roads;
- more police security/presence; and,
- A clean up of trash and junk".
(see Rural Element, Chapter 5)

Aside from meeting the requirements of GMA, the primary purposes of the Rural Lands use category are:

- to accommodate demands of non-farm families and hobby farmers for rural living;
- to provide buffers between urban and agricultural uses; and where there are appropriate land forms, e.g., ridges, mountains, and rivers and floodplains, between urban areas;
- to conserve lands potentially suitable for future inclusion into Urban Growth Areas (in those areas so identified) in close proximity to urban areas and services.

Within this category, allowable densities per the Land Use Map range from one dwelling unit per twenty acres (1DU/20ac) to one dwelling unit per 5 acres (1 Du/5ac.) Within limited areas of more intense rural development, densities are generally 1 Du/ac., but may be up to 3 Du/ac.

The lower density (1Du/20 acre) is designated on lands immediately adjacent to the new Finley Interie route. The highest densities, (1-3 Du/acre) are within Community Centers. When existing outside of Community Centers the 1 Du/acre applies in areas already platted to smaller rural lots with developed streets or adjacent to Urban Growth Areas. These areas are considered equivalent to limited

areas of more intensive rural development enabled by RCW36.70A.070 (5)(d). For all other Rural Lands, the density is 1Du/5.

To accommodate rural activities and lifestyles and to assure that rural development is consistent with the rural character as defined by the visions and goals of the County and its residents. Rural Lands designations are based upon a required "minimum" lot size. A larger than minimum lot size may be required when necessary to satisfy Health Department requirements for water and domestic waste disposal, and code requirements related to setbacks, easements etc.

Light Industrial Designation (LI)

Location

Light Industrial designations on the Land Use Map are applied to suitable lands wherever they have, or are in reach of attributes essential to industrial activities, and where they will not present unmanageable conflicts with other land uses. Essential site characteristics include:

- large undeveloped or underdeveloped acreages in uncomplicated ownerships;
- relatively flat terrain;
- direct access to multi-modal transportation facilities;
- access to power/utilities;
- a suitable labor force within relatively close proximity;
- within the region, other industries and businesses which are traditionally linked; and,
- relatively free of environmental and other (e.g., citizen opposition) constraints.

Lands included within the Light Industrial classification in unincorporated county are:

- in the vicinities of Paterson and Plymouth;
- west of the city of Richland in the SW corner of the Badger Road and I-82 Interchange;
- east of the City of Prosser on County Route 12;
- within the Community Center of Whitstran;
- in the SW of Benton City;
- west of the city of West Richland along SR-224; and,
- on the Hanford site.

The county's supply of Industrial designated lands is augmented by similar designations within cities in the county. For example, the City of Richland has in excess of 7000 acres within and adjacent to south border of the Hanford Reservation so designated; the City of Prosser, in excess of 200 acres; the City of Benton City 30 acres; the City of Kennewick, approximately 100 acres.

Definition and Purpose

Lands designated Light Industrial are intended for use by a wide range of land uses within the category of industrial, but the designation is not intended for heavy, hazardous or obnoxious activity (i.e., unsightly, emissions of noise, smoke, fumes, pollutants, odor, glare). Light industry includes uses such as computer component manufacture, storage and warehousing, finished product assembly, etc.

The primary purposes of this designation are to:

- provide employment and a payroll;
- expand the tax base, in order to fund the planning, capital, operations, and service responsibilities of government and special districts (e.g., schools);
- sustain the local and regional economy.

Heavy Industrial Designation (HI)

Location

Lands designated Heavy Industry on the Land Use Map are lands for activities that require the same locational and site essentials as Light Industrial plus a few things more: rail and water borne transportation access are critical; isolation from high density residential and commercial uses; large acreages for outside storage and maneuvering of trucks and rail equipment.

Heavy Industrial lands are designated in Paterson-Plymouth of the south county, in the south Finley area, north of Prosser, and on the Hanford Site.

Definition and Purpose

Heavy industries are by definition those that in the normal course of activity transport, store or produce emissions, smoke, glare, noise, odor, dust and hazardous materials as products or byproducts. Typically they function at the fundamental economic level: rail transport and facilities operations, chemical products manufacturing and shipment for agriculture, sand and gravel operations for construction, raw products processing, waste products recycling, etc.

Currently, the combined Light and Heavy Industrially designated land resources of the cities, the counties and the Port

Districts are sufficient to meet foreseeable demands. However, not all sites have been prepared with infrastructure or infrastructure plans sufficient to provide a competitive edge to businesses looking for such sites.

Public Lands Designation (PR)

Location

The PR designation is found throughout the county, but most generally along the Columbia River corridor.

Definition and Purpose

Lands designated PR are intended for public uses such as parks, playgrounds, greenways, open spaces and wildlife habitats owned and operated by a governmental agency.

The general locations and owners of lands designated as Public are listed below. Refer to Maps 4.0 through 4.6 for specific locations.

- Parklands owned by the county or leased from the Army Corps of Engineers by the county (see Park and Recreation Element, Chapter 6);
- Waste Treatment Site of approximately 90 acres for future municipal use including community waste in the Plymouth vicinity;
- Federal lands owned or managed by federal agencies or other entities;
- Bureau of Land Management Lands (BLM) throughout the county;
- Bureau of Reclamation (BUREC) Lands having mainly to do with irrigation water activities;
- Department of Energy (USDOE) lands on the Hanford site;
- U.S. Fish and Wildlife (USFWS) lands

- U.S. Army Corps lands mainly along the shoreline of pools behind hydroelectric dams on the Columbia River;
- Department of Natural Resource (DNR) lands, mainly the school sections (16s) and river beds;
- Department of Ecology (WDOE) lands, most notably a square mile on the Hanford Site; and,
- State Department of Fish & Wildlife (WFW) lands, principally small purchases along the rivers.
- Port lands not otherwise designated, for port or industrial purposes.

Publicly Owned Lands

In addition to lands actually designated for "Public Use", there are 342,391 acres of "publicly owned" lands within the county that are designated for industrial, agricultural, or other "market" related land use designations. Examples of such lands are those owned by the Federal Bureau of Land Management (BLM), U.S. Department of Energy (USDOE) Federal Bureau of Reclamation (BUREC) or Washington State Department of Natural Resources (DNR). Figure 4-13 depicts those lands as of the date of this Plan.

Commercial Land Use Designations

There are four Commercial designations on the Land Use Map: Community, Commercial, General Commercial, Interchange Commercial, and Visitor Serving Commercial (on the Hanford Reservation).

Locations, Definition and Purpose

Community Commercial (CC) is located in the small centers of rural communities at Whitstran, Paterson, Plymouth, and Finley.

The purpose is to enable businesses to conveniently provide residents with the variety of immediate day-to-day goods and services typically sought outside the context of a weekly shopping trip to the city. Examples of uses are groceries, convenience items, taverns, restaurants, laundromats, beauty shops, fuel, hardware, etc. The size of the designated area and the establishments within it are smaller than urban scale and in harmony with the rural character.

Interchange Commercial (IC) is located at state and federal highway interchanges. Existing examples are I-82 and Badger Road west of Kennewick; I-82 and Gap Road north of Prosser; I-82 and SR-14 in Plymouth; and the I-82 and Gibbon Road interchange three miles east of Prosser. The primary purpose of these designations is to serve highway travelers, though typically they also provide convenience services to local residents as well. Uses include motels, truck stops, service stations, restaurants and fast food.

General Commercial (GC) this designation is found on the I-82 frontage road south of I-82 just west of Prosser. The purpose is to provide retail goods and services to a regional trade area. These designations are limited in the unincorporated area because the scale anticipated usually requires municipal services.

Visitor Serving Commercial (VSC) Currently, there are designations for this land use only within the Hanford Site, one at Vernita Bridge, and one at the approximate intersection of SR-225 and SR-240 adjacent to Horn Rapids (see Chapter 12).

Other potential locations outside of the Hanford Site are lands in close proximity to the Yakima and Columbia Rivers; some of which are owned by Port Districts. Future study and market analysis relating to visitor serving developments may result in additions of this designation to the Land Use Map. Many of the uses included within this designation can also occur in the GMA Agricultural and Rural Residential designations.

This designation includes uses that attract and serve visitors who deliberately travel to the site for recreational activities, including those associated with commercial services. Uses include resorts, conference centers, golf courses, motels, restaurants, recreational vehicle parks, etc.

Research and Development Designations (R&D)

Locations

This designation on the land Use Map currently exists only within the southern plain of the Hanford Site west of Route 10.

GMA Agricultural Lands Designation

Location

Like the Rural Residential designation, the Agricultural designation on the Land Use Map covers lands in all Planning Regions of the County except for the Hanford site.

Definition and Purpose

Lands with this designation are those which have characteristics suitable and valuable for commercial agriculture. Such characteristics include:

1. suitable soils;
2. farmable topography;
3. unplatted acreage's of significant size;

4. existing or potential availability of water;
5. suitable slope and exposure; and,
6. absence of existing land uses which are generally known to be incompatible with agricultural operations.

The purpose of this designation is to conserve these lands for agricultural production. The designation does this by assuring existing and prospective farmers that their investment will not be jeopardized by the encroachment of land uses which would increase production cost and decrease productivity (e.g. increased taxes, increased liability, altered production methods to limit liability).

In the interests of providing non-farm income to owners of lands within this designation, uses also include recreational and visitor facilities such as resorts, recreational vehicle parks, golf courses, dude ranches, hunting clubs, etc. Agriculturally related industry and clustered non-farm housing are also included.

Open Space-Conservation

Location

This designation is found on the Land Use Map on the north side of the Yakima River west of the City of Richland extending up and down the river from Twin Bridges and the intersection of Snivley and Grosscup Roads and north to the Horn Rapids Ditch. The area is known as Barker Ranch.

Definition and Purpose

Lands with this designation are those recognized as areas having critical resources and ecosystems with unique

characteristics that support: significant habitats for migratory birds, fish and wildlife; natural riverine functions and aquatic environments; botanical inventory; water quality and flood retention. The areas designated Open Space Conservation areas provide significant natural functions and benefits to natural resources and the public and should be protected from destruction, conversion, and encroachment by incompatible uses. These areas may also provide limited recreational and educational opportunities for the public. Candidate lands for designation should include one or more of the following:

1. Areas identified in the County's Comprehensive Plan or within the "Ecologically Sensitive Areas of Benton County", March 1982 document described as having critical or sensitive areas that should be protected from incompatible uses;
2. Areas held under conservation easements with state or federal agencies that are deemed valuable for their unique ecosystems, plant or wildlife communities, or aesthetic significance;
3. Significant wildlife ecosystems in the County which are highly productive and support significant numbers of breeding or migratory species, or have been otherwise noted as significant habitat due to their high value or scarcity; and,
4. Sensitive areas containing significant examples of representative natural plant and animal communities in the County.

Mineral and Aggregate Resources

Location

Lands containing mineral and aggregate resources are ubiquitously spread throughout the county. Their locations are shown on the Mineral and Aggregate Resources Map (Map 2-3, Chapter 2).

Definition and Purpose

Mapped designations of these resources indicate known sites where sand, gravel, or basalt in commercially extractable quantities exists. The purpose of this designation is to identify and protect resources of limited availability, which are of long-term value to the construction and development sectors of the local and regional economy.

Per the adopted Mineral Resources Protection Ordinance, some of the sites have been afforded a degree of protection against the occurrence of land use activities on the site, or adjacent sites, which may be incompatible with, or prejudicial to the extraction and processing of resources. The owner of the resource must request these protections. Based upon how well the site meets the criteria for protection identified in the ordinance, the protections may or may not be granted.

Urban Growth Areas (UGAs)

Location

Lands adjacent to, or as in the case of existing unincorporated islands, surrounded by existing city limits.

Definition and Purpose

Urban Growth Areas are where urban expansion of the adjacent municipality is anticipated, and is in fact being planned for by the municipality. The county designates the UGA in consultation with

each city. Within UGAs the city must size, finance and construct urban infrastructure to facilitate urban expansion.

Land use designations on unincorporated lands within UGAs are the variety of urban use classifications typically found within a city. Figures 4-8 thru 4-12 show the county's land use designations within UGAs, with exceptions, the designations mirror those adopted by the city within the UGA. Notwithstanding the exceptions, the county defers to the city's designations.

BENTON COUNTY

State of Washington

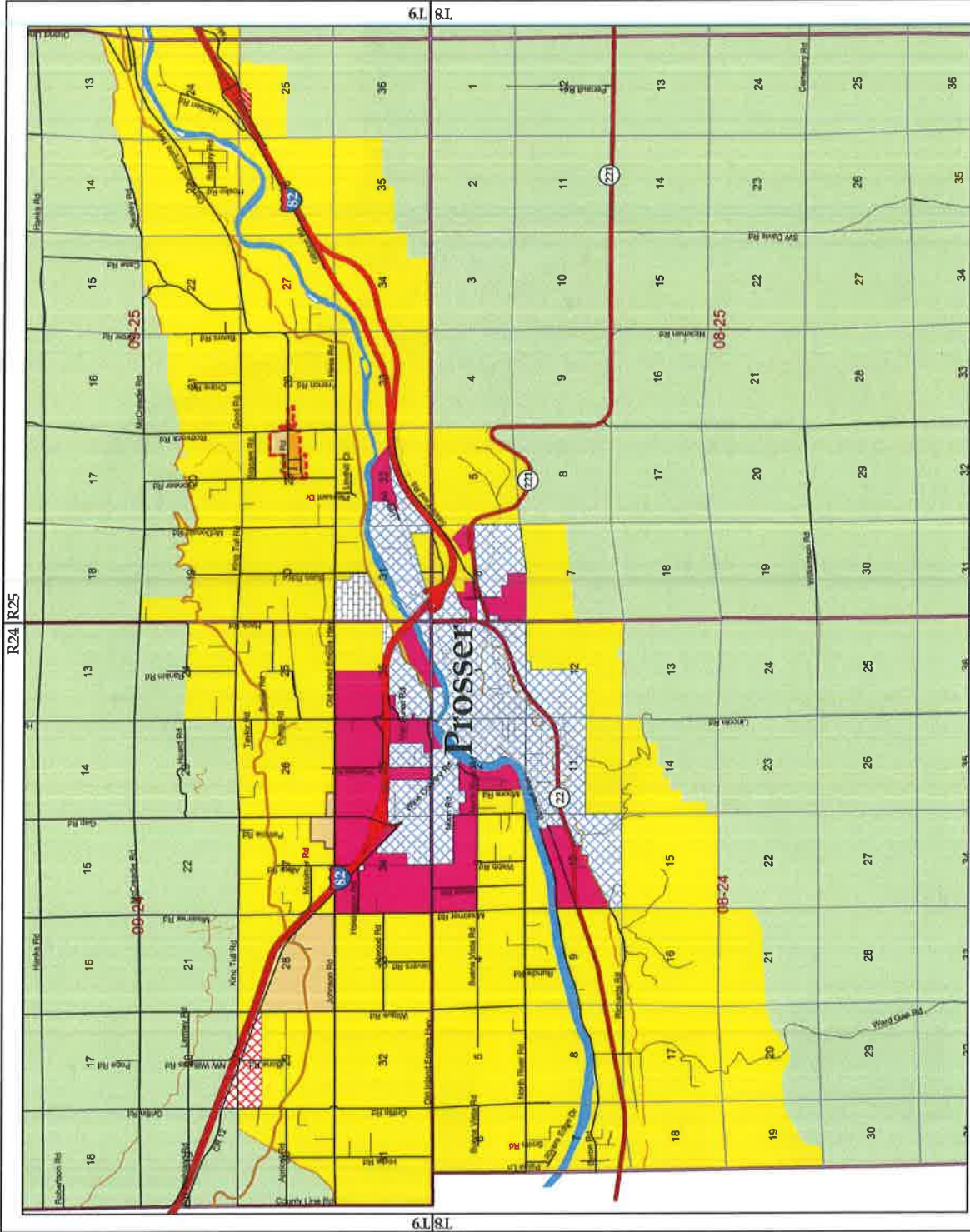
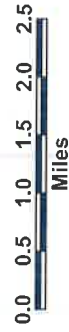
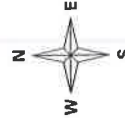
LAND USE MAP 4.1

PROSSER-WHITSTAN PLANNING AREA

Adopted by Resolution #12-528
Dated September 11, 2012

Legend

-  CITY LIMITS
-  URBAN GROWTH AREA
-  RURAL LANDS 1
-  RURAL LANDS 5
-  COMMUNITY CENTER
-  COMMUNITY COMMERCIAL
-  INTERCHANGE COMMERCIAL
-  GENERAL COMMERCIAL
-  LIGHT INDUSTRIAL
-  HEAVY INDUSTRIAL
-  GMA AGRICULTURE



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BENTON COUNTY

State of Washington

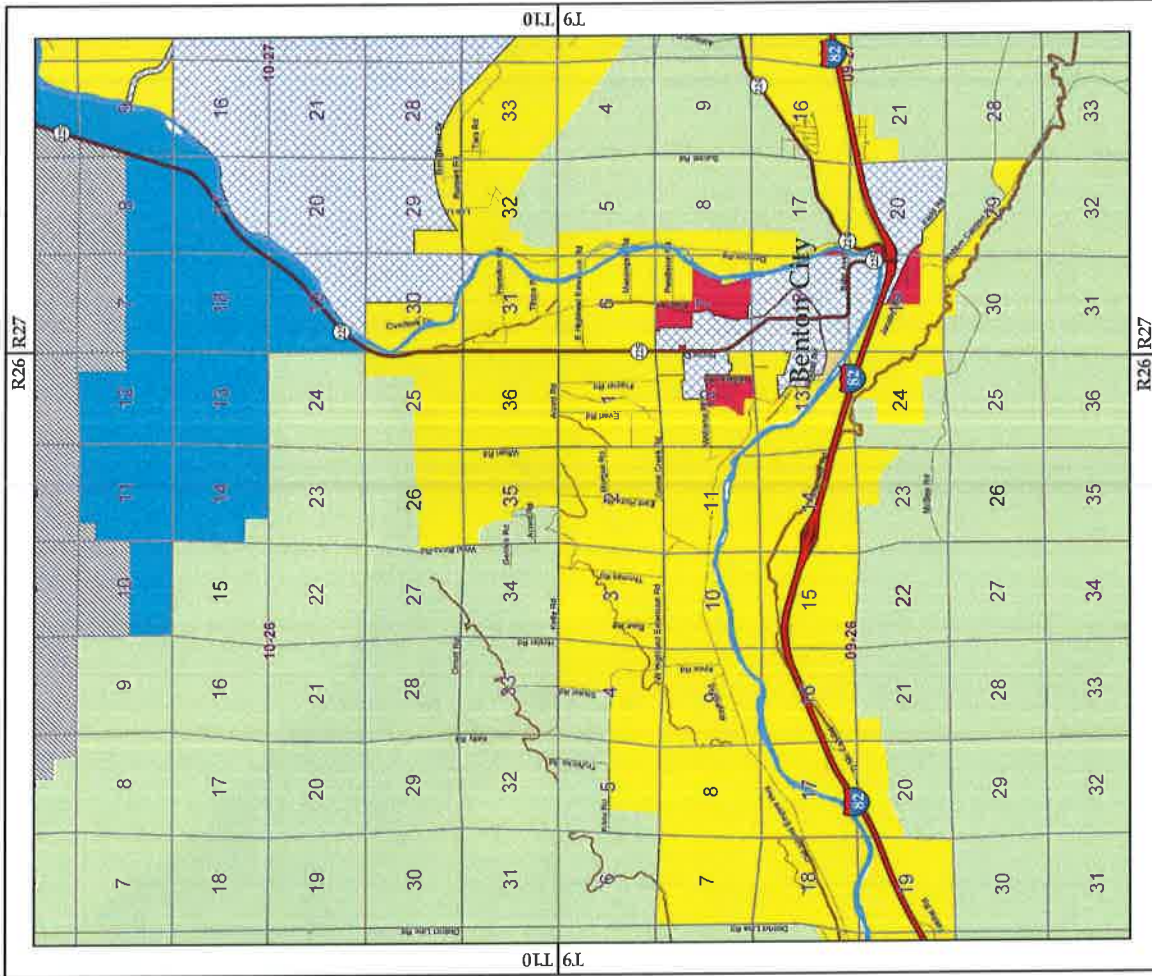
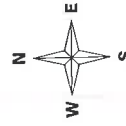
LAND USE MAP 4.2

BENTON CITY-KIONA PLANNING AREA

Adopted by Resolution #07-767
Dated October 22, 2007

Legend

-  CITY LIMITS
-  URBAN GROWTH AREA
-  RURAL LANDS 5
-  LIGHT INDUSTRIAL
-  GMA AG
-  PUBLIC
-  HANFORD



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BENTON COUNTY
State of Washington

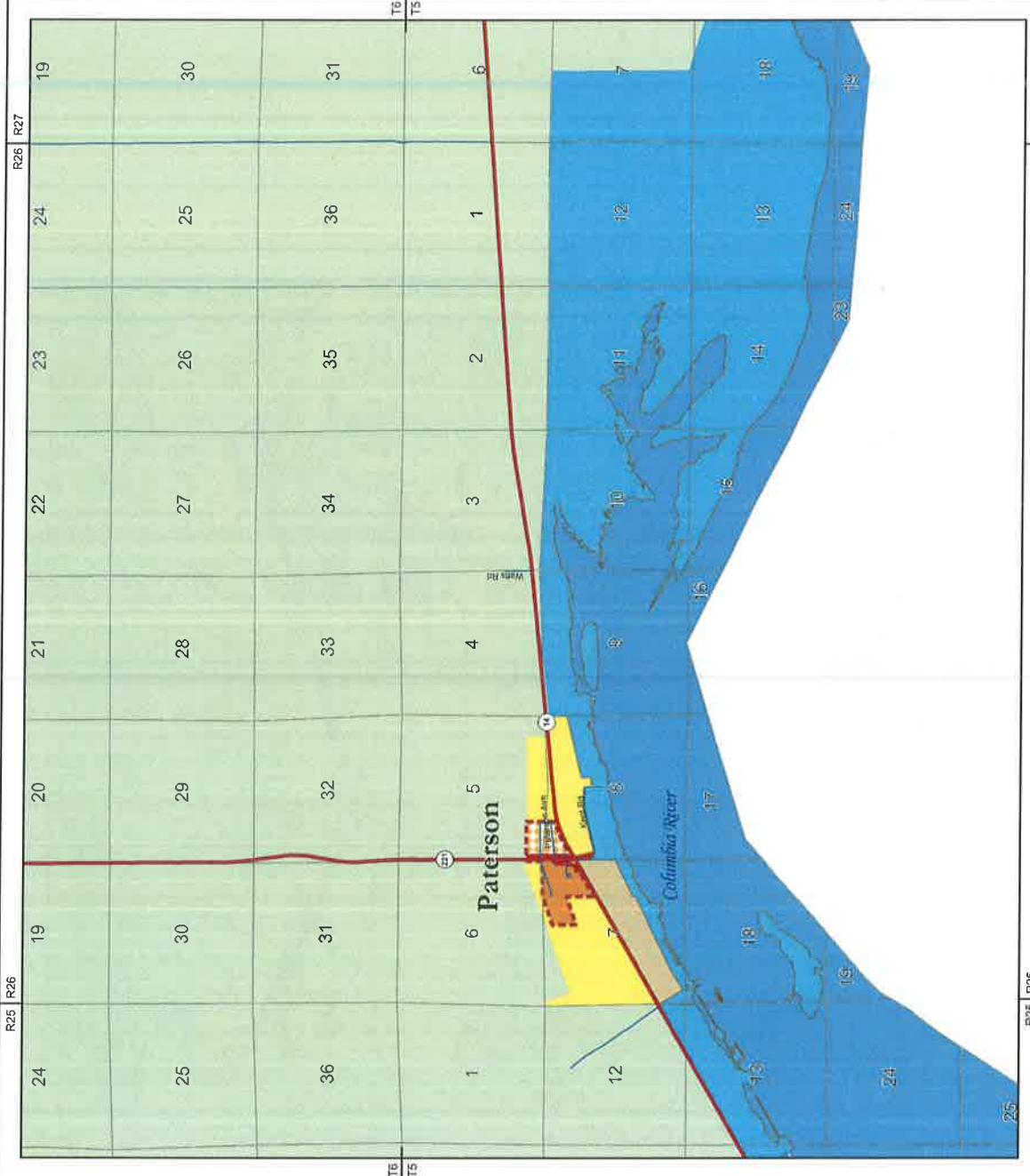
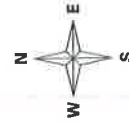
LAND USE MAP 4.3

**PATERSON
PLANNING AREA**

Adopted by Resolution #07-767
Dated October 22, 2007

Legend

-  COMMUNITY CENTER
-  RURAL LANDS 1-3
-  RURAL LANDS 1
-  RURAL LANDS 5
-  COMMUNITY COMMERCIAL
-  LIGHT INDUSTRIAL
-  GMA AG
-  PUBLIC

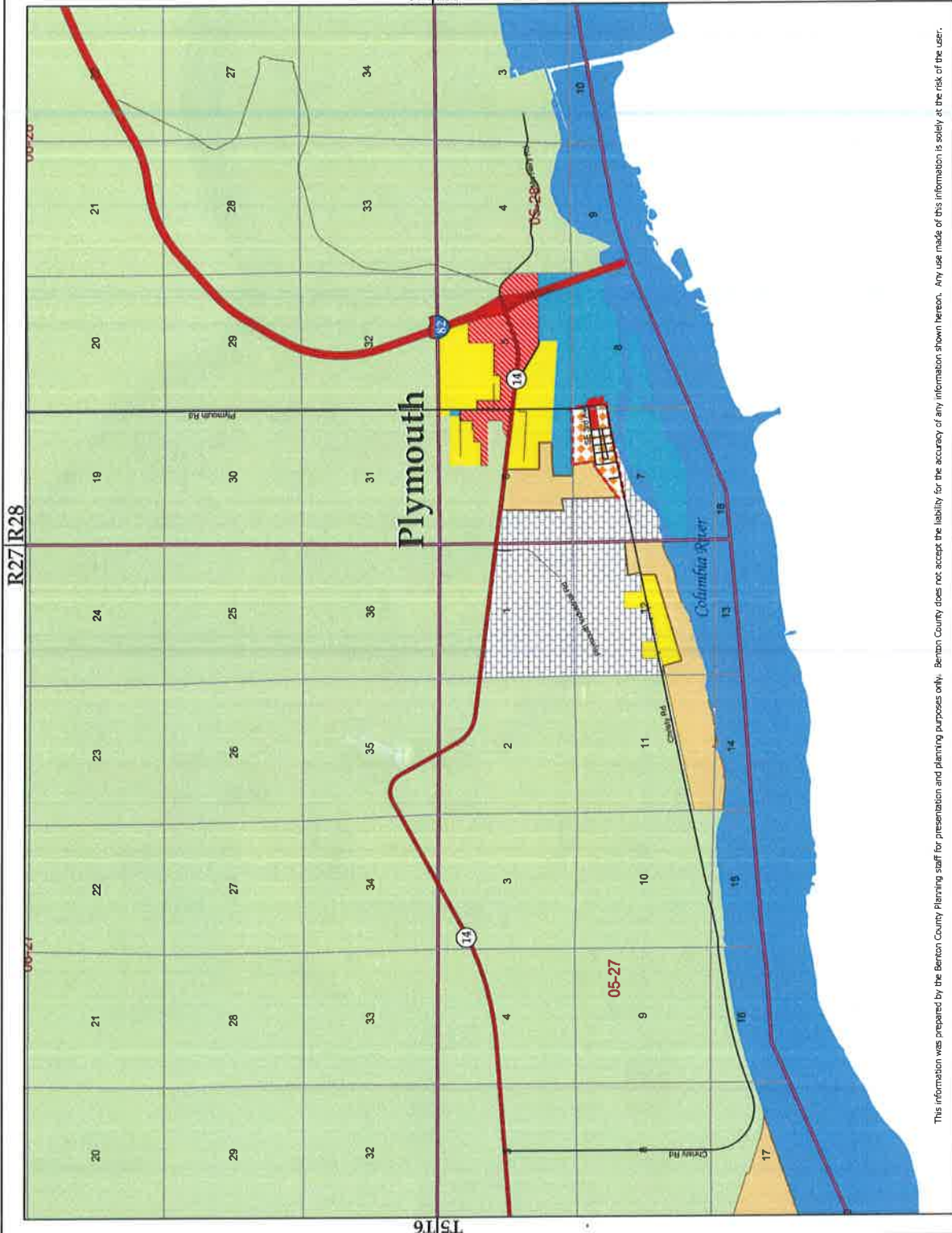
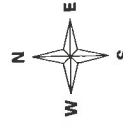


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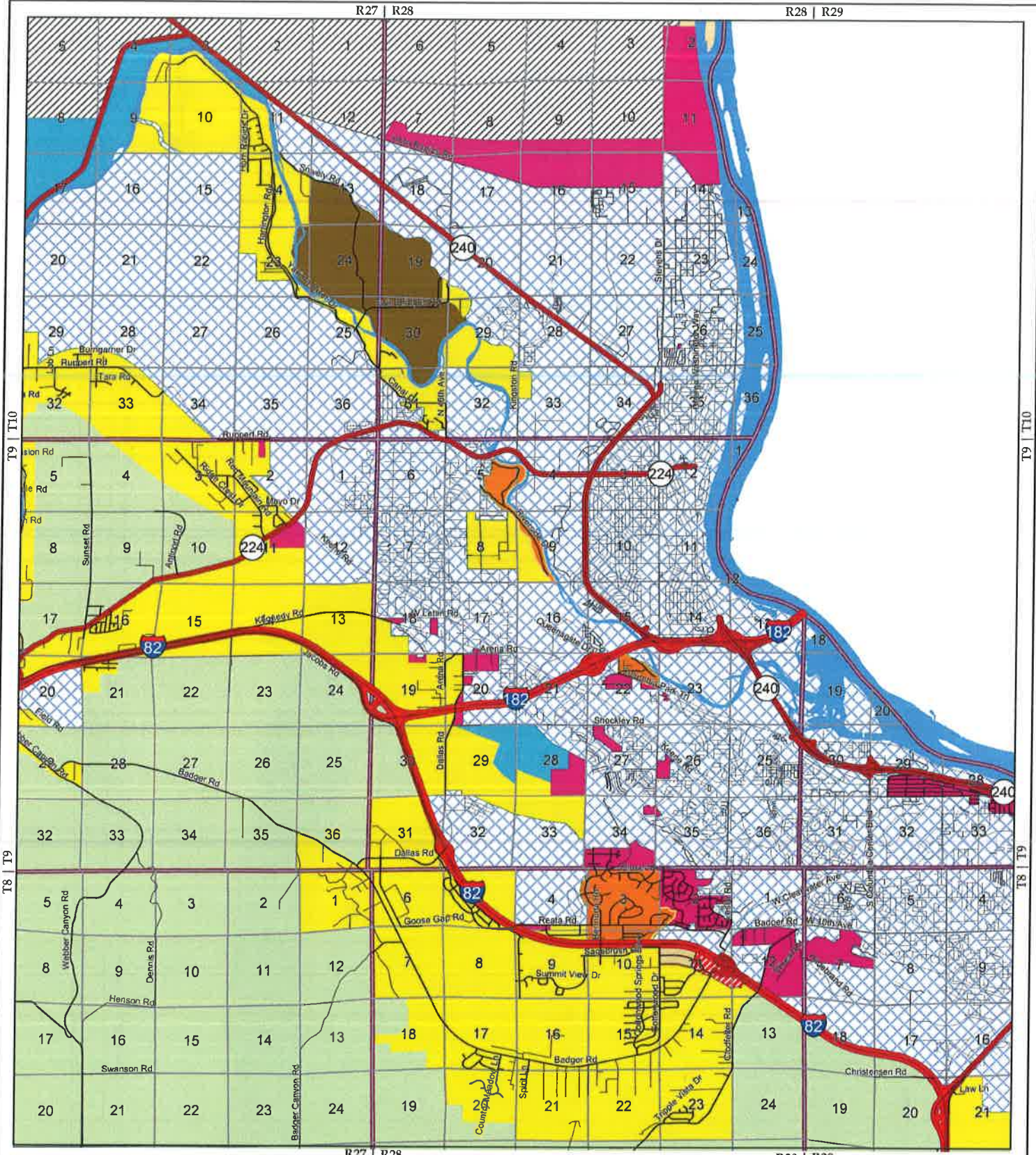
BENTON COUNTY
State of Washington
LAND USE MAP 4.4
PLYMOUTH
PLANNING AREA

Adopted by Resolution #12-526
Dated September 11, 2012

- Legend
- COMMUNITY CENTER
 - RURAL LANDS 1-3
 - RURAL LANDS 5
 - COMMUNITY COMMERCIAL
 - INTERCHANGE COMMERCIAL
 - LIGHT INDUSTRIAL
 - HEAVY INDUSTRIAL
 - GMA AGRICULTURE
 - PUBLIC



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T9 | T10

T9 | T10

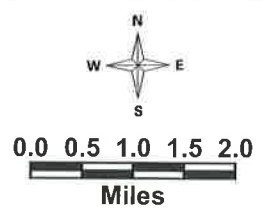
T8 | T9

T8 | T9

BENTON COUNTY
 State of Washington
LAND USE MAP 4.5
 RICHLAND-WEST RICHLAND
 PLANNING AREA

Adopted by Resolution 2015-518
 Dated July 21, 2015

- Legend**
- CITY LIMITS
 - URBAN GROWTH AREA
 - RURAL LANDS 1
 - RURAL LANDS 5
 - LIGHT INDUSTRIAL
 - INTERCHANGE COMMERCIAL
 - GMA AGRICULTURAL
 - OPEN SPACE CONSERVATION
 - PUBLIC
 - HANFORD
 - HANFORD REACH



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**LAND USE MAP 4.6
KENNEWICK-FINLEY
PLANNING AREA**

Adopted by Resolution
2016-492
June 14, 2016

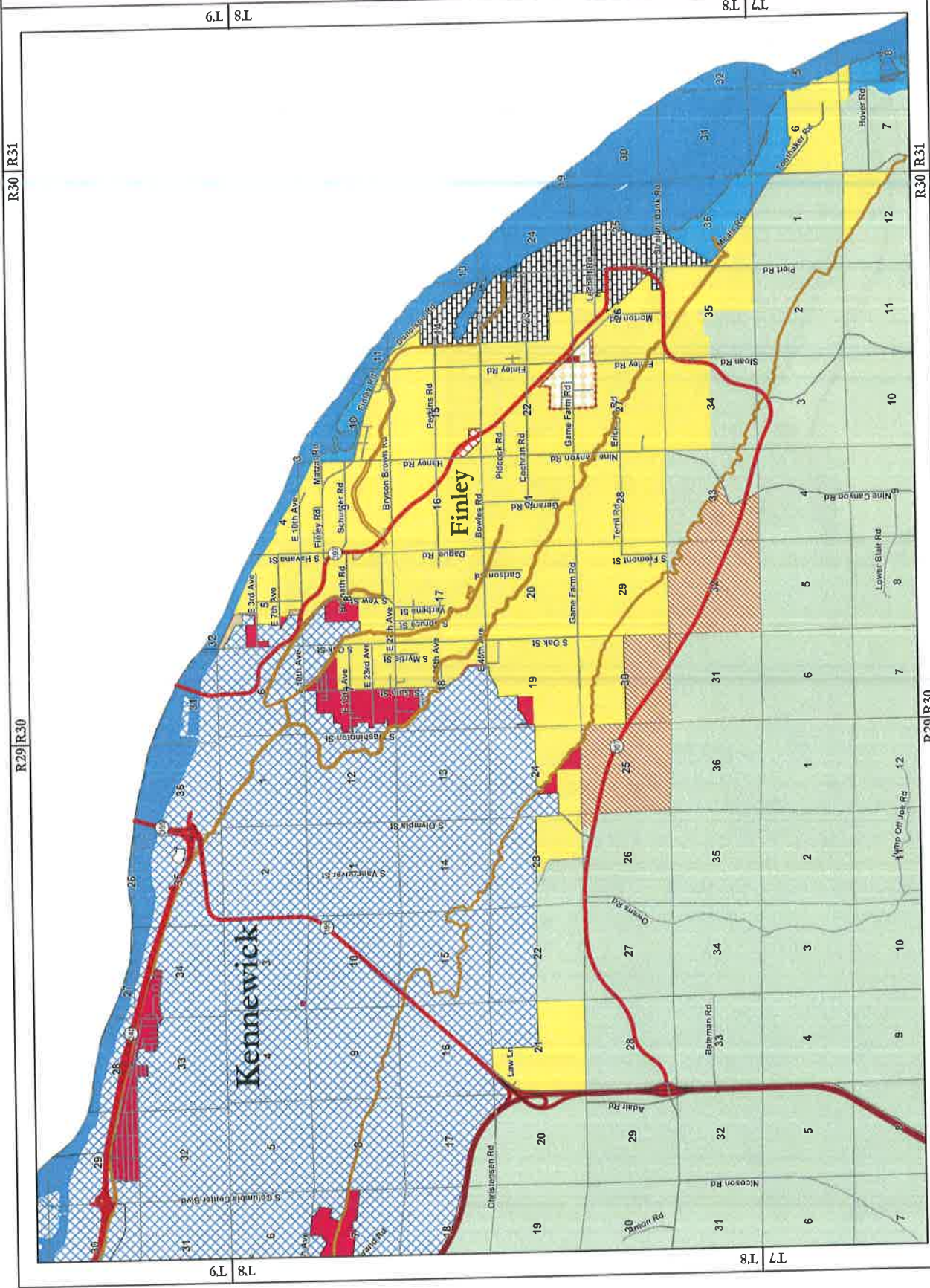
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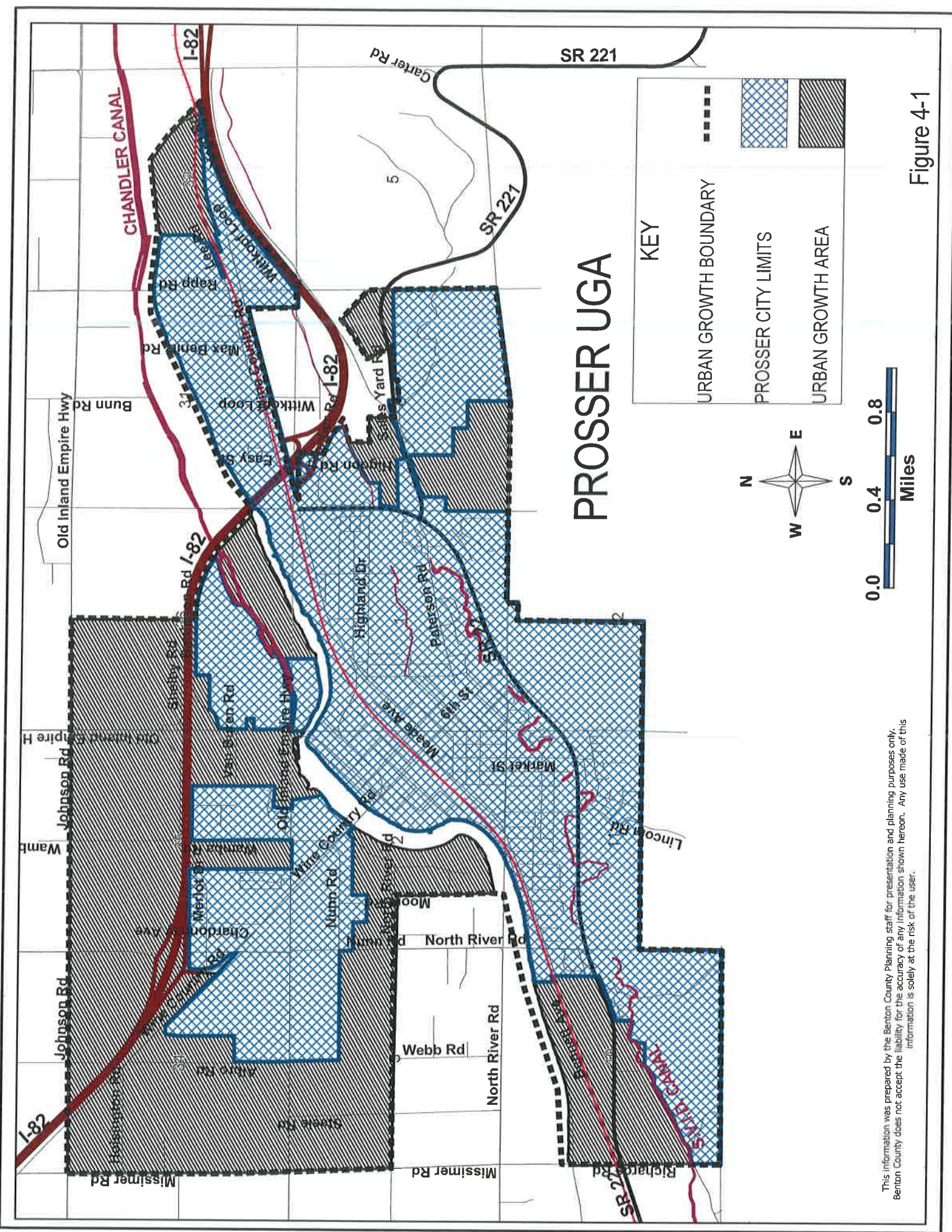
- CITY LIMITS
- URBAN GROWTH AREA
- RURAL LANDS 1-3
- RURAL LANDS 5
- RURAL LANDS 20
- COMMUNITY CENTER
- COMMERCIAL
- GENERAL COMMERCIAL
- LIGHT INDUSTRIAL
- HEAVY INDUSTRIAL
- GMA AG
- PUBLIC

Dated June 14, 2016



0.0 0.5 1.0
Miles





PROSSER UGA

KEY

- URBAN GROWTH BOUNDARY
- PROSSER CITY LIMITS
- URBAN GROWTH AREA

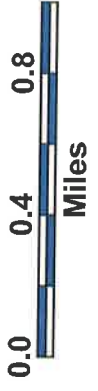
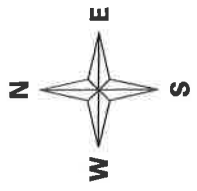


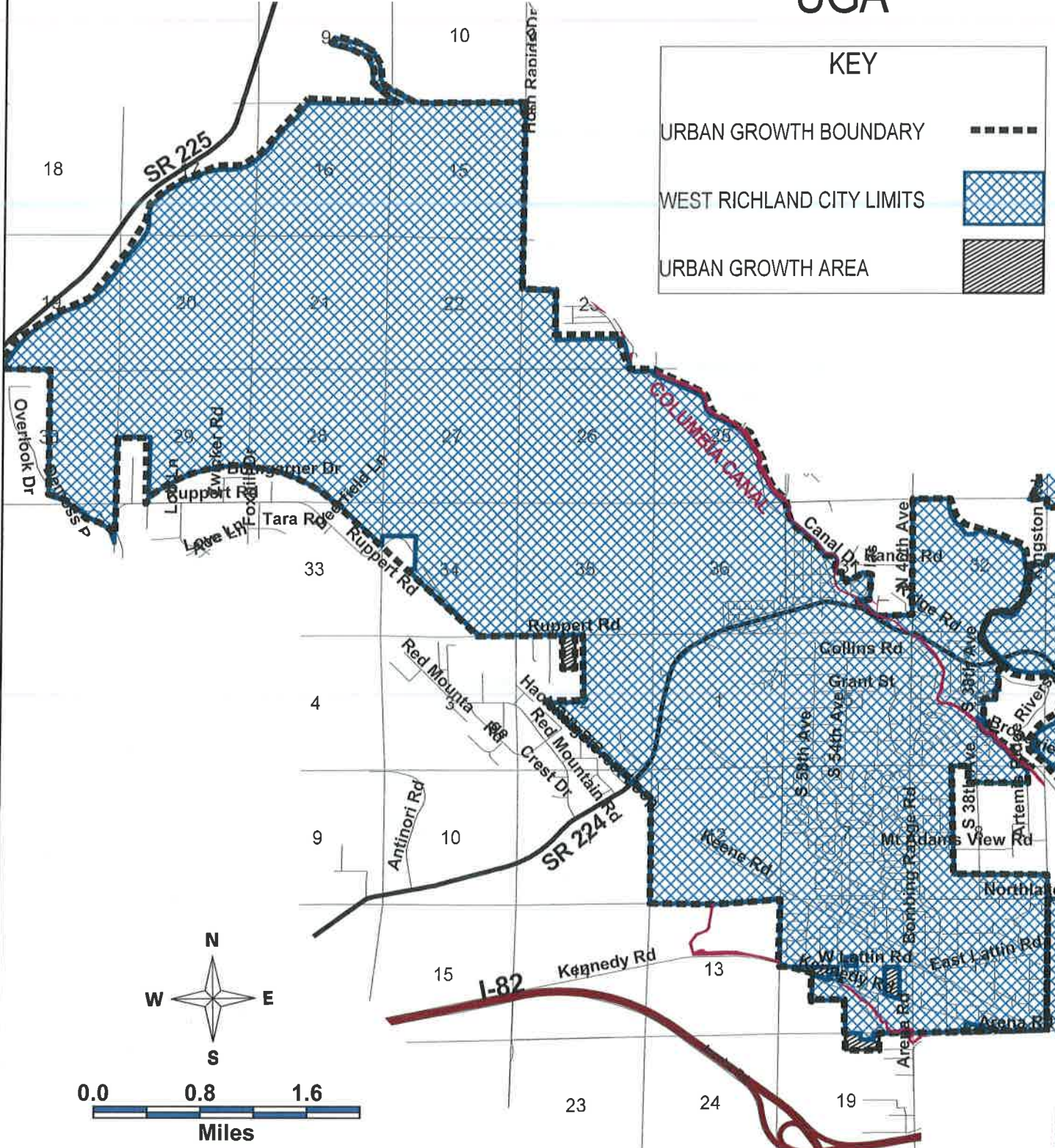


Figure 4-1

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WEST RICHLAND UGA

KEY	
URBAN GROWTH BOUNDARY	-----
WEST RICHLAND CITY LIMITS	
URBAN GROWTH AREA	



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Figure 4-3

RICHLAND UGA

KEY

URBAN GROWTH BOUNDARY



RICHLAND CITY LIMITS



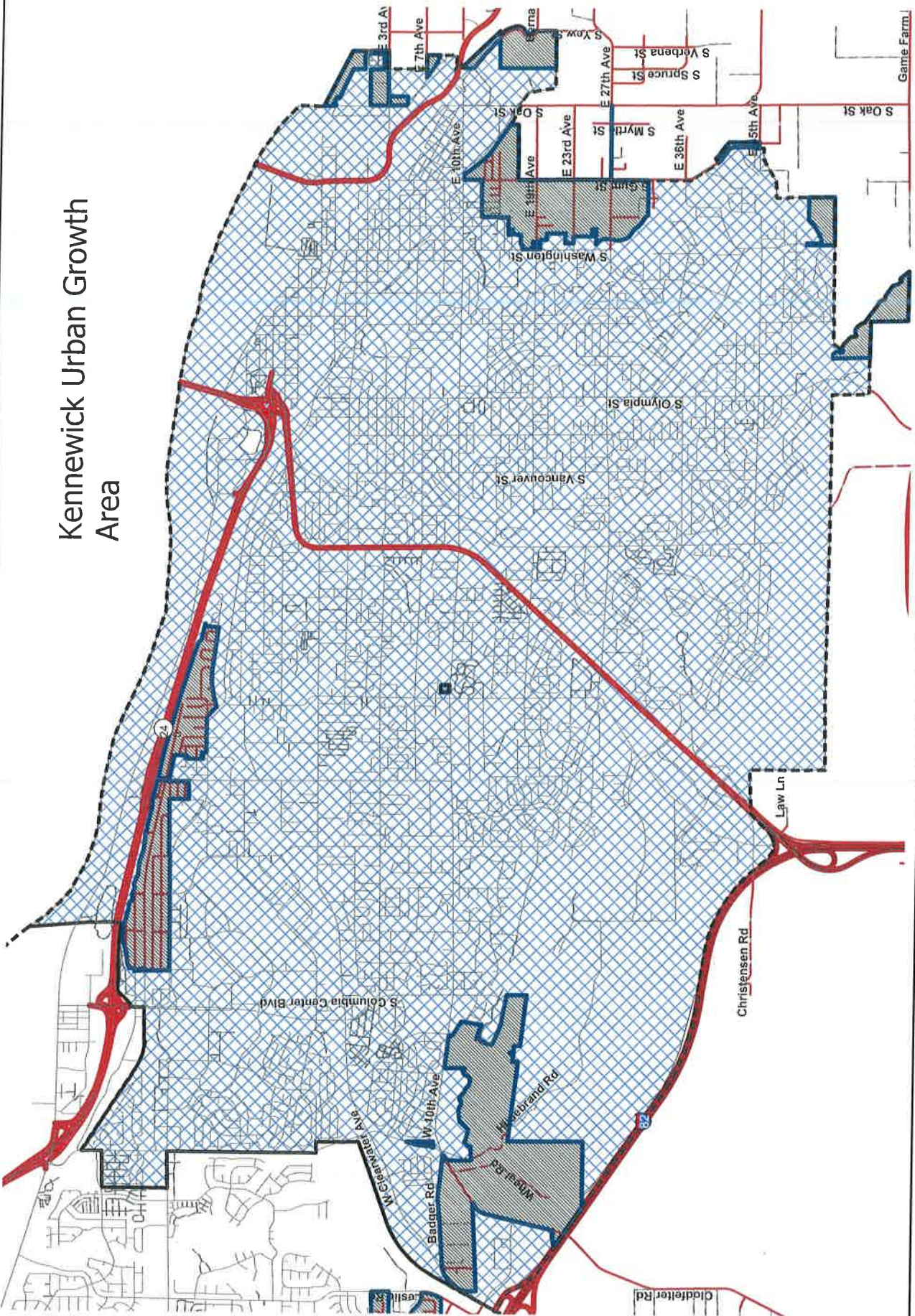
URBAN GROWTH AREA



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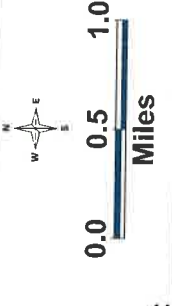
Figure 4-4

Kennewick Urban Growth Area



BENTON COUNTY
State of Washington

Planning Department

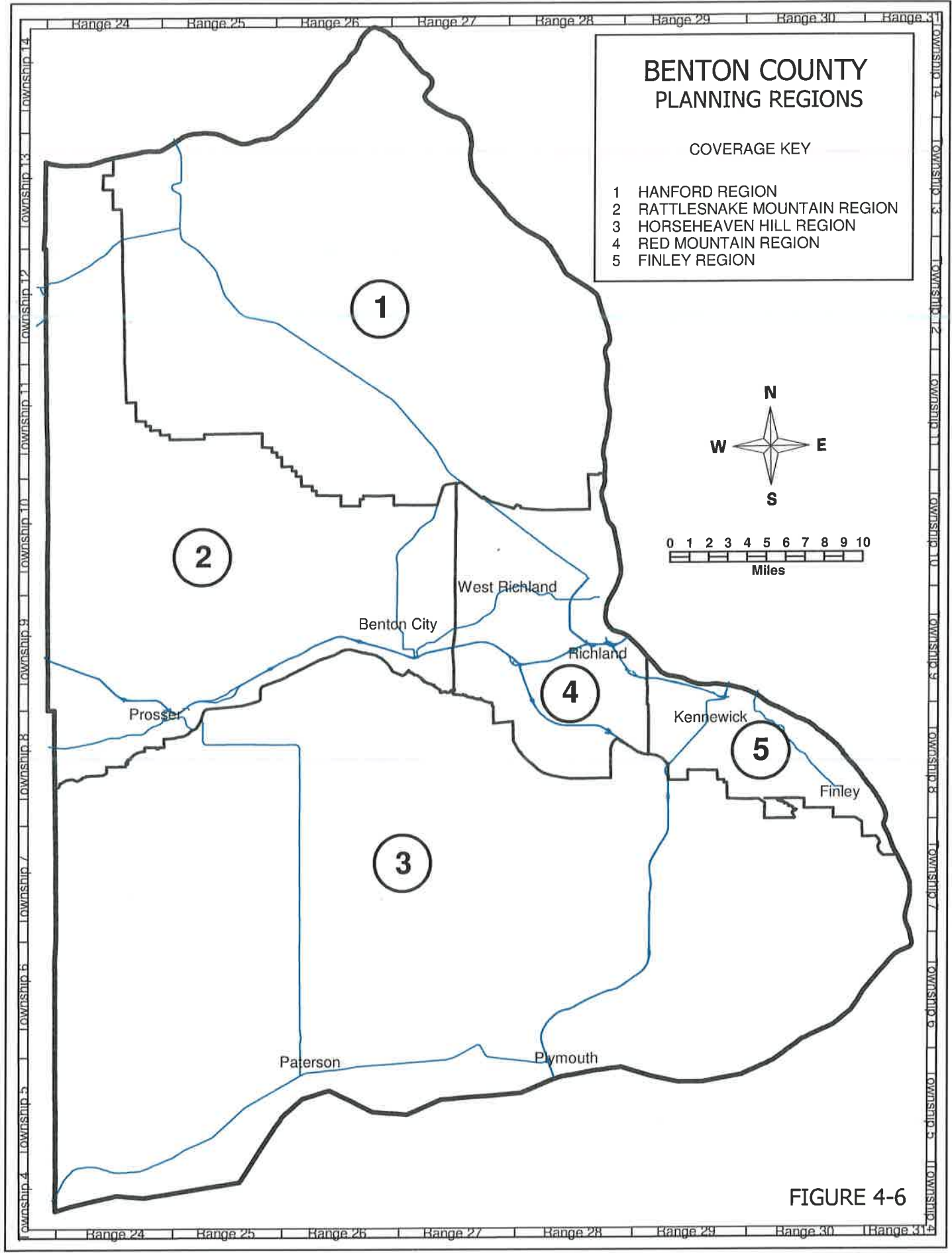


- LEGEND**
- URBAN GROWTH BOUNDARY
 - KENNEWICK CITY LIMITS
 - URBAN GROWTH AREA

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**Adopted by Res # 2015-516
Dated July 21, 2015**

Figure 4-5



BENTON COUNTY PLANNING REGIONS

COVERAGE KEY

- 1 HANFORD REGION
- 2 RATTLESNAKE MOUNTAIN REGION
- 3 HORSEHEAVEN HILL REGION
- 4 RED MOUNTAIN REGION
- 5 FINLEY REGION

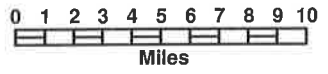
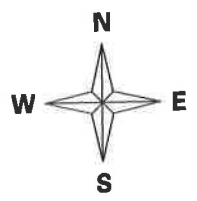


FIGURE 4-6

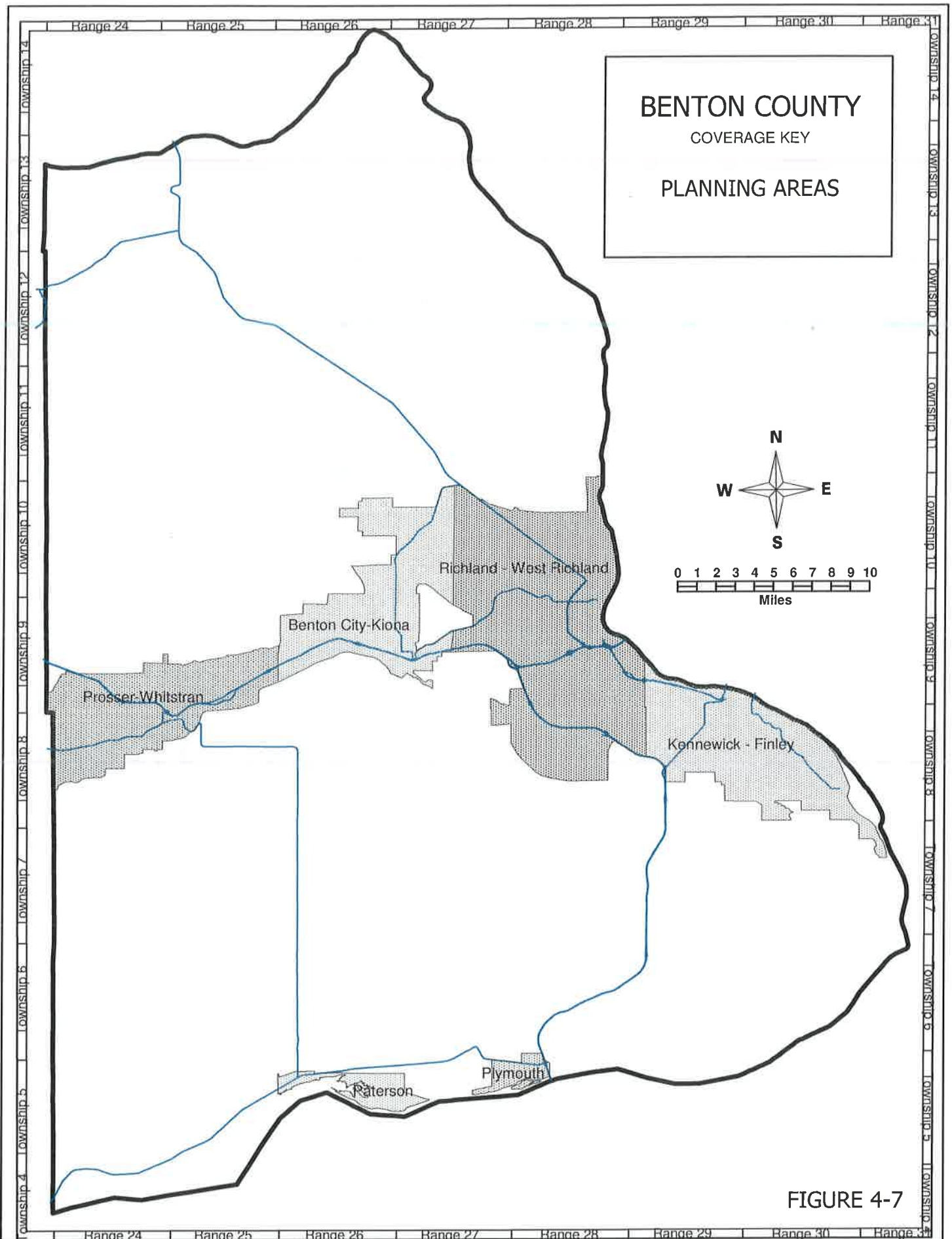


FIGURE 4-7

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Prosser Urban Growth Area Preferred Land Use

BENTON COUNTY
PLANNING
DEPARTMENT



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Legend

- Urban Growth Boundary
- City Limits
- Residential 0-6du/ac
- General Commercial
- Light Industrial
- Public

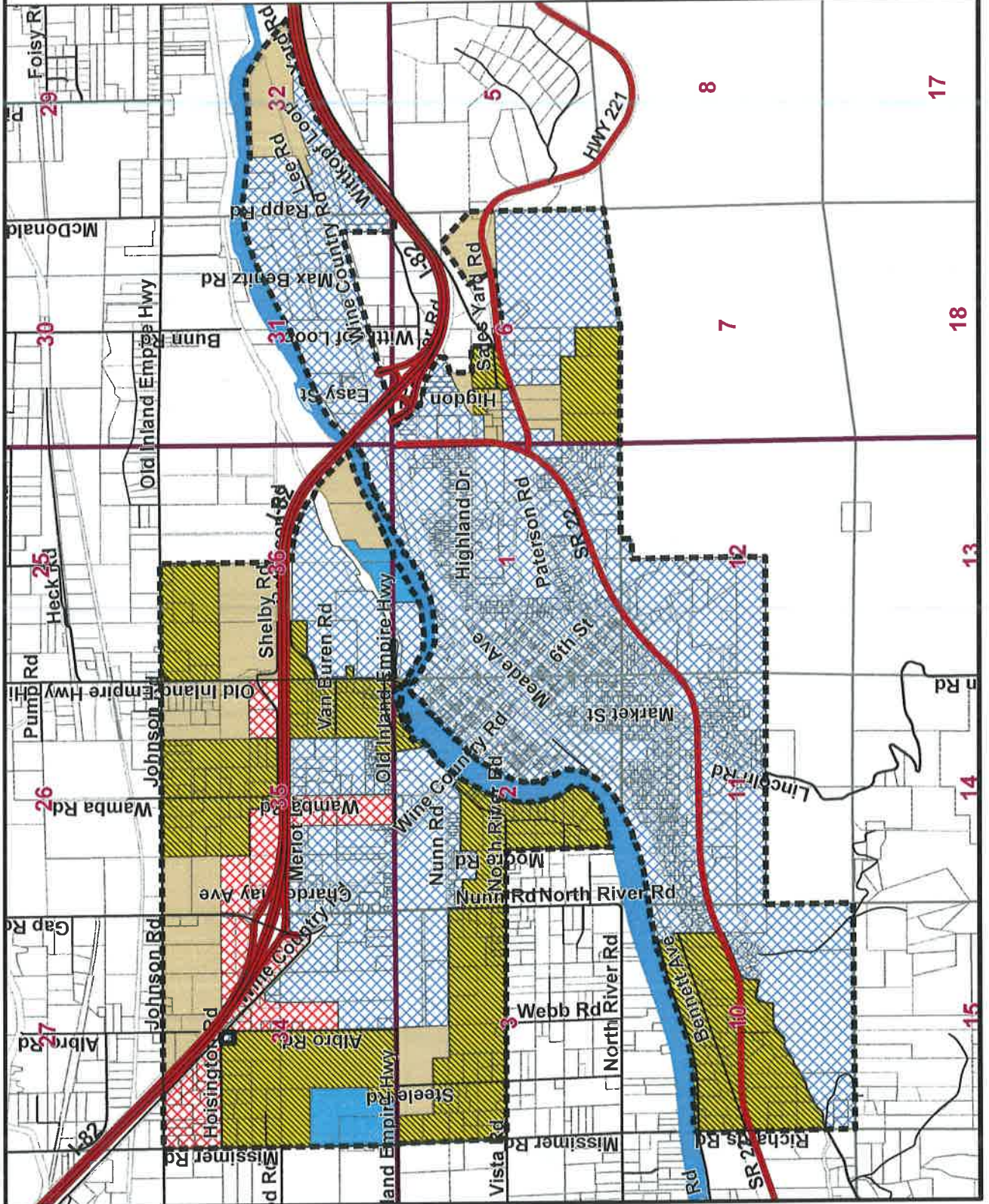
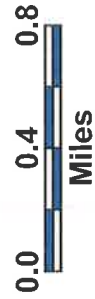
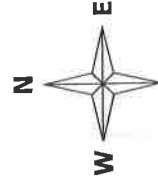


Figure 4-8

Benton City Urban Growth Area Preferred Land Use

BENTON COUNTY
PLANNING
DEPARTMENT



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Legend

- Urban Growth Boundary
- City Limits
- Residential 0-6du/ac
- Light Industrial

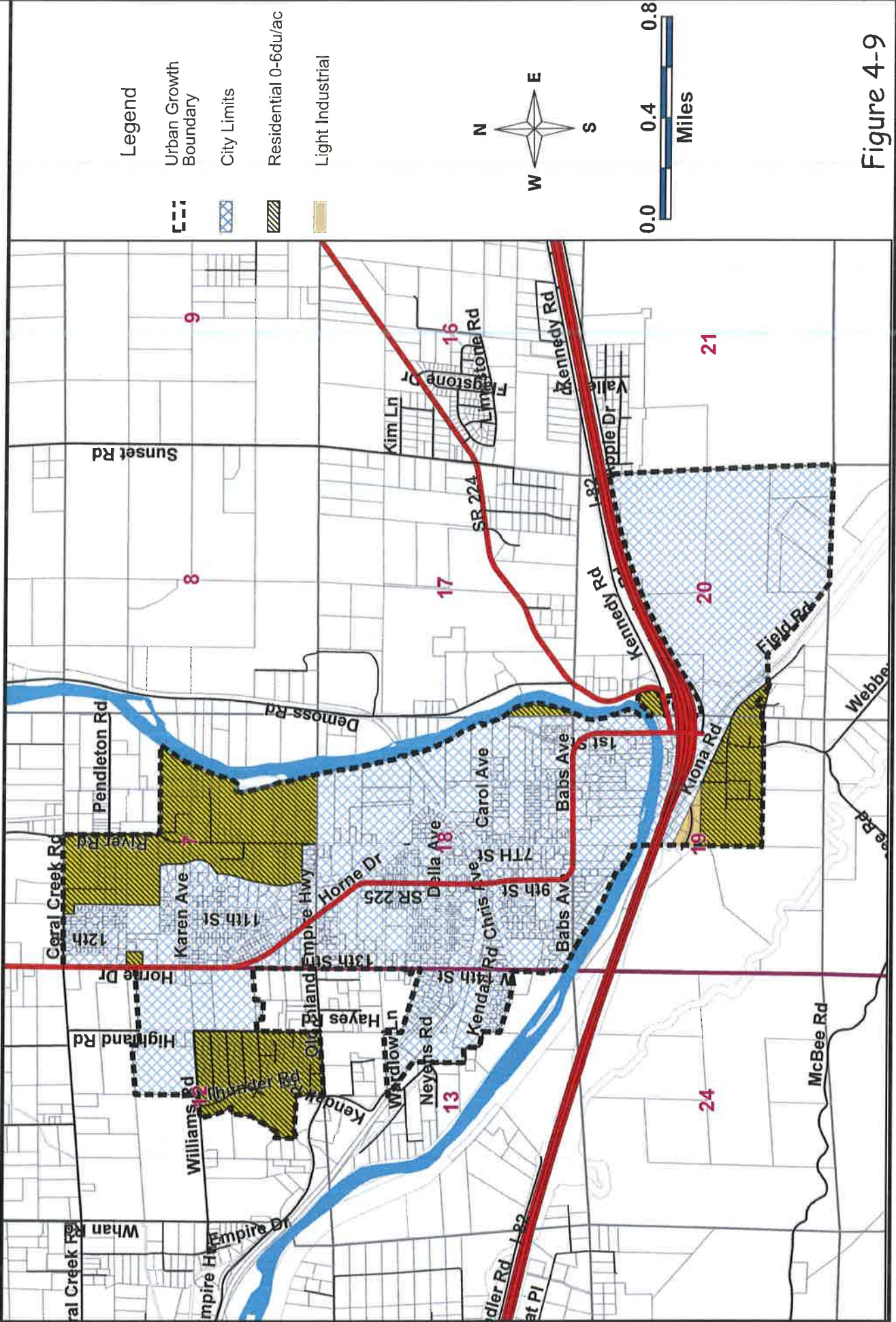
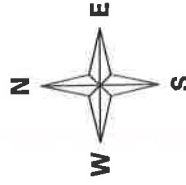


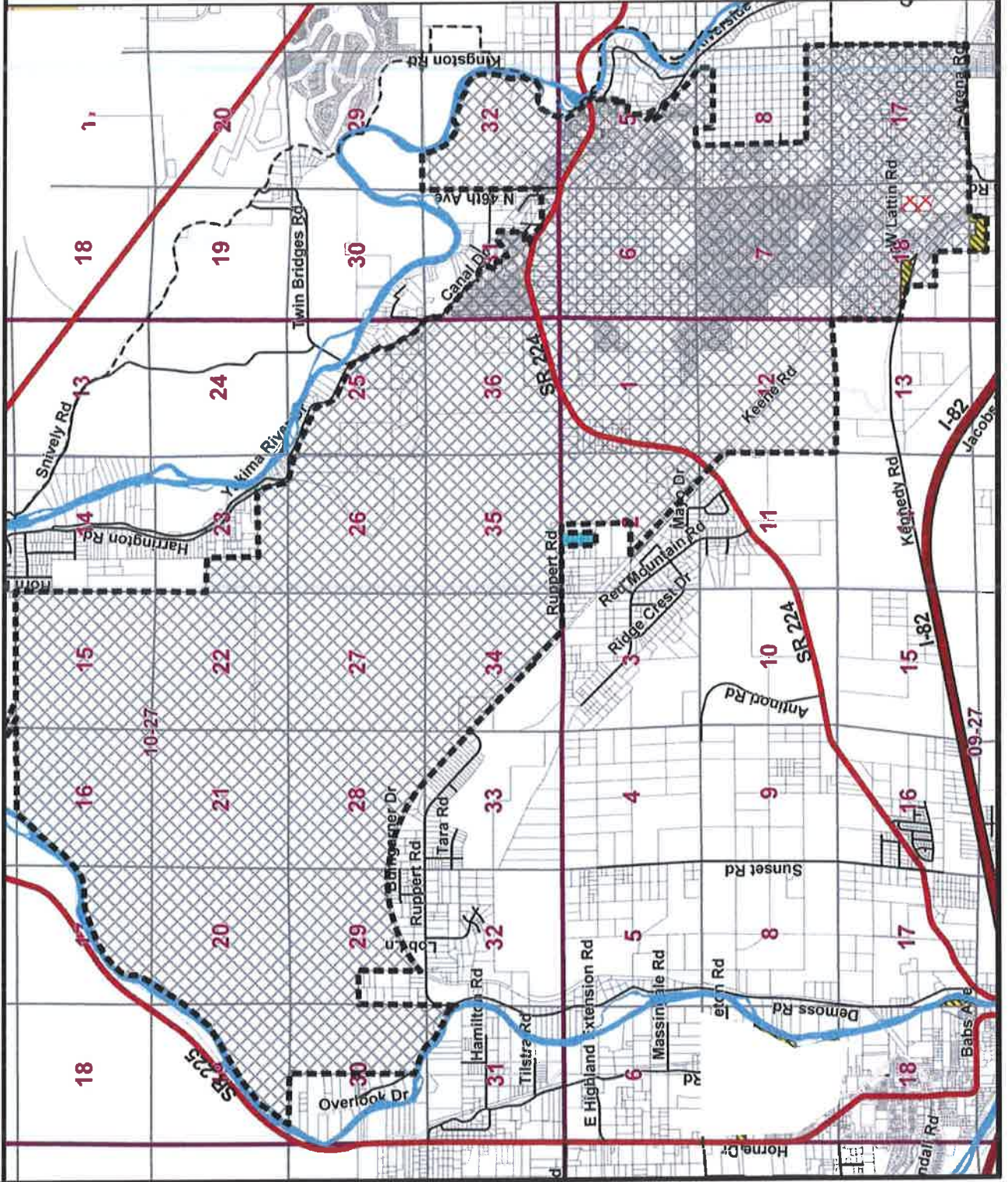
Figure 4-9

West Richland Urban Growth Area Preferred Land Use

BENTON COUNTY
PLANNING
DEPARTMENT



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Legend

- Urban Growth Boundary
- City Limits
- Residential 0-6du/ac
- General Commercial
- Public



0.0 1.2

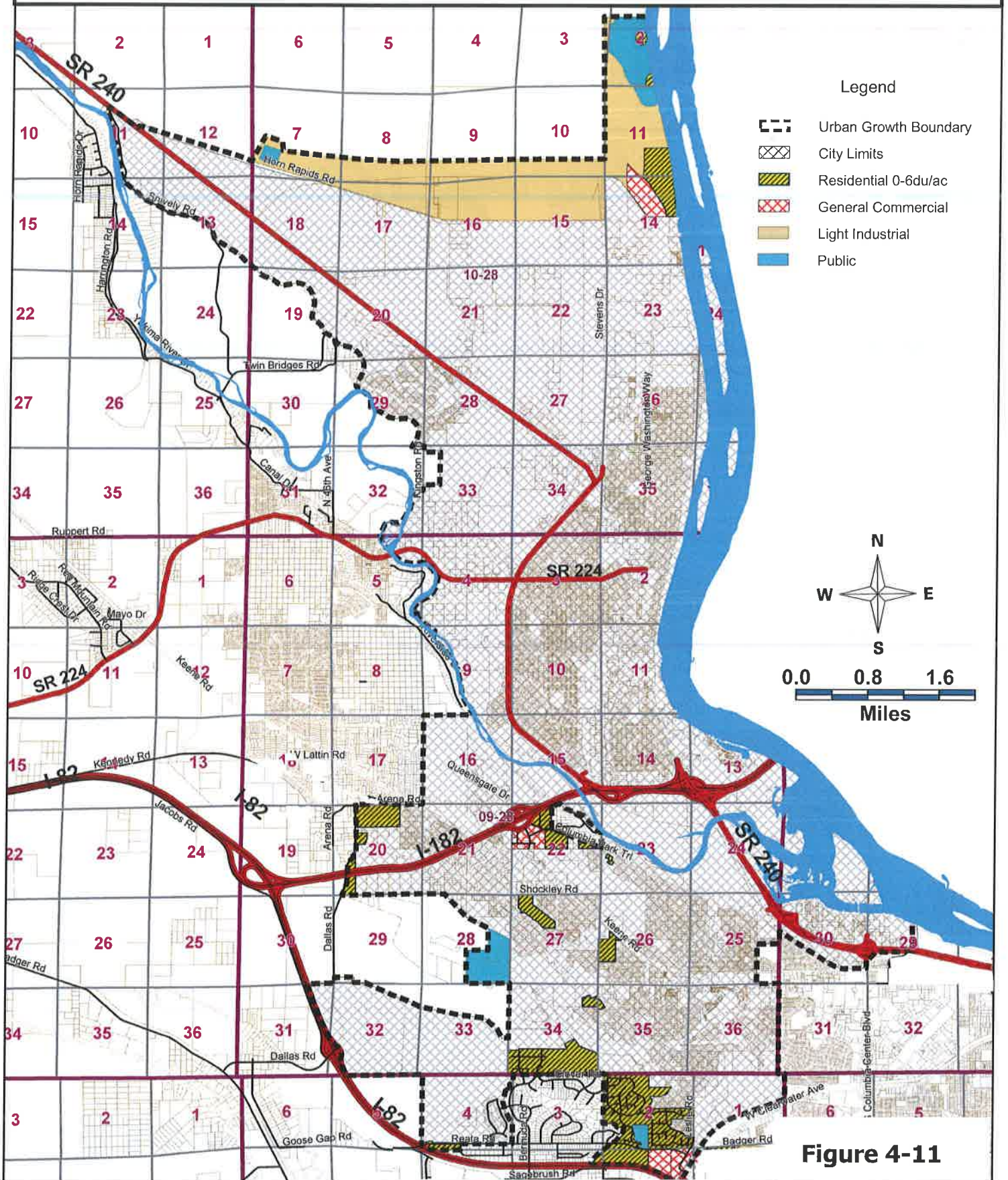
Miles

Figure 4-10



Richland Urban Growth Area Preferred Land Use

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- Legend
- Urban Growth Boundary
 - City Limits
 - Residential 0-6du/ac
 - General Commercial
 - Light Industrial
 - Public

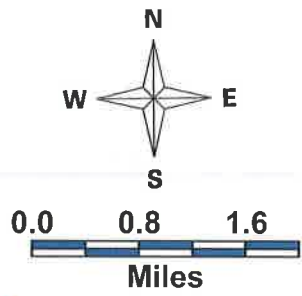


Figure 4-11

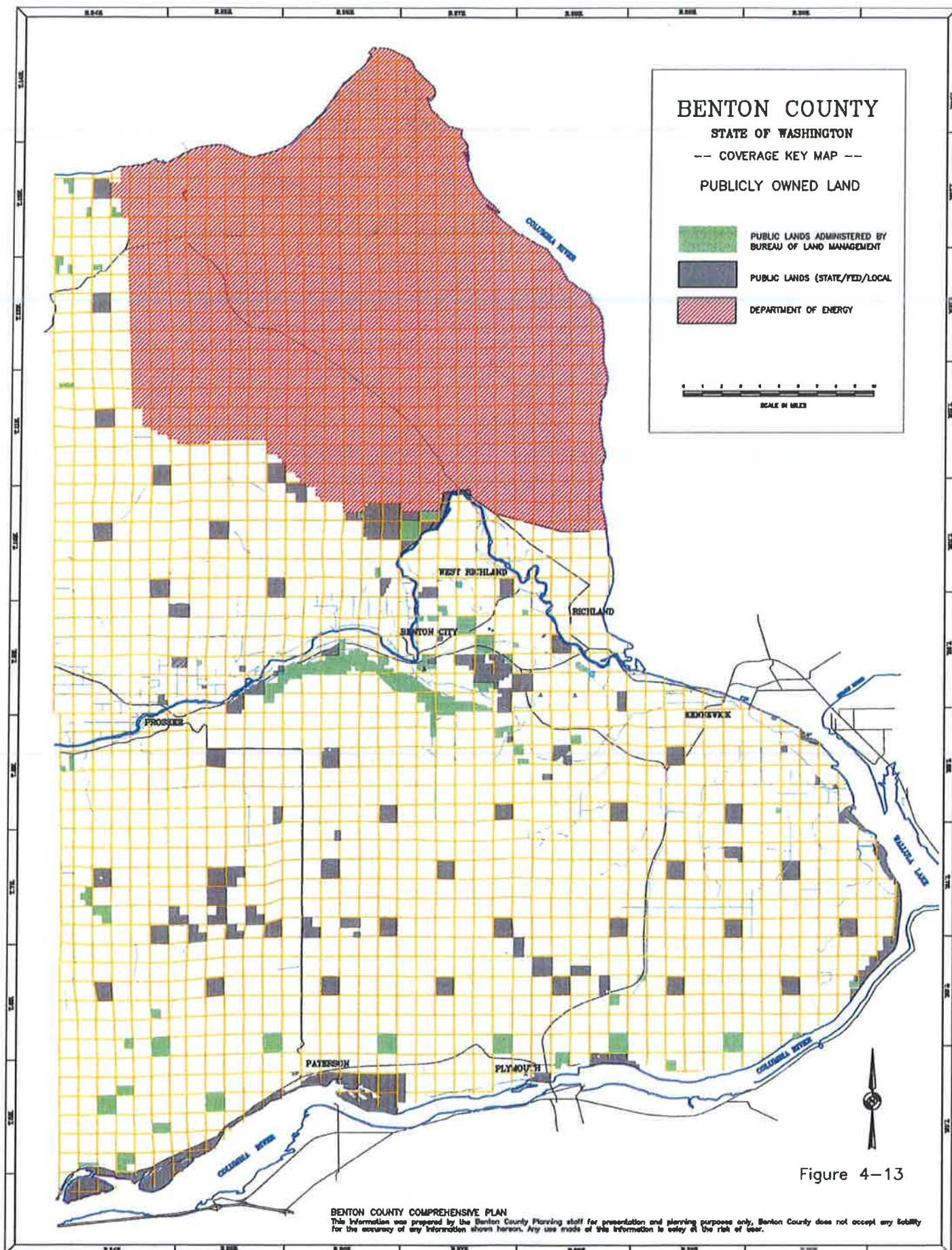


Figure 4-13

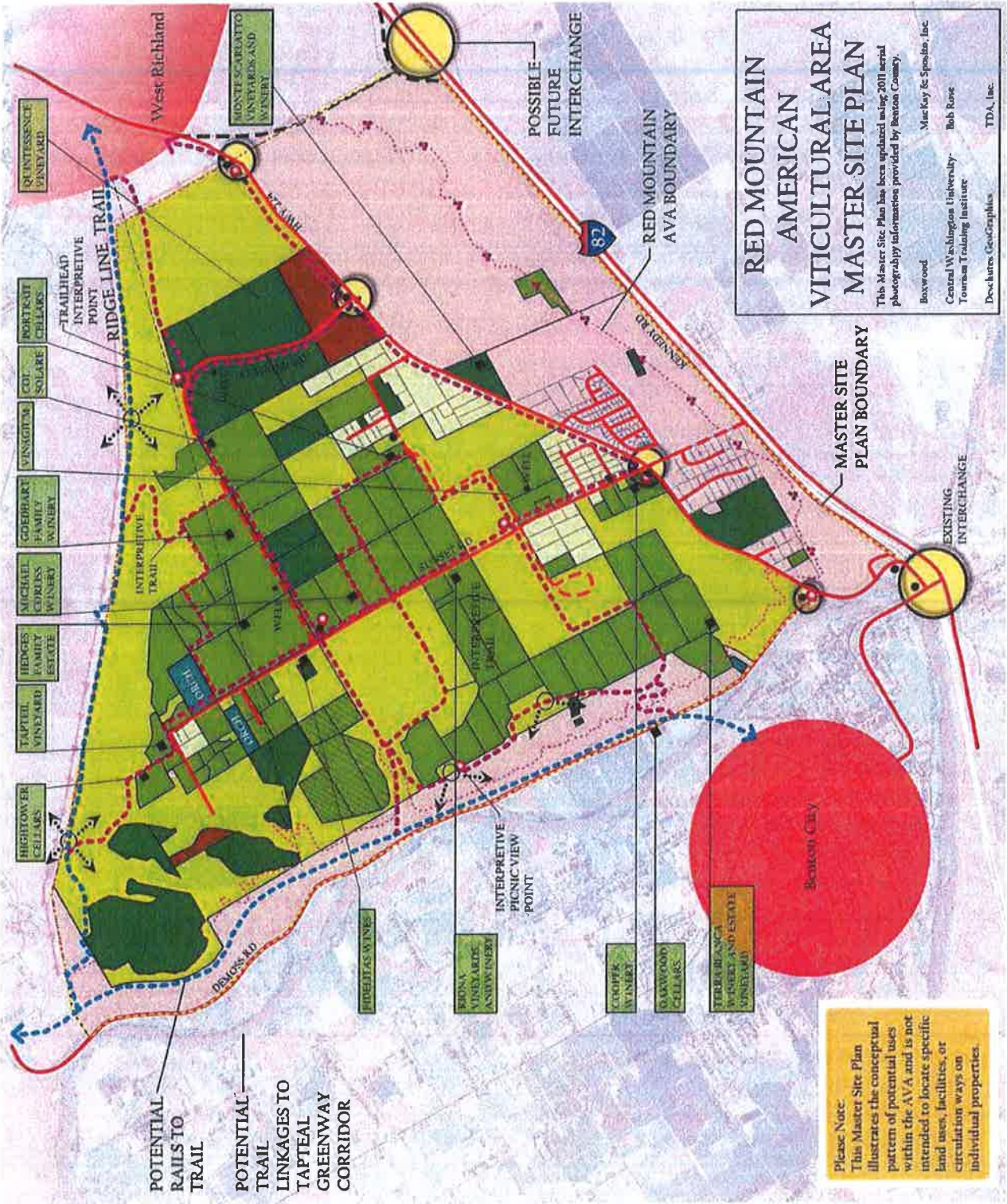
LEGEND

NOTE: RED MOUNTAIN WINE VILLAGE (MRV) SITE SELECTION DEPENDING ON SITE AVAILABILITY AND SUITABILITY AS DESCRIBED IN THE MASTER SITE PLAN DOCUMENT.

- B ▲ EXISTING WINERIES
- POTENTIAL VINEYARDS AND WINERIES
- EXISTING VINEYARD
- EXISTING VINEYARD AWDED SINCE 2009 UPDATE
- INACTIVE VINEYARD
- LAND CLEARED FOR VINEYARD DEVELOPMENT
- EXISTING RESIDENTIAL POTENTIAL VINEYARDS AND WINERIES
- RURAL LANDS FIVE ACRE (RL-5)
- VISITOR FACILITY AND WINE PRODUCTION SUPPORT OPPORTUNITIES IN NEIGHBORING COMMUNITIES
- ORCHL
- EXISTING ROAD
- AVA BOUNDARY
- MASTER SITE PLAN BOUNDARY

The location of the following plan elements is conceptual

- GATEWAYS IN PUBLIC RIGHT OF-WAY
- WAYFINDING SIGNS
- INTERPRETIVE/ DISCOVERY POINTS
- VIEW POINTS
- POSSIBLE FUTURE I-82 INTERCHANGE ROAD
- PROPOSED 2 LANE RURAL ROAD
- POTENTIAL TRAILS
- POTENTIAL REGIONAL TRAILS



Please Note: This Master Site Plan illustrates the conceptual pattern of potential uses within the AVA and is not intended to locate specific land uses, facilities, or circulation ways on individual properties.

Figure 4-14

RURAL ELEMENT CHAPTER 5

INTRODUCTION & OVERVIEW

Growth Management Act

The Growth Management Act requires counties to include a Rural Element in their Comprehensive Plans.

"Counties shall include a Rural Element including lands that are not designated for urban growth, agriculture, forest or mineral resources. The rural element shall permit appropriate land uses that are compatible with the rural character of such lands and provide for a variety of rural densities..." {R.C.W. 36.70A.070 (5)}

The Washington Administrative Code (WAC 365-195-330 {2}) recommends that certain steps be followed in preparing the Rural Element, many of the recommended steps are listed below:

- The identification of rural lands;
- The amount of population growth within the twenty-year planning period which will live or work on rural lands;
- Adoption of policies for the development of such lands;
- Uses permitted, including a variety of densities for rural, commercial, and industrial use, consistent with the rural character of the area;
- P.U.D's, cluster housing, and innovative techniques for managing development within the overall parameters of rural density;
- Establishment of a definition of rural governmental services which identifies the limited public services provided to persons living or working in rural areas;
- Provisions to regulate the orderly inclusion of urban growth areas for future development;

BENTON COUNTY-WIDE
Top 4 Planning Issues
Road Improvements
Control/limit growth
Ordinance to cleanup trash
More sheriff protection
1993 Rural Survey Respondents

- The adoption of policies for the development and preservation of the rural character of such lands, including: the preservation of critical areas (e.g., fish and wildlife habitats, water quality etc..) consistent with private property rights; continuation of agricultural use; excavation of mineral resources;
- Encouragement of the use of rural lands for recreational pursuits which preserve open space and are environmentally benign;
- Adoption of strategies for the acquisition of natural areas of high scenic value;
- Establishment of criteria for environmental protection, including programs to control non-point sources of water pollution and to preserve and enhance habitat for fish and wildlife.

What Is Rural and Rural Character?

The rural areas of Benton County are places where open space, the natural environment and vegetation predominate over the built environment. They are discrete areas, each having a built environment and social texture uniquely created by factors such as origin, history, period of settlement, use capability of the land, and employment base of the residents. The rural area is a place

where you can find wildlife habitats, and a historic heritage shown by minimal non-native uses of land that includes small farms or scattered homesteads.

The rural areas or communities within Benton County attest to the observation that each rural area is different. For example, though there are common physical characteristics and resident preferences throughout the rural communities in the four Planning Regions of the county (Hanford Region excluded), there are also very distinct differences in the custom and culture, community outlook and living environments.

Rural Character embodies a quality of life based upon traditional rural landscapes, activities, lifestyles, and aesthetic values. The residents that live and work in the rural areas of the County, through their participation in the Rural Planning Area Committees prepared visions, goals, and listed unique and valued characteristics for each rural planning area. The following descriptive text defines "Rural Character" using those visions, goals, and perceptions of the County residents, and described as: large open landscapes where the setting is quiet, peaceful, and natural. The residents enjoy a slower pace lifestyle, closeness with nature and access to recreational opportunities. There is a strong sense of family and community and a separation from government and city.

In the rural area there is elbowroom, less traffic, access to wildlife and

where the natural beauty of the rural landform is valued and enjoyed. The rural residents value property rights, and feel a sense of "freedom" in the rural area that provides opportunities to farm, raise children and keep animals.

Homes are buffered from neighbors in a very low-density setting that include five and twenty acre minimum parcel sizes. There are limited areas of more intense rural development, where community infill may occur.

Rural is not the center or traditional hub of commerce and administration, with markets, theaters and shopping with mixed housing. It is not a densely built environment or a sprawling landscape of homes.

In an urban setting there are higher levels of public services, controlled traffic and lower speed limits. They experience short commutes from home to office, school, or library, and are close to urban governmental services, i.e., police, fire and emergency facilities.

Rural Survey

Commonalities and distinctions among rural areas within the county are evident in the Rural Visions For Benton County 1993-2013, and the "pie charts" and graphs of the 1993 Rural Visioning Survey Report. These documents are products of a public participation program conducted in each Rural Area by Benton County planning staff, with the assistance of a consultant, as part of its GMA planning process. Within these

documents are the "**Vision**" citizens used to form the base for their Rural Area Plan.

Common Rural Preferences

Notwithstanding differences between rural areas, the Survey and work of the individual Rural Planning Advisory Committees identified preferences common to all rural areas within the county. The most common preferences include the following:

- the ability to keep livestock and animals;
- location of open space or farming in the proximity of living environments;
- near unanimous support for wildlife and habitat protection;
- desire for the expansion of public open spaces for outdoor recreation;
- no urban encroachment;
- desire to preserve open space and low densities;
- a desire and expressed need for good to excellent county roads;
- freedom from government regulation, except for enforcement of ordinances that prohibit the accumulation of junk and trash on properties, and prevent residential sprawl or unmanaged growth;
- peace and quiet.

The Benton County Rural Visioning Survey Report Spring 1993 is cited frequently in the Comprehensive Plan document, and is incorporated into this element by reference.

THE RURAL PLANNING AREAS OF BENTON COUNTY

Four of the five Planning Regions of Benton County have "Rural Planning Areas" within them (the Hanford Planning Region does not).

The Rural Planning areas within each Planning Region comprise those lands outside of both the Growth Management Act (GMA) Agricultural designation, and Urban Growth Areas. It is the aggregate of these rural areas that comprise the **Rural Element** of the Comprehensive Plan.

PATERSON-PLYMOUTH RURAL PLANNING AREA

Location & Geographical Setting

The rural communities of the Paterson-Plymouth Planning Area reside in the south of Benton County, on the downward sloping terrace of the Horse Heaven Hills Planning Region. Both communities overlook the Columbia River. The rising landform to the north of the communities is predominantly in large-scale agricultural production.

The setting of each community is afforded panoramic views of the river and the Oregon shore on the river's south side. The river-shore below and to the east and west of each community is largely owned by the federal government who purchased lands along the river to accommodate the rise and fall of river waters pooled by hydroelectric dams. The shoreline and near-shore areas, characterized by sloughs, riparian

areas, islands and rocky shoals, is administered by the U.S. Fish and Wildlife Service and is a valuable recreational resource to the community.

Plymouth is the most "up-river" of the two rural communities. It lies less than one mile west of the I-82 interchange and bridge crossing at McNary Dam. **Paterson** is approximately 12 miles downstream of Plymouth, along SR-14.

History¹

Today, the rural communities of Paterson and Plymouth lie on the high ground above portions of their historic settlements, which were inundated by the backwater pool of the John Day Dam in the late 1960's. Few physical artifacts from the pre-dam era exist above water. Some of the larger houses and buildings were moved to higher ground in advance of the rising waters, they were large and made of wood construction on a landscape open to seasonally thunderous skies and electric storms and were gradually consumed by fires.

Paterson's original name was "Scott." Plymouth, a few miles upriver was originally called "Crimea," then "Expansion." In 1906 it became Plymouth.

Through the latter part of the 19th and the early 20th century, white settlers and Indians jointly occupied and lived on the land and islands along the

¹ Based on information from "Benton County a Glimpse of the Past", Benton County Historical and Pioneer Association, 1967.

Top 5 Issues/Desired Improvements

- Ordinance to cleanup trash
- More sheriff protection
- Animal control
- Road improvements
- A church

Paterson-Plymouth Survey Respondents

river. The Indians fished and kept ponies, and the settlers farmed.

The original settlements pre-dated Benton County. They were established by Klickitat County stockmen and farmers some time in the 1870s or 80's. One of the early stockman was Harry Paterson Sr., whose son became the postmaster at Scott. The town of Paterson is named for his father.

The railroad along the river was constructed around the turn of the century. Over time, the Paterson landscape has been occupied by a ferry landing, school houses, a hotel south of the tracks (converted from the original Paterson family home), a cafe (still there), and the fore-runner of the present day Paterson Store. The original store had two stories with a dance hall and was destroyed by fire and replaced with the present structure in the 1920s.

Custom & Culture

The custom and culture of Paterson and Plymouth residents is rooted in commercial agriculture, with ancillary forays into tourism in the late 1800's when services were provided to travelers and Indian artifact hunters who came to exploit rich caches of arrowheads and other artifacts along

the river.

Early agriculture was livestock, including horse round-ups in the Horse Heaven Hills. Frank Mathews planted an orchard along the river after the flood of 1894, he also planted currants and hay. Beyond Devil's Bend upriver of Paterson, George McNeilly raised turkeys and grew cherries which ripened ten days before even the early cherries in the upper county. Dr. E.A. Bryan, former President of Washington State University, partnered with Dr. Sharples in the Paterson Land Company. Dr. Sharples grew large pear crops and shipped asparagus plants to Walla Walla in 1908.

Annual picnics at host farms were major events where homegrown foods were served under open skies on long trestle tables, games and dances enjoyed, and crops and politics were discussed.

Contemporary life in the Paterson and Plymouth communities continues to be based upon agriculture, though the rich social fabric which characteristically revolved around the mutual aid practiced earlier by small family farming operations has been thinned by the evolution of today's agriculture to economies of scale.

The Paterson-Plymouth landscape today is tilled by private or corporate agri-businesses that farm thousands of acres. Much of the area dryland wheat and rangeland areas of only 10 to 15 years ago have been put under irrigation. Corn, apples, potatoes, wheat, and wine grapes are major crops. Processing and storage facilities and wineries are recent

arrivals.

These agri-businesses as well as other agricultural support industries employ residents in a variety of agri-related occupations. The Paterson Store, fire station and school survive as centers of community activity.

Demographics

The Planning Areas have a current population of approximately 391 residents who occupy 146 residential dwelling units. Population density is one person per 144 acres, or 4.4 persons/sq. mile. The population of Plymouth is approximately 265 residents, while Paterson has approximately 126 residents.

Infrastructure

Though each is different, Paterson and Plymouth are rural communities, who have in common, isolation from public services, low population density, and minimal service infrastructure.

Plymouth has a public water district with an established service boundary and capacity greatly in excess of current demands. Well capacity is 1,186,000 gpd with a single reservoir storage capacity of 250,000 gallons. Domestic waste disposal is accomplished through individual (private) systems. Principal transportation infrastructure consists of SR-14 which runs east and west across the top of the community, and I-82 which runs north and south, and provides a full interchange approximately one mile to the east of Plymouth. SR-14 connects to I-82 at the McNary crossing, and provides a river crossing again 80 miles down river at Biggs, Oregon. Interior collectors

1996 were updated in 2006. The following are allocations of principal land uses:

PATERSON PREFERRED LAND USE

<u>Land Use</u>	<u>Acres</u>
Residential	516
Commercial	13
Industrial	145
Public	3,965

PLYMOUTH PREFERRED LAND USE

<u>Land Use</u>	<u>Acres</u>
Residential	566
Commercial	198
Industrial	1,567
Public	594

The Land Use Maps for Paterson and Plymouth are shown in the Land Use Element, Chapter 4, Maps 4.3 and 4.4.

Paterson-Plymouth Rural Area Vision, Goals, and Actions.

The Paterson-Plymouth Citizen's Rural Planning Advisory Committee has identified the following "Vision":

"The Paterson-Plymouth rural area is...an area that preserves "an endangered species" (rural folks and rural living). Our future is our kids. We are involved with our parks and wildlife habitat. We dream of less government intervention, wish for more transportation and housing opportunities, and water and sewer systems within our established communities."

- Paterson-Plymouth Rural Committee

The Citizen's Rural Planning Advisory Committee has identified the following Planning Goals and Actions:

Note: Where an asterisk*appears, the action should be driven by the citizens committee.

PARKS AND WILDLIFE HABITAT

GOAL: Improve road access into sloughs for fire and safety equipment, fishing and hunting.

*Action: Approach appropriate agencies to discuss and pursue better access.**

GOAL: Preserve, enhance and add to riverfront recreational opportunities.

Action: Keep Crow Butte State Park
Action: Expand Plymouth Park to include the whole island.**

*Action: Construct park and boat launch at Paterson.**

GOAL: Protect the river in order to preserve wildlife habitats, the desert, wetlands, and to provide clean air, water, sky.

Action: Keep neighboring land uses compatible.

*Action: Encourage projects that enhance the fish and wildlife in and around the river.**

MORE PUBLIC SERVICE OPPORTUNITIES

GOAL: More protection provided by the Sheriffs Department for the Plymouth/Paterson area.

Action: Slow traffic and speeding.

LESS GOVERNMENT INTERVENTION

GOAL: Preserve rural freedom, opportunity, and property rights and values.

Action: To support public relations training for the various departments at the county level.

GOAL: To continue a citizen involvement program that insures the opportunity for full citizen participation

for Plymouth are Christy Road, which parallels the river south of Plymouth, and Plymouth Road which runs north from the river intersecting Christy Road and SR-82. The Plymouth residential community is between the river and SR-14.

The Plymouth School houses students in grades K through five. There are currently 30 students enrolled. The Plymouth School operates out of the Kennewick School District.

Paterson has limited public water supply capability. The Paterson Heights Water District has a 525-foot well with a capacity of 140 gpm., and a 50,000-gallon reservoir. Official records indicate that it serves 23 households currently. Paterson School District has its own public water supply. Waste disposal in the community is via individual systems. Principal transportation infrastructure is SR-14 (east/west) and SR221, which runs north from SR-14 across the Horse Heaven Hills to SR-22 at Prosser in the Yakima Valley. The main residential community in Paterson is away from the river on high ground north of SR-14.

The Paterson Elementary School is a modern facility housing grades K thru 6. It currently has 111 students with a staff of seven. The facility includes a library and gymnasium.

Existing Land Use

The largest category of land use in the Paterson-Plymouth Planning Area is public (Port of Kennewick and federal shoreline ownerships). The next largest designation is industrial with approximately 1,712 acres.

As indicated below, land use changes within the planning region surrounding the Paterson and Plymouth rural communities over the past decade show a major trend to convert dryland and rangeland to irrigated agriculture. Currently there are approximately 131,800 acres of irrigated agriculture along the Paterson plateau.

The increase in irrigated crop acreage has influenced construction of new agricultural storage and processing facilities for onions, corn, and potatoes. Vineyards, wineries, and apple orchards are recent significant trends.

The Rural Planning Area of Paterson-Plymouth encompasses approximately 7,564 acres, or two percent of the Horse Heaven Hills Planning Region. The Paterson area contains roughly 4,639 acres and Plymouth 2,925 acres. Within their boundaries, these rural communities are sparsely developed at present, but have the potential for growth. They have river, rail, and state or federal highway access, undeveloped industrial acreage, and adjacency to significant accessible public shorelands.

Plymouth's industrially designated acreage (Port of Kennewick and Agri-Northwest) on its west side, equals 55 percent of its land area. A natural gas supply line traverses the community. Paterson has industrial designations equaling four percent of its acreage.

Preferred Land Use Plans

The Preferred Land Use Plan Maps drafted by the Paterson-Plymouth Rural Planning Advisory Committees in

in public decision-making.

Action: Encourage the use of mailing lists to keep County residents informed of new projects, ordinances and changes in policy.

RURAL FOLKS AND RURAL LIVING

GOAL: To identify areas for a variety of agricultural uses in an effort to preserve and maintain productive farmlands to the maximum extent possible.

Action: That only compatible land uses should be established adjacent to agriculture to minimize potential problems caused by incompatible land use activity.

PROVIDE HOUSING IN OUR ESTABLISHED COMMUNITIES

GOAL: Plan for a diversity of living and working situations that will provide residents with an opportunity to make economic and lifestyle choices.

Action: Create a stable, balanced community economic situation by promoting industries that are diverse, agriculturally based and that process what we produce.

GOAL: Expand employment opportunities.

Action: In 1998, with the Port of Kennewick, Plymouth residents, and the U.S. Army Corps, define uses, and develop a Specific Plan for the island at Plymouth.

Action: Prior to development of the Industrial designated area west of Plymouth, extending from the RR tracks in the south to SR-14 in the north, a site plan with operational standards, open space setbacks, and visual screening to mitigate impacts and be compatible with the downwind residential community shall be prepared and approved with public involvement.

Action: Enlarge the potentially develop-able area adjacent to the west of Paterson.

Action: Zone area between SR-14 and the railroad tracks industrial.

OUR FUTURE (Our kids)

GOAL: Create a "whole life" living area that allows peace and quiet, preserves the farm heritage and rural character and accommodates children, wage earning families and retired people.

GOAL: Keep Paterson like it is with little growth.

GOAL: Grow slowly and in a manner that preserves the existing rural community and lifestyle.

*Action: Maintain Paterson as a great place for kids to grow and keep it safe for them.**

A WATER AND SEWER SYSTEM IN OUR ESTABLISHED COMMUNITIES

GOAL: Achieve a household water

and sewer system that is affordable yet is not based on densities which change the rural character.

*Action: Complete a water and sewer study.**

RURAL PLANNING AREA PROSSER-WHITSTRAN

Location and Geographic Setting

The Prosser-Whitstran Rural Planning Area lies within the southwestern corner of the Rattlesnake Planning Region.

Outstanding geographic features of the Prosser-Whitstran Rural Planning Area are: the Yakima River, as it cuts through the lower valley; the elevated slope of irrigated croplands on the "Roza" as it rises up the southern flank of Rattlesnake Mountain to the north; and the textured slumps and hummocks of the north face of the Horse Heaven Hills, which rise abruptly from the south bank of the river.

History²

The early Indian inhabitants of the Prosser-Whitstran area lived along the Yakima River. In the early spring they camped along both sides of the river near "The Falls" awaiting the salmon run. Prosser's first citizen, Colonel Prosser, staked a claim along its banks in 1882.

² Based on information from "Benton County, a Glimpse of the Past", Benton County Historical and Pioneer Association 1967, and "Prosser the Hometown", by Pearl Mahoney, 1950.

It was in 1881 when James Kinney camped overnight below Prosser. Upon awakening the next morning he found his horses had strayed and followed their tracks which led up the hillside and over into an upland plain. There he found his runaway horses cropping the succulent bunch grass. "Surely this is Horse Heaven," he said to himself. Others tried to call the district "Columbia Plains", but Mr. Kinney's name stuck, and that is how the name Horse Heaven came to be. In 1884, "Prosser Falls" as Prosser was originally called, boasted a general store, two saloons, one restaurant, and a livery barn. At the same time one-mile west of Prosser Falls other settlers were venturing to start a town. They called it Kinneyville, which had a hotel, several saloons, two restaurants, and one residence. This area was eventually absorbed by Prosser. Prosser Falls was given a Post Office that spring, but because there were so many "falls" in the state, "Falls" was dropped to prevent further confusion.

In the winter of 1884-85 the original townsite of Prosser was platted. Nelson Rich (who was the namesake for the City of Richland) ran the first store. His residence, which was a mansion in its day, was sited on what is now the Benton County Courthouse Square. Mr. Rich was a contractor and builder, and was an honored citizen who served the community as school director, postmaster, and state representative for the district. Mr. Rich made the first addition to the original townsite of Prosser. He platted the section of Court, Market, and Main

Streets by compass and not by the railroad (as many cities did at the time), so the streets run north and south and the avenues east and west. Construction of the Northern Pacific Railroad did not get underway until the mid 1870's. The track between Spokane and Ainsworth (Pasco) was completed in 1880, and during the summer and fall of 1884, the railroad made its way through Prosser and the Yakima Valley. During the early 80's many pioneer families filed claims along the route of the Northern Pacific Railroad line up the valley, sheltering themselves in tents, shacks, and covered wagons.

Development of the railroad construction camps was soon followed by new schools. The Prosser School District, established on February 2, 1884, has the distinction of being the oldest school district in what is now Benton County.

In the late 1880's, Lewis Heinzerling arrived in what was then Prosser Falls. Impressed with the opportunities the area offered, especially the river, the falls, and the potential water power it could produce, he envisioned a flour mill at a particular spot on the river bank and spoke of his aspirations to Colonel Prosser. On Heinzerling's behalf, Prosser negotiated with the chief of the Indian tribe then camped along the river for permission to build the mill. Mr. Heinzerling brought his family and a number of neighbors from Missouri in the spring of 1887 to assist in building the mill.

Mr. Heinzerling was also a bridge builder. The original bridge across the Yakima River leading to the Rattlesnake Hills was his creation, as well as the original Sixth Street Bridge also over the Yakima, built in 1906.

The first of two public roads in what is today Benton County was authorized by the Territorial Legislature in 1882. The first was a short stretch of road on the north bank of the Yakima River across from Prosser. The second started at the ferry landing opposite Wallula, running through the Hover-Finley area, then west past Coyote Springs, then up and across the Horse Heaven plateau and down to Prosser. Five miles of this road falls within the present State Route 221 and the County Well Road, and a short expanse remains as the Locust Grove Road.

Shortly after Washington became a state in 1889, people in southeastern Yakima County began to complain about the distance they had to travel to Yakima City to transact business. It was in 1901 when talk began of the formation of a new county, naming Prosser as the county seat. Then State Representative Nelson Rich was instrumental in passing a measure in the state legislature in 1905 that created the new unit of government that is Benton County.

Prosser's roots are deeply embedded in agriculture. Much of the success in agriculture is due to the harnessing of water and applying it to the fertile soil: "irrigation". As early as 1889, Northern

Pacific Railroad completed a study in connection with the Sunnyside canal. In 1908, the government began to show interest in the project, and in 1916, the Northern Pacific Railroad made another survey on the present location, but due to WWI nothing came of the activity.

Then in 1919, landowners formed a district and immediately entered into a contract with the government for canal surveys, and contracting for water in 1921. Six years later, a joint economic study was prepared at a cost of \$10,000 which was shared equally by the landowners and the government. The study justified the project, and the storage dam at Cle Elem was promoted. Actual work was finally underway in 1936 for 99 miles of canal, serving 46,000 gravity acres called the Roza Canal. Today the Roza District is one of the most productive farming areas in the State of Washington.

Custom & Culture

The custom and culture within the Prosser-Whitstran Rural Area is predominantly agricultural based. It revolves around the agricultural products grown on the "Horseheaven Hills" to the south and the "Roza" to the north.

Upon a base of agricultural land and a water supply from the Yakima River, the residents of the Prosser-Whitstran Rural Area, and those of the City of Prosser itself have historically nurtured an economy primarily associated with agriculture related industry, a public

and private service sector, and a retail sector. A relatively new opportunity established upon agriculture is the cultivation of tourism related to the growing local and regional wine making and specialty crop industries. Another opportunity, unrelated to agriculture, is the City's expansion of the highway service industry at the Gap Road interchange with I-82.

The **Roza** is among the most productive irrigated areas in the 600,000 acre Yakima Valley irrigation project. Crop production is diverse and focused on the specialty markets. Farmed holdings range from those with thousands of acres to those of less than a hundred. Farmers target a global market with products including wine grapes, wine, juice grapes, mint, numerous types of apples, hops, cherries, currants, apricots, pears, some forage crops, livestock, and dairy products.

The **Horse Heaven Hills** contain approximately 500,000 acres. It is almost entirely put to cultivated agricultural use, with steep and marginal soils in rangeland. Dryland wheat is the predominant crop, with some barley production. On its southern slope, above the Columbia River, production of irrigated crops is expanding by virtue of access to the river as a water source. Crops include: wine grapes, corn, potatoes, carrots, onions, apples, and irrigated wheat.

Area residents are employed in local agricultural industries which store, process, package and market

products such as wine, juices, corn, potatoes, and orchard fruits.

Also serving the agricultural industry are the WSU Cooperative Extension, the U.S. Department of Agriculture's Natural Resources Conservation Service, and Agricultural Service Center, all located within Prosser. Five miles north of Prosser, on the Roza, is the Washington State University's Irrigated Agriculture Research and Extension Service (IAREC), where state and federal agencies and local farmers jointly research problems associated with irrigated agriculture.

A significant number of residents residing in the Prosser-Whitstran rural community are engaged in public service employment and activities. Many of these employees are from local families who either own or have spouses working in agriculture. The City of Prosser, County government, IAREC, the Prosser School District's Elementary, Middle and High Schools, Prosser Library, Benton County Historical Museum, and the Prosser Memorial Hospital provide employment, public service and support.

The City of Prosser, which is the **County Seat**, has a population of approximately 5,000. It has a defined business and retail center anchored by banking, insurance and real estate services, and city and county administrative centers. Within the city is a range of retail/service enterprises including law offices, pharmaceuticals, auto re-upholstery,

printing, barbershop, child care, veterinary services, computer sales, auto dealerships and parts stores, groceries, restaurants, plant nursery, feed and grain, farm supplies, and arts and crafts stores. The City has a full interchange with I-82, and through the 1980s to the present, a complex of highway service businesses providing an expanding range of fast food, lodging, recreation and truck services.

Major and minor centers of farmer interaction within the Planning Area are at meetings such as those of the Cattleman's Association, Association of Wheat Growers, and the Farm Bureau. On a more routine basis, local meeting places at Prosser locations include the Buena-Vista and Horse Heaven Granges, the Barn Restaurant on Wine Country Road, and Northwoods Restaurant at the I-82 Interchange.

Top 4 Issues/Desired Improvements

- Road improvements
 - More sheriff protection
 - Ordinance to cleanup trash
 - Control/Restrict growth
- Prosser-Whitstran Survey Respondents

Demographics

The Prosser-Whitstran Rural Planning Area has a current population in the unincorporated area of approximately 4,216, who occupy 1,573 residential dwelling units. The average residential density is one dwelling unit per 16.5 acres.

Infrastructure

The principal infrastructure within the

Prosser-Whitstran Rural Planning Area is found within the City of Prosser, which has the full range of municipal services and infrastructure for a municipality of its size.

The Prosser School District provides facilities for students K-12. The school facilities include a high school, middle school, and three elementary schools (one of which is located in Whitstran for students K-5). The student enrollment for the 2004-05 school year was 2,836.

Outside of the city, infrastructure consists primarily of the county road network, which serves the rural and agricultural community, the irrigation facilities of the Roza and Sunnyside Valley Irrigation Districts, and the IAREC facility.

Existing Land Use

The predominate land uses within this rural planning area are:

- the rich and diversified irrigated crop cover on the Roza and river terraces overlooking the Yakima River;
- areas of low density rural residential development and small farmed lots located generally to the west and north of Prosser on lands having soils which range from rich and deep to marginal or poor relative to agricultural purposes;
- the City of Prosser, which is the Benton County Seat located adjacent the Yakima River;
- the complex of agricultural related

storage, processing and value added industries within and adjacent to the city;

- the regional transportation corridor, which parallels the river and contains I-82 and the Burlington Northern Railroad; and,
- the small community of Whitstran with a cluster of homes, the Whitstran Elementary School, and a small store are located several miles to the north and east of Prosser.

Outside of the City of Prosser, the land uses within the Prosser-Whitstran rural community are either commercial agriculture, or low density rural residential, depending upon any given area's suitability for commercially viable farming. Areas with poor or marginal agricultural suitability are either used for livestock grazing and/or housing. There is pressure in the Prosser-Whitstran Rural Area to convert suitable farming ground to residential housing. In some measure this is because a significant amount of acreage has constraints to both agriculture and housing use due to poor soil drainage characteristics.

The Rural Planning Area of Prosser-Whitstran encompasses approximately 23,357 acres, or thirteen percent of the Rattlesnake Planning Region. There is roughly 22,577 acres designated for rural residential land use.

Preferred Land Use Plan

The Preferred Land Use Plan Maps drafted by the Prosser-Whitstran Rural Planning Advisory Committee was

adopted in 1996, and updated in 2006. The following are allocations of the principal land uses:

PROSSER-WHITSTRAN PREFERRED LAND USE

<u>Land Use</u>	<u>Acres</u>
Residential	22,577
Commercial	193
Industrial	587

The Land Use Map for Prosser-Whitstran is shown in the Land Use Element, Chapter 4, Map 4.1.

PROSSER-WHITSTRAN RURAL AREA VISION, GOALS AND ACTIONS

The Prosser-Whitstran Citizen's Rural Planning Advisory Committee has identified the following "Vision":

**"The Prosser-Whitstran area is an area of balanced employment opportunity, with a full spectrum of housing, offering rural freedom and opportunity, with good neighbors and good living while containing rural growth to preserve natural spaces for use and enjoyment."
Prosser-Whitstran Rural Committee**

The Committee has identified the following The Citizen's Rural Planning Advisory Planning Goals and Actions:

Note: Where an asterisk* appears, the action should be driven by the citizens committee.

RURAL FREEDOM AND OPPORTUNITY

GOAL: Preserve rural freedom, opportunity and property rights and values.

*Action: Control trespassing on private property.**

CONTAINED RURAL GROWTH

GOAL: Contain rural growth in order to preserve farmland.

Action: Enlarge existing city limits to accommodate growth.

Action: Include a provision in the development regulations that allows cluster development as a tool to preserve farmlands.

GOAL: Preserve and improve the existing visual/auditory character of the area.

*Action: Support a county ordinance to clean up trash and junk.**

Action: Lower nuisance noise.

Action: Enlarge the existing ordinance's dog control zone to include the Prosser-Whitstran Planning area.

GOAL: To provide adequate, convenient roads that safely handle anticipated traffic.

Action: Provide adequate road maintenance.

Action: Control traffic and speeding.

FULL SPECTRUM HOUSING

GOAL: Plan for a diversity of living and working situations that will provide residents with an opportunity to make economic and lifestyle choices.

Action: Allow 50, 20, 10, 5, acre lots in rural areas.

Action: Improve housing standards.

BALANCED EMPLOYMENT OPPORTUNITY

GOAL: Create a stable, balanced community economic situation by promoting industries that are diverse, agriculturally based and that process

what we produce.

Action: Agricultural related industry permitted in lands designated for agriculture.

GOAL: Promote and protect winery tourism.

Action: Farmlands and commercial areas to include wineries.

GOOD NEIGHBORS/GOOD LIVING

GOAL: Create a "whole life" living area that allows peace and quiet, preserves the farm heritage and rural character and accommodates children, wage earning families and retired people.

*Action: Maintain the Prosser rural areas character and lifestyle by allowing 2-5 acre rural densities.***

**In 2007, the Board of County Commissioners generally rejected designations of less than the RL 5 as inconsistent with the GMA.

NATURAL SPACES USE AND RECREATION

GOAL: Preserve open spaces in order to protect wildlife habitats, the river, the desert, wetlands, wildlife and to provide clean air, water, sky.

Action: Provide access to public natural areas.

GOAL: Plan for a system of recreational opportunities (trails, parks, boating, hot air balloons, etc.) that connect communities and allow public access yet provide protection for the environment.

Action: Establish a low maintenance bike and walking path with resting areas, with a horse trail alongside, using the abandoned railroad line.

Action: Designate public recreational facilities and identify source of public and private funds for their acquisition, construction, and maintenance.

THE BENTON CITY-KIONA RURAL PLANNING AREA

Location And Geographical Setting

The Benton City-Kiona Rural Planning Area lies within the eastern portion of the Rattlesnake Planning Region. The Planning Area includes the rural area surrounding the City of Benton City.

The lands within the Planning Area form a remarkable landscape, the principal features of which are basaltic uplifts rising from a point where the Yakima River makes a "hair-pin" turn to the north from its 200 miles long downstream direction of southeasterly.

To the east and south of the Yakima's hair pin turn rise Goose Hill, Badger and Candy mountains; to the southwest rise the escarpments of the Horse Heaven Hills; and to the northeast, Red Mountain rises sharply. To the northwest the long flank of Rattlesnake Mountain reaches across the Roza down to the Yakima River; the City of Benton City rests on this flank. Across the River from the city to the south is the small residential cluster of Kiona. Kiona lies below the Horse Heaven Hills escarpments at the point where they turn south down Badger Canyon. In prehistoric times the Yakima River flowed through the canyon on its way to the Columbia River.

History³

In 1882, an early pioneer, Billy Kelso, filed a claim on land in the Horse Heaven Hills above Kiona, and initiated an operation that grew into a large wheat ranch. In 1883 a small railroad camp sprung-up where Kiona is today. People were filing claims as fast as they could along the route of the Northern Pacific's line up the valley and also on the Horse Heaven Hills plateau. Many of these "homesteaders" were men working in the railroad construction camps.

The town of **Kiona** was the original settlement on lands overlooking the bend in the Yakima River.

In 1885, a school was opened in Kiona for the four children of William Neil, the rail line section foreman. The first teacher was Miss Libbie Ketcham, who with her sister Olive began a grocery store. About that time, a townsite was laid out by Billy Kelso and his brother Clint. The Kelso brothers later married the Ketcham sisters and the grocery store was expanded into the Kelso Brothers General Merchandise Store. At that time a post office and a large wooden hotel were built in Kiona.

Land speculation schemes triggered by representatives of rival railroads are recorded in **Benton City** history. Kiona, a Northern Pacific (NP) town, had been the civic center since 1884, but the N.P. also owned a township of land in the plateau north of the river that had never been put on the market. The name of "Benton Highlands" became attached to this

township. Sometime in the early 1890s, the N.P. constructed a canal and a pumping plant on the river to pump water to apple and pear orchards in the highlands. This later became a part of a 2,000-acre tract acquired by Calhoun, Denny, and Ewing of Seattle. The land was divided into 10-acre lots and sold to people of all walks of life from Seattle, the Bremerton Shipyards, and other West Coast cities.

A glowing picture of rural life was painted to the prospective buyers by these real estate operators, "Retire for life to watch the apples grow". The new purchasers, many from the city, soon learned that there was a lot more to fruit growing than simply "watching the apples grow," and it was harder work than many had ever done.

In 1909, a 48-room Benton City Hotel was erected at a cost of \$35,000. In the spring of 1910, there were persistent rumors of a town being built; orders for nursery stock were pouring in, and the new townsite set to fruit. In 1911, W.A. Dudley became the owner and publisher of the Benton City News at Benton City.

Mr. Robert Strahorn, a promoter of the North Coast Railway, arrived in the hopes of developing a rail route that would bring Spokane and Walla Walla closer to Portland, Tacoma and Seattle. The North Coast Railway Depot was built (at a location just south of the present day US Bank in Benton City), and a large turntable was built about a quarter of a mile east of the depot. By the time Benton City came into being, the Harriman Lines in the Northwest and the North Coast Railway was consolidated as

³ Based on the information from "Benton County a Glimpse of the Past", Benton County Historical and Pioneer Association 1967.

the Oregon-Washington Railroad and Navigation Company; but the link from Benton City to Spokane was never built. The train depot was later dismantled with its pieces stored, and then lost track of. All that remained was the track through town, which ceased being used in 1994, and was removed entirely in 1995.

Custom and Culture

The custom and culture of the Benton City-Kiona Rural Planning Area, though historically rooted in agriculture, has been also influenced by non-farm characteristics in recent decades. This is largely as a result of the close proximity of the Planning Area to Hanford Site and the Tri-Cities metropolitan area.

Prior to the establishment of the Hanford Nuclear Reservation, the custom and culture of the Planning Area was orchard, forage crops, asparagus, concord grapes and livestock production.

However, for the last 50 years, employment and the use of land and resources within the Planning Area have been influenced strongly by Hanford Site programs. Employment statistics for the City of Benton City indicate that on a per capita basis, the population within the Planning Area has the highest percentage of Hanford dependent employment countywide.

During the Hanford era, the Planning Area has been populated by many non-farming households seeking quick housing to meet transitory labor opportunities, or seeking to support a "rural lifestyle" through employment at

Hanford.

With the economic cycles driven by Hanford, platting and breaking down of acreage for sale as smaller residential lots has in itself become a means of livelihood for individuals living both within and outside of the Planning Area. These speculative actions were most prevalent during the 1970s, 80s and early 90s, and were driven by Hanford Site projects such as the Washington Public Power Supply System (WPPSS) nuclear power plant constructions, then the federally sponsored Basalt Waste Isolation Project (BWIP), and most recently, the Hanford Clean-up Project.

Successive years of these activities have influenced a contemporary custom and culture which deviates from the traditional one of long term reliance on commercial farms as the principal means of financial support.

Within the last half decade however, as the certainty of sustained Hanford program levels ebbs and flows, the custom and culture of the Planning Area may be reinvigorating its agricultural roots. Landowners and users within the Planning Area appear to be thinking and acting "agriculture." In large measure the focus is on specialty crops such as cherries, apples, and wine grapes. Urban encroachment on agricultural land is being opposed by some orchardists.

New plantings for agricultural production are evident on the landscape. Prime soils and microclimates to the west and north of Benton City early provide cherry crops for the affluent California and Japan markets. Soil, slope, and rainfall

conditions on Red Mountain across the Yakima River to the east of the city are favorable for the growing of red wine grapes of sufficient quality that an application for designation as a special wine growing "Appellation" has been made to the federal government as new vineyards are planted. There are new orchard plantings on Goose Hill lands leased from the Department of Natural Resources. Orchard plantings and circle irrigation is expanding from the north end of Badger Canyon southerly to the Badger Interchange.

The City of Benton City within its means, is the nucleus of the Planning Area. It has approximately 2,840 residents within its corporate limits. Many of the rural residents utilize the services available within the city.

The Kiona-Benton (Ki-Be) Elementary and High Schools, along with the many churches in the city, are the major centers of social and cultural inter-action. There are two restaurants which serve as informal meeting places for area farmers and rural residents. Commercial, retail and other private sector services in the city which include: banking, grocery, restaurants, child care, farm supply, two gasoline-convenience stations, auto repair, beauty salon, mercantile store, tannery, hardware, and a U.S. Post Office.

Just outside the city, to the north, is the Benton Junior Fair & Rodeo grounds, owned by a private non-profit association which hosts numerous events through the year, including a family rodeo event in August as part of the City's annual Benton City Daze celebration.

Top 5 Issues/Desired Improvements

- Road improvements
- Enforce zoning restrictions
- Ordinance to cleanup trash
- Protect right to farm
- More police protection

Benton City-Kiona Survey Respondents

Kiona is a residential cluster overlooking the City of Benton City from the high ground on the south terrace of the river. All physical signs of its origin as the first town at the bend in the River have vanished to the casual observer. The population is less than 100. There are no commercial, private sector service or retail amenities, nor are there public services located within Kiona. Residents rely on services in Benton City for their routine needs, or those within the Tri-Cities. Kiona is within the City of Benton City's Urban Growth Area.

Demographics

The population on unincorporated lands designated as "Rural" (i.e., does not include lands zoned Agriculture), within the Planning Area is currently estimated at 4,261 persons, residing in 1,590 households, at a density of one dwelling unit per 15 acres. This density is low, evidencing the fact that the predominant land use within the rural designation is agriculture. A significant portion of this acreage has development constraints related to topography, flood areas, or availability of potable water resources. The single family housing type is predominantly mobile or manufactured home (58%).

Infrastructure

With the exception of county roads serving the rural and farming areas, principal infrastructure within the Planning Area is provided by the City of Benton City, the Ki-Be School District, and the Washington State Department of Transportation (WSDOT).

Municipal Services The city provides municipal water and sewer services, a city street network, and has two small public parks; one with tennis courts across from the elementary school, and one behind City Hall with benches, tables and a concession stand.

School Facilities There are approximately 1,653 students within the Ki-Be School District, which has Elementary, Middle and High School facilities located within the city limits. The Ki-Be School District provides the aforementioned grades in facilities off of Horn Road (SR 225). The elementary and middle schools are at a location separate from the high school.

Major Transportation WSDOT provides and maintains a Park-and-Ride lot at the full interchange of State Highway 225 and I-82. This interchange serves as the main entrance to the city. A bridge on SR-225, adjacent to the interchange, carries traffic over the Yakima and north through the city. North of the city, SR-225 converges with, and parallels the river on its west bank, all the way to SR-240 on the Hanford Reservation's southern boundary. Horn Rapids Park is a county park located on the river. The Park extends along approximately seven miles of river frontage to the

intersection of SR-225 and SR-240. The park does not have infrastructure or facilities at this time.

Principal county roads in the Planning Area are: Lower River Road, which extends through the city's north boundary and parallels the west side of the Yakima River to converge with SR-225 just upstream of the Horn Rapids County Park; Old Inland Empire Highway, which parallels the north side of the Yakima River extending westerly from SR-225 in Benton City to Whitstran and Prosser; SR-224 a western route from the I-82 Interchange with SR-225 to West Richland, and Badger Canyon Road, which extends south from I-82 through Kiona and Badger Canyon to the cities of Richland and Kennewick.

Existing Land Use

The Benton City-Kiona Rural Planning Area has a total of 23,708 acres (37 sq. mi.) which represents twelve percent of the land use in the Rattlesnake Planning Region. The predominate land use is agriculture (88%). However, within that category approximately 55% is rangeland or undeveloped and only about 20% is irrigated agriculture.

Within the Planning Area, lands currently designated for unincorporated rural residential use total 18,451 acres, and range in density from one dwelling unit per acre to one per five acres. Acreage within the City of Benton City and its Urban Growth Area total 1,949 acres. Land use within the city is characterized by low-density residential development located around a defined urban center.

The Preferred Land Use Plan

The Preferred Land Use Plan Map drafted for the Rural Area by the Benton City-Kiona Rural Planning Advisory Committee was adopted in 1996 and updated in 2006. The following are allocations of the principal land uses:

BENTON CITY-KIONA PREFERRED LAND USE

<u>Land Use</u>	<u>Acres</u>
Residential	18,451
Commercial	0
Industrial (light)	24
Public	5,233

The Land Use Map for Benton City-Kiona is shown in the Land Use Element, Chapter 4, Map 4.2.

BENTON CITY-KIONA RURAL AREA VISION, GOALS, AND ACTIONS

The **Benton City-Kiona** Citizens Rural Planning Advisory Committee has identified the following "Vision":

**"The Benton City-Kiona Rural Planning Area is a friendly, cooperative rural living area with green fields surrounded by preserved pristine environments, spare time recreation areas and a community of involved citizens with civic pride."
Benton City-Kiona Rural Committee**

The Citizens Rural Planning Advisory Committee has identified the following Planning Goals and Actions:

Note: Where an asterisk* appears, the action should be driven by the citizens committee.

GREEN FIELDS

GOAL: Preserve rural and agricultural living.

Action: Maintain rural residential densities.

GOAL: That the rural and agricultural character of the Benton City-Kiona rural planning area be maintained and protected.

Action: That non-agricultural related industry be located on sites unsuitable for food production and in areas where access problems will be at a minimum.

Action: In the event of a conflict between residential uses and the normal agricultural activities of a preexisting agricultural use, county support should be in favor of the agricultural use to the extent practicable.

GOAL: Expand employment opportunities.

Action: Create a stable, balanced community economic situation by promoting non-polluting industries that are diverse, agriculturally based, and that process what we produce.

GOAL: Preserve the natural beauty and character of the Benton City-Kiona rural area.

*Action: Designate low density living areas (2, 2.5, 5, & 10 acres) which provide for small scale agricultural use**.*

Action: Include a provision in the Rural Lands Element of the Comprehensive Plan that encourages cluster development and provides

open space.

Action: The inclusion of landscaping techniques into the County's Administrative Design Manual that includes various low maintenance desert landscaping and lists trees and vegetation which is adaptable to the County's arid climate.

**In 2007, the Board of County Commissioners generally rejected designations of less than the RL 5 as inconsistent with the GMA.

SPARE TIME RECREATION

GOAL: Preserve and enhance the area's regional parks and natural areas that provide a variety of outdoor recreational activities.

Action: That excess county land should be traded or sold to acquire additional parklands or to provide necessary maintenance or improvements to the county's existing parks.

Action: That state park enhancement programs and grants be utilized to leverage private donations to support and maintain park projects.

Action: Enforce litter laws and keep parks clean.

GOAL: Plan for a system of recreational opportunities (trails, parks, boating, etc.), that connect communities and allow public access yet provide protection for the environment.

Action: That county parks and recreation programs be coordinated with those of the city to avoid duplication of services.

Action: Acquire the abandoned Union Pacific Railroad Property for use as a pedestrian, equestrian and bike path.

CIVIC PRIDE

GOAL: To assure residents will live in areas that are clean, quiet, and non-polluted.

Action: County Commissioners enact and enforce an ordinance to clean-up trash and hulk vehicles and equipment.

Action: Prohibit the burning of household garbage.

Action: Designate a county dump (landfill) and recycling center.

Action: Yard lights should be shielded or directed in a way as not to cause a nuisance.

FRIENDLY, COOPERATIVE RURAL LIVING

GOAL: Create a "whole life" living area that allows peace and quiet, preserves the farm heritage and rural character and nurtures children, families and retired people.

INVOLVEMENT

GOAL: Preserve rural freedom, opportunity, property rights, and values.

GOAL: To continue a citizen involvement program that insures the opportunity for full citizen participation in public decision-making.

Action: That citizens be provided with information through mailing lists and the news media to allow maximum

citizen involvement during the land use decision-making process.

PRESERVE PRISTINE ENVIRONMENT

GOAL: Recognize and protect the Yakima River as a wonderful and important resource.

Action: Protect the banks and undergrowth of the river.

Action: Stop industrial and agricultural pollution of the river.

Action: Keep cattle off the river, except for designated water sources.

Action: Conserve water, use new techniques to irrigate.

Action: Keep density to rural standards.

GOAL: Preserve the river in order to protect wildlife habitats, the river, the desert, wetlands, wildlife and to provide clean air, water, sky.

Action: Protect and enhance riparian corridors.

GOAL: Protect the desert environment.

Action: Keep off-road recreational vehicles off shrub steppe habitats.

Action: Designate significant shrub steppe areas and protect them by performance standards.

THE RICHLAND-WEST RICHLAND RURAL PLANNING AREA

Location And Geographical Setting

The Richland-West Richland Rural Planning Area lies within the Red

Mountain Planning Region, which is the most intensely populated region of the county.

The Planning Area contains the cities of West Richland, Richland and areas of southwest Kennewick. Due to the size of the urban boundaries in this Planning Area, and their less than coherent configuration, the rural lands are scattered enclaves of unincorporated lands whose residents live in relative geographic isolation from those in other unincorporated areas.

The lands and terrain within the Richland-West Richland Rural Planning Area are varied and rich in natural features, wildlife, and beauty. The Yakima River is a primary feature which flows through the Planning Area. Visually, the river is a green ribbon starkly contrasted against a horizon of golden desert, textured by plays of light and sky. The river lays below a pattern of basaltic uplifts known as Rattlesnake, Badger, Candy and Red Mountains, Thompson and Goose Hills, and the north face of the Horse Heaven Hills as it slumps and fans downward to the ancient river bed of Badger Canyon.

At Horn Rapids on the Yakima River, the relatively thin riparian corridor characteristic of the river's upper reaches within Benton County gives a last concession to the encroaching desert sage and bunch grass, then expands into a wide complex of floodways and floodplains overlain by a weave of remnant meanders, wetlands, and riparian thickets. These characteristics remain and expand in width through the Barker Ranch and West Richland area, thinning

somewhat at the Van Giesen Bridge in West Richland, but persist all the way downstream to enlarge again before spreading massively as an alluvial delta into the Columbia River. The delta is a complex of channels, islands, wetland/riparian areas and open waters periodically turned to mud flats by the rise and fall of the McNary Dam pool. This complex extends all the way downriver to the area known as "The Wye."

History⁴

The early Indian inhabitants of the Richland-West Richland area lived along the Yakima River known by the Indians as "Tapteil", meaning narrow river. The first white men of record to visit this area were those of the Lewis and Clark Expedition. They mapped this great western branch of the Columbia River for which they adopted the Indians' name "tapteil".

Early fur traders ferried across to the west bank of the Columbia River to cut hay on the lowland meadows and to graze horses on the lush bunch grass. They followed a trail on the west bank northward along the "Indian road". Today the north Hanford Highway (SR-240) follows this route north from the Horn of the Yakima River. The trail lies in the valley of Cold Creek which crossed through what the pioneers called Pleasant Valley and led to the Selah Valley and the upper Yakima River.

Cattlemen began arriving in the fall of 1860. In what we know today as the Richland area they grazed their cattle in "Grants Meadows". By 1861 the

area was producing the hay for a freight and stage line that ran through what today is Franklin County.

In 1875, Smith Barnums Place at the mouth of the Yakima was made a station on the mail route running from Wallulla up the Yakima Valley. In anticipation of the Northern Pacific branch, Ben J. Rosencrance brought his bride Mary to his homestead near the Richland "Wye" in 1880. There they developed a stagecoach station. Ben began accumulating the horses to be used on the "scrappers" that turned dirt in the railroad construction. He was one of the first to raise horses on a large scale. The railroad also was selling land from its grant at 50 cents per acre and Ben bought up a sizeable chunk of that where the City of Richland stands today.

The early settlers along the river conceived the beginnings of irrigation by putting in water wheels with ditches leading from them that carried water from the river to gardens and orchards. Landowners on the north side of the Yakima between its mouth and the Horn worked out a cooperative plan to build a canal that would serve them all. Among the sponsors were the McNeills, the Souths, the Lockwoods, Joe Baxter, and Dr. Charles Cantonwine.

Two new school districts were formed in 1889, the Richland district and the White Bluffs district (the town of White Bluffs being on what is now the Hanford Reservation and not a part of this Planning Region).

Richland was known at the time as Grants Meadows and was a point on the riverboat schedule where they picked up bailed hay for downriver markets. In 1892 Nelson Rich of Prosser and Howard Amon of Richland

⁴ Based on information from "Benton County a Glimpse of the Past", Benton County Historical and Pioneer Association 1967.

formed a "Benton Land and Water Company".

June 7, 1905, a plat for the town of "Benton" was filed, and the following October the first post office was started, with William R. Lamb as postmaster. Records show the name "Benton" was changed January 3rd 1906, to Richland, after a civic leader and stalwartly gentleman from Prosser, Nelson Rich. In 1906, T. E. McClosky started The Richland Advocate, a newspaper that stayed in business until the original town of Richland was absorbed in the Hanford Project in 1943.

Custom and Culture

The custom and culture within the Richland-West Richland Rural Area is as diverse as the landscape over which it exists. Though historically its roots were in agriculture like the rest of the county, today it is distinctly different than that of the other four Rural Planning Areas of the county: commercial agriculture is not a foundation stone; to a large extent the employment base is non-farm; average income is relatively high; and the percentage of site built versus manufactured or mobile homes is higher than in other rural planning areas. Because the rural areas within the Planning Area are widely dispersed and isolated from each other by the pattern and size of three intervening cities, there is not a coherent "sense of community", such as within the Paterson-Plymouth, or Prosser-Whitstran Areas. Instead, there are numerous and distinct rural enclaves or neighborhoods, often with homeowners associations to collectively look after the neighborhood interests.

However, there are a few seemingly common cultural characteristics throughout this rural area. For example, there seems to be an unequivocal insistence upon a low density rural development pattern and lifestyle; there is also a recognition that residential property values are in large measure dependent upon the maintenance of visual and aesthetic quality; and there is a desire to enjoy a rural lifestyle, but within a relatively close proximity to urban services and employment centers.

El Rancho Reata, on the south limit of the City of Richland, overlooking the Badger Rd./I-82 Interchange, is a discrete residential enclave of approximately 200 site built homes on 1.25 to 2 acre lots laid out over a landscape of small canyons and hilltops within a broken pattern of orchards and vineyards. In large measure the employment base here is Hanford or WPPSS. Though marginally of urban character relative to lot size, encroaching urban proximity, and its public water supply, Rancho Reata on balance is a rural rather than urban lifestyle. Rural characteristics are: the adjacent agriculture, along with the lack of domestic waste disposal systems, lack of sidewalks and gutters, and the number of horse pastures, outbuildings, and hay stacks.

Directly south of Rancho Reata, across the I-82 corridor lies the south end of **Badger Canyon**. The canyon extends roughly ten miles to the west. Though there are concentrated pockets of smaller lots within the canyon, it is sparsely developed with large rural residential lots (e.g. 5 acres) amidst much larger acreages of forage and row crop production under irrigation circles or wheel lines.

Approximately two miles north of Rancho Reata, on the north side of the interchange of I-182 and I-82, within the lee of the north slope of **Candy Mountain**, lies another large lot rural enclave just south of the City of West Richland. Here, open slopes and specialty crop agriculture on 5, 10 and 15 acre parcels is a rural characteristic which has only recently emerged; its fulfillment being hindered by the slow pace of gaining irrigation water well permits from the state.

A bit further to the northeast, across Kennedy Road and surrounded on three sides by the City of West Richland, lies the partially developed **Willamette Heights**; a rural residential neighborhood of site built housing on unimproved roads. The Willamette Heights extends to the bluff overlooking the river, where below lies the rural community of **Riverside Drive**. This is a built-out area of more established homes on one and two acre lots in a narrow strip of land "backstopped" by the Willamette Heights bluff and fronted by the Yakima River. Water and sewer is provided by individual wells and septic systems. Access can only be gained through West Richland to the north, as the Willamette Heights bluff is a formidable obstacle to road construction, though there is an irrigation district canal right-of-way which traverses the base of the bluff upslope of Riverside Drive. The right-of-way could eventually be converted to a road and/or non-motorized trail, should the irrigation district ever eliminate the canal.

The **Valley View** residential community is an established residential area lying on a bench of land overlooking the Yakima River Delta. The bench lies

down slope of Columbia Drive just downstream of the Queensgate Road Interchange with I-82. The bench is isolated from its larger surroundings by a steep slope rising to its west, and by the publicly owned lands that constitute the undeveloped riparian and wetland environment of the river delta to the east, southeast and northeast. Two small wineries with vineyards are to the west. The community is approximately 80 acres in size, and currently contains 35-40 homes on parcel sizes ranging from 2 acre (right at the edge of the bench), to over 4 acres. The lifestyle is rural: livestock pasture and outbuildings, small orchards, gardening, and wildlife watching. The roads into Valley View dead-end within the community.

The **Grosscup/Snively Road, Twin Bridges** unincorporated area lies upstream of the West Richland Municipal Golf Course. Much of this area is characterized by older homes and dispersed forage or livestock production on river bottomlands or terraces. Overall density is relatively low due to the size and configuration of the Yakima River floodway and floodplain, which extend considerably upland of the normal high water line of the river, especially on the north side of the river where the old **Barker Ranch** of 2,400 undeveloped acres is predominantly in the floodway. Throughout this area (outside of the Barker Ranch) there are scattered areas of high ground upon which residences are typically located. Water and sewage disposal is private. This is an area of frequent flooding brought about by spring thaw in the Cascades, or when Chinook winds melt the Cascade snow pack under conditions of freeze in the lower

Yakima Valley.

The **Horn Rapids** rural area lies generally on the south bank of the Yakima between the river and the city limits of West Richland. Access is via Yakima River Drive and Harrington Road. Water and sewer service is provided on individual lots. Density varies from 1.25 acres to 5 and 10 acres.

The **Ruppert Road/Red Mountain** area lies on the north slope of Red Mountain. A few subdivisions of one acre plus lots has occurred within the Ridgecrest area, however water availability and poor soil conditions have limited rural densities to larger lot sizes.

Demographics

The population on lands designated as "Rural" (i.e., does not include lands zoned GMA Agriculture, or lands within the city or its UGA), within the Richland-West Richland Planning Area is currently estimated at 4,291 persons, residing in 1,601 households, at a density of one dwelling unit per 15.8 acres. This household per acre density is low, evidencing the fact that significant acreage within the rural designation has development constraints related to topography, flood areas, or availability of potable water resources. Some lands are also in productive agriculture.

Top 5 Issues/Desired Improvements

- Road Improvements
- Plan/organize growth
- Slow/enforce speeds
- More police protection
- Water/sewer services

Richland-West Richland Survey Respondents

The single family housing type is predominantly site built (75%), which is the largest percentage of site built homes in the unincorporated county.

Infrastructure

With the exception of county roads serving the rural and farming areas, principal infrastructure (municipal services) within the Planning Area is provided by the cities of West Richland, Richland, and Kennewick. The Washington State Department of Transportation (WSDOT) provides regional infrastructure (182, I-82, State Routes 224, 225 and 240). Burlington Northern Railroad provides track through Badger Canyon. There are private water companies serving Rancho Reata and the Ruppert-Ridgecrest Road residential areas. Kennewick, Badger Mountain and Columbia Irrigation Districts serve the irrigation needs of the area.

The Richland School District is the primary provider of school services. The district provides K-12 facilities at numerous venues: Taptal Elementary school in West Richland, Jason Lee, Chief Joseph, Sacajewea, Carmicheal and Badger Mountain Elementary, and Hanford and Richland High schools in Richland.

Existing Land Use

The Red Mountain Planning Region contains 72,368 acres (113-sq. mi.). Of this, approximately 23,220 acres, 36-sq.

mi., or 32% of the region are considered "rural" (i.e., lands outside of incorporated areas or Urban Growth Areas). The predominate rural land use is rural residential dispersed with agriculture and open space; some of the latter is used for livestock grazing.

Preferred Land Use Plans

The Preferred Land Use Plan Map drafted for the Rural Area by the Richland-West Richland Rural Planning Advisory Committee was adopted in 1996 and updated in 2006. The following are allocations of the principal land uses:

RICHLAND-WEST RICHLAND PREFERRED LAND USE

Land Use	Acres
Residential	22,504
Commercial	113
Industrial	175
Public	428

The Land Use Map for Richland-West Richland is shown in the Land Use Element, Chapter 4, Map 4.5.

Richland-West Richland's Citizens Rural Planning Advisory Committee has identified the following Vision:

"The Richland-West Richland Rural Planning Area is a place with a sense of community that preserves the rural setting and lifestyle. It is environmentally sensitive and preserves natural habitat, including the desert. The citizens here ask: how aesthetically pleasing is my community? -and are proud of the quality of life and variety of recreational opportunities geared for rural life. They proclaim "no additional bridges over the river," realizing that there will be growth in the cities, they plan for the pressures of future development".

Richland-West Richland Rural Committee

RICHLAND-WEST RICHLAND RURAL AREA VISION, GOALS , AND ACTIONS

The Citizens Rural Planning Advisory Committee has identified the following Planning Goals and Actions:

Note: Where an asterisk* appears, the action should be driven by the citizens committee.

QUALITY OF LIFE

GOAL: Promote high quality rural life by preserving the rural character.

Action: County to respond to problems, identify violators in publications.

Action: County enjoins cities to restrict industrial or industrial areas to urban growth areas.

Action: County to notice all property owners within 1,000 feet and posting notice re: land use actions.

*Action: Rigid zoning: 2.5 acre minimum lots for single family, no apartments.***

Action: Establish criteria for evaluating land use decisions.

Action: Permit minimum lot sizes consistent with land use and lot sizes.

Action: Require new commercial and retail development to site design projects in a manner which mitigates land use incompatibilities.

**In 2007, the Board of County Commissioners generally rejected designations of less than the RL 5 as inconsistent with the GMA.

GOAL: To assure residents will live within areas that are clean, quiet and non-polluted.

Action: County Commissioners to

enact an ordinance restricting nuisance noise, visual and light pollution.

Action: Control dust and noise.*

Action: Require development standards which recognize and protect the visual prominent geographical features, i.e., Candy Mountain, Red Mountain, Horseheaven Hills, Badger Mountain.

Action: Require underground utilities where feasible.

Action: Require yard light shields or deflectors in new developments that address light pollution.

Action: Require ordinance procedures where residents filing complaints shall be noticed by mail of the progress and results of enforcement actions.

GOAL: Efficient use of groundwater to maintain quality and quantity.

Action: Seek state assistance and technical resources to facilitate a groundwater study.

GOAL: Maintenance and development of areas similar in appearance and in land use.

Action: Encourage area property owner associations by including information on how to form them in the County's Administrative Design Manual to be referenced by developers and interested parties.

Action: Upgrade the existing mobile home standards.

Action: Encourage developers to

use creative site design planning which yields open space.

Action: Provide consistency in location, quality, type of homes, outbuildings and grounds within specific locations.

GOAL: Develop a comprehensive plan that implements state planning law, has stakeholder involvement, and includes development regulations.

Action: Low density

Action: Space/buffer zones between agricultural land, urban growth zones and city; preservation of open space, wildlife and vegetation in critical areas; types of industry.

Action: Address regional infrastructure needs (roads, sewage, power, water, etc.)

RECREATION

GOAL: Develop and improve Benton County parks for the daily enjoyment of county residents and visitors.

Action: County take action now to improve existing parks including shade trees, large grassy areas, improved roads, designated parking areas, toilets and garbage collection sites.

Action: Develop large parks (Horn Rapids etc..) for camping, with play areas, fishing docks, nature trails for walking, jogging, biking or horseback riding.

GOAL: To have country roads wide enough or provide off-roads for

walking, jogging, horseback riding, from one area to another safely.

Action: County to assure that new roads or road rebuilding/repaving include 10 ft. wide shoulder on each side. Project bids to include these design parameters.

Action: Require that all new development be required to add such shoulder widths to the plat layout and development costs.

THE ENVIRONMENT

GOAL: Reserve wildlife and vegetation by maintaining carrying capacities of the floodway and floodplain.

Action: Establish database for critical areas.

Action: Maintain the diversity of habitat types: desert, river, wetlands, wildlife.

Action: Preserve shrub steppe habitat of significant resource value both biological and visual.

Action: Incorporate all development standards into the Comprehensive Plan.

GOAL: Transition of the Yakima to a Class B river with greenbelts.

Action: Identify problems and potential solutions.

Action: Identify polluters and work with them to control runoff (divert to holding ponds, more efficient irrigation methods, proper application of pesticides and herbicides, and planting greenbelts with plants that will filter waste products).

Action: Enforce regulations

concerning earth moving and farming practices along the river.

Action: Budget manpower and money.

TRANSPORTATION

GOAL: New construction and improvements to the Transportation Element and other county public works projects be designed to be compatible with the rural character.

Action: County to develop a use agreement with Ben Franklin Transit and school district bus service for the use of transit on scheduled routes with service funded by user fees (passbook coupon system recommended).

Action: Ordinances and procedures which require adequate space for roadway widths, paths, buffers for noise, visual screening, shelter belts, and pedestrian crossings that protect wildlife habitats and mitigates significant impacts.

GOAL: No more bridge consideration until Benton County circulation plan for Richland-West Richland is fully funded.

Action: Use tax dollars for maintaining and improving current roads instead of new construction.

KENNEWICK-FINLEY RURAL PLANNING AREA

Location and Geographical Setting

The Kennewick-Finley Rural Planning

Area lies within the Finley/Hover Planning Region, which covers southeast Benton County below the Horse Heaven Hills from Columbia Center Boulevard in the north to Hover Park on the Columbia River in the south.

The geographic setting of the Kennewick-Finley Rural Planning Area is spectacular, having been sculptured by the massive glaciation, repeated flooding and tectonic uplifting which formed the landscape of the entire Central Basin.

Straddling the river just to the south of Finley stand the sentinel promontories of the Wallula Gap. The regulated flows of today's Columbia River languidly pass between them without hint that for prehistoric ages the Wallula Gap was the floodgate which alternately backed and released glacial waters of the cataclysmic Missoula floods.

Directly across the Columbia to the east is Lake Wallula and the delta of the Snake River, whose forceful merging with the Columbia created a miasma of backwaters, gravel bars and sediment mounds which underlies today's lowland scape of the Finley shore and near-shore areas.

History⁵

Early history of the Finley Area records the meeting of **Yelleppit**, "The Great

⁵ Based on information from "Benton County, a Glimpse of the Past", Benton County Historical and Pioneer Association 1967, and, Prosser the Home Town, Pearl M. Mahoney, 1950.

Chief" of the Walla Wallas, and the Lewis and Clark Expedition, in October 1805. They declined Chief Yelleppit's invitation for a celebration, but promised to do so on their return journey in the spring. Upon their return in April, Yelleppit met the party and renewed his invitation. He brought with him gifts of roast "mulletts" and wood. The expedition stayed two nights at Yelleppit's village on the banks of the Columbia opposite the mouth of the Walla Walla River.

Two Rivers was a lively community in 1910-1922. It had two post offices (one for the Snake and one for the Columbia River traffic) which were closed in 1937. The streams provided irrigation for the Two Rivers and its neighbors, Burbank and Attalia. Peaches, grapes and alfalfa were produced abundantly.

Finley was named in 1906 after its first settler, George Finley. Finley was one of the first assigned poll tax collectors for Benton County, and did much of the grading for the Spokane, Portland & Seattle Railroad. The line followed the Columbia River in the area southeast from Kennewick. Its passenger and freight stops lined the horseshoe around Benton County via Hover, Yelleppit, Tomar, Mottinger, Berrian, Plymouth, Longview, Coolidge, Paterson, Sage, Whitcomb, and Carley. Finley was a community of twenty-five families who bought their land from the Washington Realty Company. At that time a four-room schoolhouse was built and a stagecoach ran through Finley with a route running from Kennewick to Hover.

The railroad arrived in Finley in 1907,

and shortly after a hotel, store, barbershop, and lumberyard were opened. In 1908 the train depot was built and a new two-story brick school, which was destroyed by fire in 1917.

Hover was another thriving town along the west bank of the Columbia River. The first ferry at Hover began operation in 1880. Wheat wagons from the Horse Heaven Hills made the long dusty trip to Hover to deliver their cargo to the "Harvest Queen" for markets downstream on the Columbia River.

Hover was platted in 1907, and named after Herbert Hover, a pioneer businessman who lived in Kennewick. It reached a population of 600. The town boasted a 32 room hotel (Hover Hotel), an opera house, which burned in 1916, a meat market, grocery store, three saloons and a school. The Hover townsite is submerged under the McNary Dam pool.

One of the first granges established in Benton County was the Finley Grange, in 1910.

Custom And Culture

The custom and culture of Finley is varied and difficult to characterize as of one characteristic or another. This is because Finley residents pursue a variety of occupations throughout the county and beyond. Relative to other areas of the county, the number of Finley residents employed at Hanford appears small.

Agriculture is a predominant land use, especially orchards on the sloping elevations rising to the Horseheaven crest. Cold storage facilities as well as industries that manufacture, sell and transport agricultural chemicals are

located in south Finley. Accordingly, a significant element, though not the major portion of the custom and culture of the area is related to farm production and industry. Many Finley residents however, have non-farm jobs within the Tri-cities and at Hanford, and seek the country residential environment as a lifestyle choice separate from circumstances of employment.

Top 4 Issues/Desired Improvements

road improvements
ordinance to clean up trash
control/limit growth
water/sewer improvements

Kennewick-Finley Survey Respondents

There are several centers in Finley where farmer and resident interaction can be found. One such area is the community center area found in the heart of Finley at the intersection of Game Farm Road and SR- 397. The several block area includes the Riverview High and Middle schools, a small store, the Finley Grange Hall and several churches. There is also a commercial area at the intersection of Bowles Road and SR-397.

Demographics

The current population within the Kennewick-Finley Rural Planning Area is approximately 7,578 people. Finley is a stable community, with a surprisingly high percentage (76%) of residents having lived in the community more than 10 years⁶. The housing supply numbers 2,526 units and is a mixture of old and new

⁶ Benton County Rural Survey 1993

manufactured and site built homes, with manufactured homes predominating⁷. The average density is one dwelling unit per 5.7 acres. The average household size is 3.0 persons.

Infrastructure

School Facilities

Sixty-five percent of the Kennewick-Finley Planning area reside in the Finley School District #52. The current population in the district is 4,925 residents in 1,641 households. The Finley School District operates three schools serving 1,030 students. The Riverview High School located on Lemon Drive, serves grades 9-12. Finley Middle School accommodates grades 7 and 8, and is located on Game Farm Road. The Finley Elementary School houses the Kindergarten through sixth grade, and is located on Cougar Road, off Nine Canyon Road. To further ease crowding, the district has plans to build an additional 14,000 square feet at the Middle School site.

Transportation Facilities

Major transportation infrastructure within the Kennewick-Finley Rural Planning Area consists principally of the Highway SR-397 and the Burlington Northern (B.N.) railroad line, which parallel each other in a narrow corridor extending from the Kennewick City limits in the northwest through the Finley rural area. South of Finley Road the railroad line trends south and west to follow the Columbia River shoreline to the coast.

The SR-397/B.N. corridor is intersected at various points by east-west aligned arterial roads including 10th Street, and Haney, Finley, and Bowles Roads,

which serve the collectors and neighborhood streets to and within the interior of Finley. The SR-397/B.N. corridor is the only direct ingress and egress to rural Finley. It is virtually the only truck route.

Due to the recent and projected increased industrial activity in South Finley, and the overall increase in regional rail traffic, to which B.N. has responded to by adding an additional line parallel to the existing track in Finley, both truck and rail traffic along the SR-397/B.N. corridor are expected to increase significantly within the next decade.

The close proximity of the railroad line to SR-397, and the intersection of the corridor by a narrow arterial at less than perpendicular angles on sharply elevated railroad crossings, restricts "sight" distances, and leaves little room for crossing vehicles to "queue" up outside of the traffic lanes. These factors, coupled with the fact that much of the truck and rail transport is carrying toxic chemicals and by-products, makes the corridor inadequate and potentially problematic relative to safety. The safety problems inherent to the existing roadway geometry of the SR-397/B.N. corridor must be addressed by Washington State Department of Transportation.

A recently constructed road development serving the Finley area extends SR 397 west and connects to I-82 at the Locust Grove Exit. At a cost of \$21 million, the "Intertie" stretches 11 miles through the remote areas of Benton County connecting to the

⁷ 1,540 units/or 61%

several businesses along the river in Finley. The road is constructed to WSDOT standards with two 12 foot lanes and six foot shoulders. In the more urban area of Finley, a center turn lane has been added and an overpass constructed at the Burlington Northern railroad crossing at Riek and Pierf Roads.

This new route, SR 397, provides an alternate truck route for industrial and farm-to-market truck traffic to the Finley and south Kennewick industrial and agricultural areas, relieves traffic congestion in Kennewick by bypassing the populated Tri-Cities area, and also serves as a secondary access/emergency route for the residents of Finley. In 2009, the road extension was assumed by the state highway system.

The Citizen's Rural Advisory Committee requested that several road links in north and west Finley area be completed for routine circulation and emergency access purposes. These, and the newly constructed access route SR 397 are shown on the "Transportation Map" for the Finley Planning Region, Figure Map 8-3.

Barge facilities for waterborne transportation exist in south Finley as part of the existing infrastructure serving industry.

Existing Land Use

The Kennewick-Finley Rural Planning Area encompasses approximately 15,506 acres, or 53% percent of the Finley Planning Region.

Land uses consist of irrigated agriculture; including livestock, rural residential use, minor acreages of commercial lands, significant acreage of publicly owned shoreline (US Army Corps), and the largest resource of industrial uses and industrially designated acreage (1,432 acres), in the unincorporated county outside of the Hanford Reservation. The rural residential land use is the largest land designation in the planning area with 13,354 acres.

A rail corridor servicing the industrial uses is also an important land use within the Planning Area.

PREFERRED LAND USE PLANS

The Preferred Land Use Plan Map drafted for the Rural Area by the Kennewick-Finley Rural Planning Advisory Committee was adopted in 1996 and updated in 2006. The following are allocations of principal land uses:

KENNEWICK-FINLEY PREFERRED LAND USE

<u>Land Use</u>	<u>Acres</u>
Residential	13,354
Commercial	35
Industrial	1,432
Public	685

The Land Use Map for Kennewick-Finley is shown in the Land Use Element Chapter 4, Map 4.6.

KENNEWICK-FINLEY RURAL AREA VISION, GOALS, AND ACTIONS

The **Kennewick-Finley** Citizens Rural Planning Advisory Committee has identified the following Vision:

**"The Kennewick-Finley rural area is a healthy community that wisely manages its assets and resources and preserves its rural character and country living."
Kennewick-Finley Rural Committee**

The **Kennewick-Finley** Citizens Rural Planning Advisory Committee has identified the following Goals and Actions:

Note: Where an asterisk* appears, the action should be driven by the citizens committee.

QUALITY OF LIFE

GOAL: Preserve and improve the visual character and quality of our community lands.

Action: Educate and encourage awareness of sound land use practices;*

Action: County Commissioners enact and enforce an ordinance to clean-up trash and hulk vehicles and equipment;

Action: Organize and hold public seminars on good land use practices;*

Action: Promote media sponsorship of articles and commentaries on land use laws and practices;*

Action: Encourage adult education classes on land use laws and practices;*

Action: Enforce existing land use plan and ordinances.

GOAL: Create a land use plan with map, policies, and objectives which defines and facilitates the Finley rural area vision.

GOAL: Preserve surface and groundwater for the beneficial use of the rural area's citizens and wildlife.

Action: Determine the capacity of the local groundwater basin and develop a plan for living within its limits.

GOAL: Enhance and protect our natural assets.

Action: Recognize and encourage the growing diversity of our flora and fauna.*

Action: Set aside and/or preserve our wetlands.

Action: Encourage the preservation of habitat.

Action: Mitigate conflicts between lands of contrasting uses by the use of buffers or other suitable methods

Action: Allow for "naturalization" of habitat (in addition to native species, habitat can consist of species not indigenous to the area, but which produce food and cover for birds, animals, reptiles, etc.).*

GOAL: Preserve rural character.

Action: Consider the feasibility of replacing the Board of Adjustment and use a professional hearing examiner to enforce zoning laws;*

Action: Develop a base rural residential density of 2.5 to 5 acres with specific areas designated one acre;**

Action: No annexation to Kennewick; stay a rural

community.

**In 2007, the Board of County Commissioners generally rejected designations of less than the RL 5 as inconsistent with the GMA.

GOAL: Healthy sense of community.

Action: Community bulletin board (at stores) and also community newsletter.*

Action: Create a map of historic events.*

Action: Establish incentives for community clean-up.

Action: Ease of disposal/free disposal days.

Action: Fences or trees for storage yards.

GOAL: Comfortable transportation with urban/rural linkage.

Action: Study feasibility of a taxi feeder service;

Action: Roads constructed, or reconstructed wide enough to include paths for jogging, biking, and horse back riding;

Action: Park and ride lot;

Action: Keep SR-397 (Chemical Drive) a rural community road);

Action: Reconfigure Chemical Drive (SR-397) to improve safety.

PARKS & RECREATION CHAPTER 6
ELEMENT

INTRODUCTION

This Element, in conjunction with **Table 9.0** of the Capital Facilities Element, Plan Policy, and relevant background information in the various other Comprehensive Plan Elements, is the functional equivalent of a Comprehensive Parks and Recreation Plan for Benton County.

This Element provides the framework that will help guide future decisions of the Benton County Park Board on matters related to parks and recreation facilities needs.

One of the main responsibilities of the Benton County Parks Board is to provide long-range leadership, goals and policies for the sound development and operation of Benton County Parks. This responsibility is met primarily through the development of a long-range comprehensive parks and recreation plan. This Element is the long-range policy document for Benton County.

Historically, the County's Parks and Recreation Plan has been a separate document from the Benton County Comprehensive Plan. However, the 1991 legislative changes to Washington State Planning Law, (i.e., GMA), though not requiring the integration of the Parks and Recreation Plan with the County Comprehensive Plan, do make it logical to integrate the two into a single document, as it is done herein.

This Plan Element applies to a twenty year planning horizon, with major review for possible revisions occurring

every five years as part of the overall review of its parent document.

Background Of This Plan Element

The lineage of this Park and Recreation Element, as well as the information and capital projects shown in Table 9.0 of Chapter 9, begins with the 1977 Benton County Parks and Recreation Comprehensive Plan, which was superseded by the 1982 Parks and Recreation Comprehensive Plan, for which an "Update" was adopted in 1990.

The 1982 Comprehensive Plan was truly comprehensive, it was selected for an award by the Washington State Association of Planners. It departed from the 1977 Plan in that while the earlier Plan covered only parks and park facilities within the unincorporated areas of the county, the 1982 plan inventoried and addressed parkland and resources in all county government jurisdictions including school districts.

The 1990 update refocused on only county facilities, which is also the focus of this Element, except for specific goals and policies relating to the integration of existing and planned non-motorized trails, and Greenways across all jurisdictional boundaries. The intent here is to create a countywide recreational trail system connecting the major parks and facilities, and rural and urban community centers of all jurisdictions.

With the exception of minor changes related to updating information, and

a significant new focus on the county's role as a regional park facilities provider, the goals, policies, and textual substance within this Element, are essentially those which were adopted in the 1990 update of the 1982 Comprehensive Parks and Recreation Plan.

Responsibility For Implementing The Provisions Of This Element

Unlike other Plan Elements in this document, this Element contains goals, objectives, and actions outside of those in Chapter 3, which is where all the Goals and Policies for other Plan Elements reside. The reason for this is that the responsibility for policy making, and decisions relating to the implementation of this Element, once it is adopted by the Board of County Commissioners as a part of the Comprehensive Plan, lies principally with the Benton County Park Board rather than the Board of County Commissioners.

The Park Board's public process and knowledge is the origin of the goals and objectives within this Element. Therefore, it is appropriate that goals and objectives specific to recreational facilities identified in this Element be separate from those in Chapter 3, which are the sole province of the Board of County Commissioners.

Park Planning, Management and Maintenance

Park maintenance is the responsibility of the County Facilities and Parks Department. Park planning, capital facilities, and operations and maintenance are overseen by the Director of the Facilities and Park Department, who provides administrative support to the seven

member Benton County Parks and Recreation Board which advises the Benton County Board of Commissioners.

After coordination with appropriate county departments, the Park Board submits its planning and capital projects to the County Board of Commissioners for adoption. Park budgets are the province of the Board of Commissioners.

State Requirements for Recreation Planning

In 1964 the Marine Recreation Land act (R.C.W. 43.99) created the Washington State Interagency Committee for Outdoor Recreation (I.A.C.). This act designated the I.A.C. as the administering agency for a grant-in-aid program made available to state and local agencies. The name of the Agency was changed to the Recreation and Conservation Office (RCO) in 2007.

Eligibility for attaining funds requested through the R.C.O. is contingent upon the requesting agency's completion and adoption of a comprehensive parks and recreation plan. This plan must contain a minimum of the required elements and be filed with the R.C.O. in Olympia. Once an agency has complied with the requirements set by the R.C.O. for parks and recreation comprehensive plans, that agency becomes eligible to apply for funding assistance from the state for a five-year period.

Goals, Objectives, Actions

Following are *Goals, Objectives, and Actions* to guide implementation of this Element. Where an "action" is shown, if capital expenditures are

necessary to carry it out, the expenditure will be shown in Table 9.0 of Capital Facilities Element, Chapter 9. Where county resources for other than capital expenditures are necessary to forward an action, the resources must be allocated in the appropriate department(s) annual budgets.

Chapter Nine also contains a discussion of possible funding sources for parks and recreational improvements page 5, and a rough prioritization of capital project expenditures related to "actions."

GOAL 1: Provide the people of Benton County with park facilities adequate to meet present and future needs within a well-managed park system.

Action: Develop Horn Rapids Park Master Plan (see Plan Map, Appendix 6-1);

Action: Consider incorporation of Taptal concepts for Horn Rapids Park into the Horn Rapids Park Master plan.

Objective 1: Develop a park in the Benton City-Prosser area.

Objective 2: Encourage Prosser's efforts to acquire and develop park land.

Action: Coordinate with and support to the extent possible Prosser's efforts to acquire and develop park land.

Objective 3: Develop bike/hike trails as funding and land rights permit.

Action: Develop a bike/hike trail from Kennewick to Two Rivers Park;

Action: Complete bike/hike trail from Johnson Road to Yakima Co. line; and,

Action: Together with the cities of W. Richland, Richland, and the Taptal Greenway, plan and develop a bike/hike trail from Columbia Point to Horn Rapids Park.

Objective 4: Maintain Horse Heaven Vista and Vista Park as currently developed for the benefit of Benton County residents and visitors.

GOAL 2: Provide access to County Parks facilities to the sponsors of appropriate recreational and educational programs.

Action: increase efforts to raise sponsors' awareness level that the facilities are available.

Objective 1: Continue to make County Parks facilities available to recreation/education program sponsors.

Objective 2: Continue to support and encourage the development of the Rattlesnake Mountain Shooting Facility and the miniature aircraft association facility.

GOAL 3: Provide for the preservation of important open spaces and wildlife habitats in Benton County Parks facilities.

Action: through signage, vehicular barriers, education and enforcement, limit vehicular access to natural areas within the existing County Parks system.

GOAL 4: Preserve the County's historic resources for future

generations.

Objective 1: Limit such lands under County management to non-consumptive uses such as trails, viewpoints, and passive park lands.

Action: work closely with museums, historic interest groups, and private citizens to identify and preserve historic resources.

Objective 2: Promote educational programs, signage, and public awareness of the county's historic resources.

Objective 3: Hold Hover Park and Wallula Gap Preserve in reserve for future development.

GOAL 5: Achieve a countywide trail and path network that functionally links county regional park facilities, city urban parks, and rural community centers and recreational areas.

Action: once the Taptéal Greenway is adopted as part of the Parks and Recreation Element of the Comprehensive Plan, annually fund a capital improvement(s) within the Taptéal Greenway Plan.

Action: work with cities and County Public Works Department to coordinate and develop a plan for future trails within the county.

EXISTING CONDITIONS

Inventory Of Park Land Capital Facilities

Benton County currently owns, or operates under lease, eight

recreational properties consisting of:

- four parks (3 large parks, plus one neighborhood park, i.e., Vista Park
- a vista point
- one shooting facility
- two natural park preserves

Of the eight properties, only Two Rivers Park in Finley has substantial facilities improvements. The remaining sites have minimal improvements beyond access roads and not all properties have access.

Table 6.0 provides specific information on ownership/lease, size and level of development at each park. The location of park properties are shown on the County Parks and Trails Map, (figure 6-0) at the end of this chapter. Each park is described briefly below:

Two Rivers Park lies on property leased from the Corps of Engineers about two miles east of Kennewick near the community of Finley. Approximately 16 acres at the west end of the park have been developed for picnicking and swimming. This area is closed during the evenings. A boat launching ramp, docks, and parking lot were developed in 1987 at the east end of the park. Both developed areas are heavily used during the summer season. Although there is significant visitation during weekdays, the most substantial recreational usage is on the weekends, especially summer holiday weekends. The area between the developed ends of the park is mostly a natural wildlife area and undeveloped beach.

Since the park lies on the Columbia River shoreline, artifacts of archaeological significance may be

present within its boundaries. A survey performed for the 1987 boat launching ramp project found no artifacts.

Horse Heaven Vista is located on top of the Horse Heaven grade on State Highway 221 southeast of Prosser. It is a beautiful overlook of the Lower Yakima Valley. The vista is jointly maintained by the State Department of Transportation (provide chemical toilets in the summer months) and the County Parks Department (mostly litter control and maintenance of the shelter, picnic tables and an interpretive sign).

Vista Park is located on Umatilla Avenue in the Tri-City Heights residential development. The Vista Women's Club maintains this neighborhood park. County park staff have monitored the operations and provided guidance in the repair of play equipment, irrigation supplies and general advice on the care of park improvements.

Rattlesnake Mountain Shooting Facility is located approximately six miles north of Benton City adjacent to Horn Road. The County has a land use agreement with Washington Department of Wildlife and a Recreation and Public Purpose Lease (R&PP) with the Bureau of Land Management who administers the terms and conditions of the leases as a single unit.

In January 1988, Benton County signed a lease/concession agreement with the Tri-Cities Shooting Association Inc. (a.k.a., Rattlesnake Mountain Public Shooting Facility Committee). According to the terms of the

agreement, the committee has the responsibility for the development and operation of the range. The Shooting Association opened the Range on November 4, 1989. They are open for public use from 9 a.m. to 3 p.m. on weekends. Their future plans are to hire a caretaker and operate an additional day during the week when their revenues allow.

Hover Park is located approximately ten miles southeast of Kennewick along the Columbia River on property leased from the Corps of Engineers. Presently undeveloped, this park has good potential for future use. It has a pleasant beach area in a protected lagoon. The park shoreline has a considerable stand of native trees while the open areas are crisscrossed with dirt roads. The Burlington Northern Railroad bisects the property. Only that portion of the property landward of the railroad right of way has public access at present. Access to the riverside portion of the park must be obtained from The Port of Kennewick, which owns the adjacent property to the east and has a railroad crossing that could serve as public access to the park. A few anglers fishing from the shore visit the park primarily on summer weekends.

The first wagon train to the area, the Longmire Wagon Train, crossed the Columbia River on rafts near the park in 1853. The first major ferry crossing from Wallula was in the vicinity, and the park is in proximity of the original Hover town site, established in 1898.

Horn Rapids Park is located approximately six miles downstream of Benton City, on the north shore of the Yakima River. The Park is about 784

acres in size, of which 20 acres is developed to campground (22 sites), paved boat launch, paved trails, picnic/lawn area, primitive horse camp, and a model plane facility (leased to a club). The park has showers and restrooms, and a pump station for recreational vehicles. Use of Horn Rapids Park has increased steadily over the past several years since its opening. The upstream areas are natural open space and used primarily as horse/hiking trails and wildlife habitat. Horn Rapids Park functions as an outdoor educational center for activities by area schools. Each spring a "Salmon Summit" is held at the Park allowing students to learn about the outdoor environment and participate in the release of salmon smolts into the Yakima River.

Ongoing projects include construction of a new multipurpose building, habitat restoration, and trail development.

Currently activities such as, equestrian rides, archery, golf, etc., occur under the auspices of private organizations, all of which provide potable water and chemical toilets during their stay. An approximately 3-acre site is leased by a model airplane club which has constructed limited facilities for its use.

The potential of Horn Rapids Park as a major regional recreational area is further discussed later in this chapter.

Badger Mountain Preserve is 574 acres of natural terrain and vegetative cover located on the upper ridges and south slopes of Badger Mountain. Shrub steppe vegetation, primitive trails, expansive views of the Columbia Basin, and steep slopes characterize

the site. Designated a Natural Park in the Benton County Comprehensive Plan, the site will remain as undeveloped open space for public use as a passive recreational and aesthetic amenity and a natural habitat preserve. The preserve was purchased in partnership with public, private and state funds.

Wallula Gap Preserve is located on the eastern slope of Benton County above Lake Wallula across from the 'Sister's Peaks' in Walla Walla County. The three parcels that comprise the park were deeded to the county in 1984 by the U.S. Department of the Interior, National Park Service. At present the only access to the property is by water. Access by land will require an easement across private property.

State & Corps Parks

Crow Butte is located 15 miles west of Paterson. The park is located on the historic Lewis & Clark Trail. It is also adjacent to the McNary National Wildlife Refuge a wintering grounds for hundreds of thousands of migratory waterfowl each year. The park encompasses 1,312 acres and 33,910 feet of freshwater shoreline.

State Parks acquired the park from the U.S. Army Corps of Engineers in 1978 under a 25-year lease. The park provides 20 picnic sites, 3 picnic shelters, 50 full hookup sites, a group camp area, 2 residences, a comfort station, a trailer dump station, a 750 foot unguarded beach, 3 boat ramps, a boat basin, a bath house, and a two bay shop/office. Activities at the park include boating, camping, fishing, picnicking, sightseeing, swimming, water skiing, windsurfing, and bird

watching.

TABLE 6.0 COUNTY PARKS: LEVEL OF DEVELOPMENT AND CLASSIFICATION ¹

Sites	Acres	Developed	Classification
Badger Mountain Preserve	574.0	0	574 N.P.
Horn Rapids Parks	784.0	20	234 L.R. ² 550 N.P. ³
Bateman Island (Corp. Lease)	173.0	0	N.P.
Columbia Park ⁴ (Corp. Lease)	433.0	310.0	290 L.U. ⁵ 143 P. ⁶
Vista Park	.5	.5	N.
Two Rivers Park (Corp. Lease)	210.0	17.0	134 L.R. 76 N.P.
Hover Park (Corp. Lease)	145.0	0	N.P.
Horseheaven Vista	2.3	1.8	Vista
Wallula Gap Preserve	163		N.
Rattlesnake Mountain Shooting Facility (450 ac. of BLM land, 650 ac. of WDW land, all used under terms of a lease administered by BLM)	1,100	600+	Regional
TOTALS	3,584.8	949.3	1,427

Plymouth Park is located 1.2 miles west of the Umatilla Bridge in Plymouth,

Washington. The park is operated by the U.S. Army Corp of Engineers. The park has 32-tent/RV pull through campsites, 16 of those with full

hookups. Park amenities include paved campsites; tent pads, grass, shade, fire pits/grills, hot showers, and trailer dump station.

The day-use area provides covered shelters, tables, fire pits/grills, swimming

1 1990 Benton County Parks Plan Update

2 Large Regional Park

3 Natural Park

4 Benton County sub-leased Columbia Park to the Cities of Richland and Kennewick in 1989. Under the terms of the lease, the Cities have the responsibilities of repair, maintenance and law.

5 Large Urban Park

6 Parkway

area, grass, shade, drinking water, cold showers, and restroom facilities with handicap access.

The park has boating facilities that include a 2-lane launch ramp, handling dock, tie-up dock, and parking area.

Recreation/Park Use

Many of the county's rural residents recreate in natural areas suitable for hunting, fishing and hiking. A reading of the "visions", "goals" and "objectives" of the Paterson-Plymouth and Finley Area Citizen's Planning Advisory Committees (Rural Element pages 7 and 33) for example, verifies the appreciation rural residents have for the natural environment and wildlife as a recreational resource.

In the more remote planning areas of the county, such as Paterson/Plymouth and Finley, recreational opportunities are often provided by federally owned waterfront lands which lie along the hydroelectric pools behind each dam.

Local citizen's requests and interests for improvements at these resources, whether they be federally or county owned lands, generally focus on improved vehicular and boat access.

However, "natural area" recreation is only one type of opportunity. There is also an unmet demand for recreational opportunities that rely upon a higher level of facilities and improvements in more developed parks.

Availability Of Improvements On Park Lands

With the exception of the Prosser rural

area, it appears that the county has sufficient acreage designated for public recreational use. However, there is a recognized shortage of improvements and amenities to support use of that acreage.

This shortage exists in contrast to strong support for such facilities within the rural population. More than 50 percent of respondents to a county survey of rural residents feel it either very important or important to maintain and enhance recreational opportunities.

TABLE 6.0 shows that in the aggregate, only 39.3 of the 1523.8 acres of county owned park property is developed.

Horn Rapids Park, which is designated as a regional park consists of 784 acres along 5 miles of the Yakima River. Currently, roughly 20 acres is developed as picnic area, campground, model airplane facility, hard surface trails, and a boat launch.

Similarly, only 17 of the 210 acres of **Two Rivers Park** are developed (parking area, boat launch and dock facility, caretaker's residence). There are no improvements at **Hover Park**, **Badger Mt. Preserve**, or **Wallula Gap Preserve**.

Connecting Links To Park Lands

Improved public recreational trails are lacking throughout most of the rural county. Citizens groups involved in the comprehensive planning process of each rural community identified trails as important and desired. Trails were proposed (see Map 6-0 at the end of this chapter for locations countywide).

Tapteal Greenway

Within the approximately 30 miles of the lower Yakima River from Bateman Island upriver to Benton City, public land ownerships amount to significant rivershore acreage and linear miles. These public ownerships are as follows:

<u>Agency</u>	<u>Acres</u>	<u>Linear mi.</u>
Army Corps.	292	13.5
Richland	236	2
W. Richland	N/A	1
WFW*	10	25
Benton Co.	784	5.1
Total	1322	21.85

* Washington Fish & Wildlife

The **Tapteal Greenway Plan** seeks to link these ownerships with a system of trails and paths over the 30-mile reach of river, and to use or improve each public property according to an overall plan. This would make the greenway greater than the sum of its parts if each property was to be left vacant, or improved as a single piece without regard to the whole.

This plan would connect via trails and bikeways, north Richland, Columbia Point and thirty miles of Lower Yakima River environments extending up-river from its confluence with the Columbia, to a Washington State Dept. of Fish and Wildlife river shore access point at the Benton City bridge on SR-225.

The Tapteal Greenway Plan was accomplished jointly through a planning effort involving local, state and federal interests.

The Tapteal Planning Process

The Lower Columbia Audubon Society (LCBAS) obtained a technical

assistance grant for the fiscal year 1993 from the National Park Service's (NPS) Rivers, Trails, and Conservation Assistance program (RTCA) to help define the potential for a greenway along the lower Yakima River.

The project began in May 1993, with a gathering of public landowners and managers (Richland, West Richland, Benton City, Benton County, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service (USFWS), Washington Dept. of Fish and Wildlife (WDFW) and the Washington Dept. of Transportation (WSDOT). A field trip of the study area was followed by a "visioning" session. In a very positive start, the group decided to pursue the greenway idea.

Tapteal Vision

The Tapteal Greenway is a corridor where wildlife, natural vegetation, and people co-exist, which provides opportunities for non-motorized recreation, education, and habitat protection planned and managed for future generations through community involvement and inter-jurisdictional cooperation

In August of 1993, after conceptual support by the Benton County Park and Recreation Board had been affirmed, the Benton County Board of Commissioners sent to all Mayors and City Councils a request for their commitment to a joint city/county preparation of a Recreational/Resources Plan (a "Greenway") along the lower Yakima River.

By September of 1993 all cities

responded favorably in writing, whereupon the Benton County Park and Recreation Board also requested of the Board of Commissioners permission to participate.

In March of 1994, the Board of Benton County Commissioners by Resolution #94-108, adopted the Parks and Recreation Board's Position Statement favoring Linear Parks and Greenways. Following this exchange of letters and actions, a public planning process was begun. After numerous public meetings on work products produced by citizen subcommittees, a Preliminary Draft of a Lower Yakima River Greenway Plan and Plan Map was produced in December 1994 and was reviewed in additional public meetings.

Once the Draft Plan was created a core group of volunteers and local jurisdiction representatives identified two additional courses of action, from which other actions to realize the concept would evolve.

Tapteal Greenway As A Tax Exempt Entity

The first course of action was the establishment of a private non-profit organization to organize, establish a membership, and pursue activities which would give the Greenway substance and legitimacy. This, in addition to the renaming of the Greenway as the "Tapteal Greenway", has been accomplished. The Tapteal Greenway is a 501C3 tax-exempt, non-profit volunteer organization. It has a 16 member Board of Directors that meets monthly to plan Greenway implementation, educational activities and projects. A goal is to improve stewardship, conservation, and recreation on public lands within the

Greenway.

Integration of the Greenway Into Local Comprehensive Plans

The second course of action was for the representatives of local planning jurisdictions within the greenway to cooperatively integrate the "Tapteal Greenway" plan into the comprehensive plans being prepared by each agency pursuant to state planning law. This would give local jurisdictions access to grant funds to help realize the Greenway Plan. It is anticipated that once the local jurisdictions and the Tapteal Greenway join in true partnership to accomplish the greenway plan, it will fast become a reality.

Because each planning jurisdiction has proceeded at its own rate of speed through its planning process, "seamless" integration of the greenway plan across jurisdictional boundaries has not occurred. However, each jurisdiction has integrated the Greenway into its own Comprehensive Plan. Seamless integration across jurisdictional boundaries is a future "action" supported by goals and policies within this Plan (Chapter 3).

CURRENT TRENDS

Recreational Demand

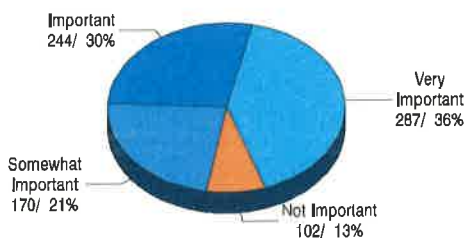
Demand for public recreational opportunities and facilities is increasing, and will continue to increase as both the urban and rural populations of the county grow, and as the growth in overall state population results in "out of area" visitors looking for recreational opportunities (Washington population growth is 100,000 per year).

A 1994 public survey conducted by the county Parks and Facilities Department to define recreational "needs" within the county, rated the following facilities "types" the most highly desired:

Type Facility	Rating Points
-bicycle/equestrian trails	1742
-waterfront parks	1509
-athletic playfields	1074
-overnight camping	1072

A 1992 survey of rural residents elicited the following countywide responses to questions relating to recreational facilities. Responses strongly favor an expanding provision of public lands and facilities for outdoor recreation as

8. How Important Is....
Recreation facilities: A system of open spaces, parks, pedestrian/bike/horse paths?



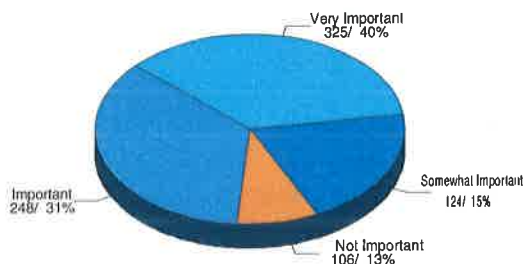
Benton County Rural Visioning Survey 1992

county population grows.

As the local economy diversifies (in contrast to the atrophy characteristic of the Hanford plutonium production era), and begins to resemble the conventional socio-economic fabric of other mixed urban/rural areas, the range of recreational demands and pursuits will broaden. To the extent that the county and cities are successful in developing a visitor

serving/tourism sector, recreational

As Benton County grows more land will be converted to... Residential, Commercial and Industrial uses
How Important is it for the County to take action to secure land for public use?



demands from out of town visitors will combine with local demands.

FUTURE CONSIDERATIONS

Key Opportunities To Meet Demands

Capital expenditures to enhance recreational use of county parklands should be prioritized to focus first on locations that have current facilities deficits, and/or on park lands where the provision of additional recreational facilities can leverage other recreation related economic and visitor benefits beyond the park itself.

Though all county park lands are in need of attention relative to facilities enhancement, two locations offer key or "threshold" opportunities: Two Rivers and Horn Rapids Parks.

Two Rivers Park currently suffers from overuse relative to the available facilities. The general condition for the boat launch and dock facilities are that they are simultaneously in need of repair, and used to capacity. The repair needs stem largely from the facilities' open exposure to wave energy and floating debris. As a priority, the county is pursuing funds to construct a protective barrier that will

reduce repair costs and make the facilities more useful. This Park is in need of a major upgrade/expansion to meet current use demands. It is a popular park with direct water access.

Expanding its capabilities will address a current need. Planned capital improvements are indicated in Table 9.0 of Chapter 9.

Horn Rapids Park is a regional park located in an area of growing and encroaching populations. The park is 10 minutes from the Benton City commercial area and approximately 20 minutes from the City of Richland. It is also the point of connection between the Hanford Site's 120 sq. mi. Arid Lands Ecology Reserve and the rich wetland and riparian environments of the lower Yakima River floodway and delta. This is a point of connection for distinctly different ecosystems where the potential to yield unique biological, recreational, cultural (tribal), and educational opportunities exists. The park has significant history as a WWII detention facility whose detainees maintained the Army's orchards, vineyards and farmlands on the Hanford Project.

Within the unincorporated area, the land and water resources of the park are the central element of the *Tupteal Greenway Plan*.

Development of Horn Rapids Park according to its Master Plan (see Appendix page 50) would provide a regional destination point, as well as an activity center for the Greenway. From the park, campers, bicyclists, equestrians, boaters, runners, etc., could travel over routes having continuity not only along the main

stems of the Yakima and Columbia Rivers, but also to running and bicycling routes up Rattlesnake Mountain, and to Benton City, and around through Badger Canyon or Red Mountain. The park would also be a key location for the future recreational trail through the Hanford Site.

The capital projects for Horn Rapids Park are shown as scheduled improvements in Table 9.0 of Chapter 9.

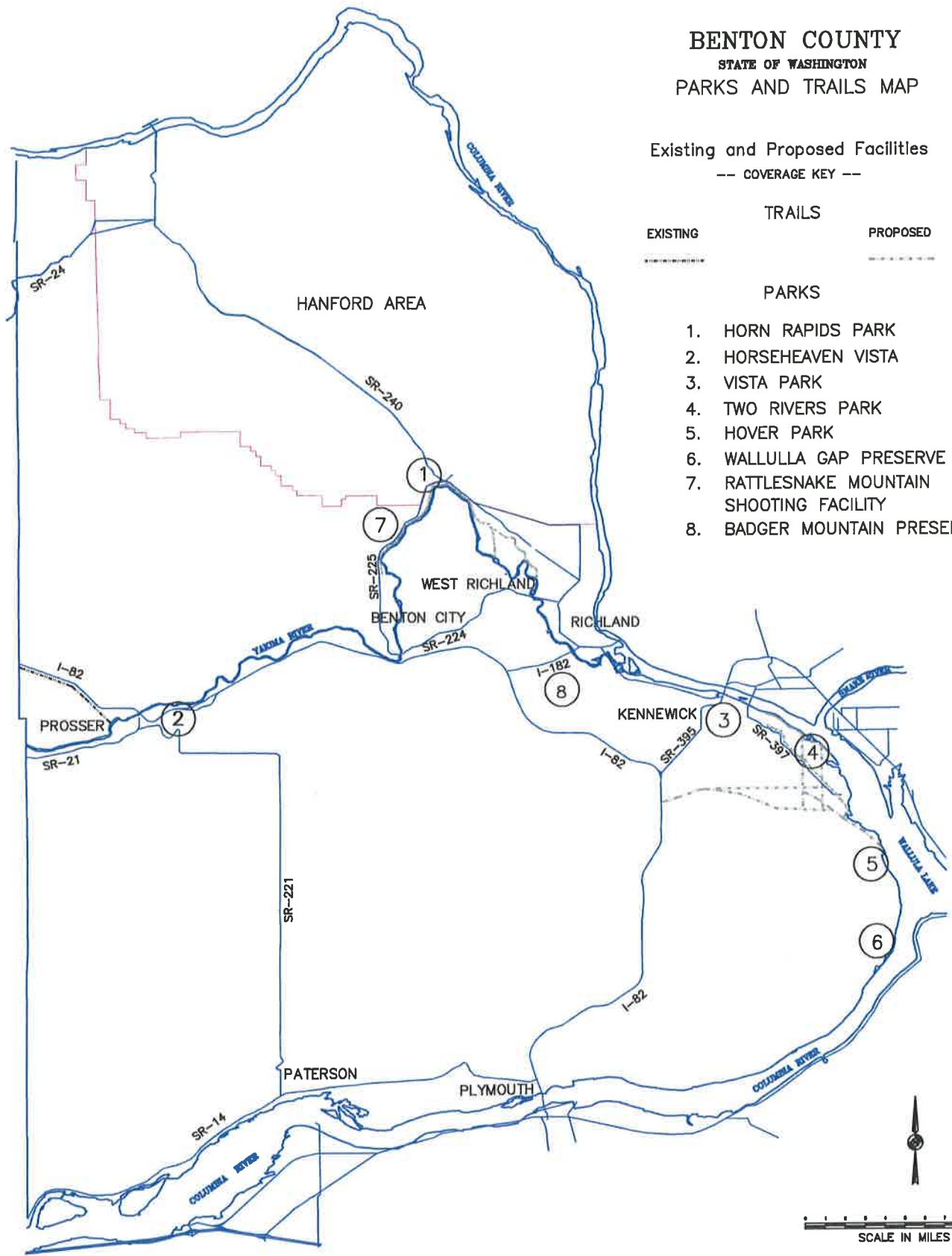
BENTON COUNTY
 STATE OF WASHINGTON
 PARKS AND TRAILS MAP

Existing and Proposed Facilities

-- COVERAGE KEY --

TRAILS
 EXISTING PROPOSED

- PARKS
1. HORN RAPIDS PARK
 2. HORSEHEAVEN VISTA
 3. VISTA PARK
 4. TWO RIVERS PARK
 5. HOVER PARK
 6. WALLULLA GAP PRESERVE
 7. RATTLESNAKE MOUNTAIN SHOOTING FACILITY
 8. BADGER MOUNTAIN PRESERVE



Map Figure 6-0

ECONOMIC ELEMENT CHAPTER 7

POLICY STATEMENT

A strong diversified economy provides a high quality of life for the citizens of Benton County and the region. This in turn, generates the resources through which local governments provide for the health, safety, and welfare of its citizens. Therefore, as a local government entity, Benton County shall promote economic development, along with public health and safety, social services and environmental quality.

INTRODUCTION AND PURPOSE

Provide Synthesis and Focus For The Economic Vision

The overall purpose of this element is to synthesize the various components within the Comprehensive Plan that relate to current and emerging land use, growth and economic issues, into a few pages of text from which deliberate and sustained actions toward economic objectives can be formulated and pursued.

The Economic Development Implementation Plan (EDIP)

This element supports, and is in turn supported by the *Economic Development Implementation Plan (EDIP)*, which is an administrative mechanism not adopted as a part of the Comprehensive Plan.

A principal function of the EDIP is to annually direct the mobilization,

allocation, and integration of county resources, at the Department level, to

accomplish specific development objectives. These objectives may include capital projects already scheduled in the Capital Facilities Element or special projects such as studies and analysis related to economic development issues. These in turn can form the basis for amending the Capital Facilities Element with additional projects.

VISION

A strong diversified regional economy supported by Benton County through its excellence in providing basic regional services and infrastructure in cooperation with local, state, and federal economic development organizations and the private sector.

-Board of County Commissioners

The EDIP is updated annually by the County's *Economic Development Coordinator* working with appropriate department directors, and coordinating with various extra-county economic interests such as the Ports, Public Utility Districts, Economic Development Associations, and adjacent cities and counties. The EDIP is presented to the County Board of Commissioners annually as part of its budgeting process.

Toward the accomplishment of its overall purpose this Element does the following:

- focuses the abstract Vision and Policy statement referred to on page 7-1 on specific economic sectors or issues which are identified in this plan as priorities for the county;
- identifies specific locations in the county where priority economic sectors and issues are at play, and where the commitment of county resources will benefit growth objectives;
- in conjunction with the Capital Facilities Element: provides a basis for the EDIP to define project related work tasks and schedules; integrate inter and extra-county roles; quantify the total amount of county resources necessary to accomplish specific objectives.

This Element does not repeat the various land and resource inventories and analyses contained within the Land Use, Rural and Capital Facilities Elements of this Plan. Those Elements provide an integrated framework for supporting the current economic base and facilitating economic growth within the county. For example, **Table 4.0** in the Land use Element summarizes the various provisions of the Plan which are "strategies" for beneficially accommodating current and emerging economic conditions and trends. Capital projects listed in Tables 9.0 and 9.1 of the Capital Facilities Element of this plan are those projects to be funded and carried out in the near term and have direct lineage to the economic development priorities identified on

page 7-3.

Regional Economic Development Plans Within the regional context, this Element, in conjunction with other principal comprehensive plan elements (e.g., Land Use and Capital Facilities), is consistent with and provides direction and specific actions that forward many of the *goals and objectives* in the "Economic Development Strategy" of the 1996 Overall Economic Development Plan prepared by the Benton-Franklin Economic Development District.

Regional Context

The county is a "regional service provider" in fact, as well as by intent (see Vision above). As required by state planning law, the focus within this Element is on "regional" and even global economic issues (see Chapter 1, for "Scope of Plan" re: global considerations).

Notwithstanding the local effects of the Hanford Site, the regional focus is a natural one for this county. The local and regional history (the custom and culture) has been one of resource based commodities trade (fisheries, fur, livestock, agriculture, minerals, and hydroelectric power), and related regional road, water, and rail, transportation.

In the main, the custom and culture is the same today, except that some technologies have evolved into their own industries (e.g., irrigation systems and technology), and productivity has

increased. The transportation systems that move these products have also undergone changes in technology and scale; they now serve global markets.

Within the last decade there have been local economic spin-offs (e.g., agri-tourism) from these traditional economic activities, and new regional economies (visitor serving commercial and recreation), which have expanded economic opportunities locally.

Most recently, the current mission on the Hanford Site offers new economic opportunities that simply did not exist under the old mission which lasted from 1943 to 1989. However, due to the unpredictable tenure and nature of the current federal administration of the Hanford Site, there is at present a lack of clarity relative to the timing of these opportunities, as they would effect county lands and economic activities in the short and medium terms.

Summary Of Economic Development Priorities

Items 1 through 9 on the following pages are currently the highest priorities for the commitment of county resources toward the objective of economic growth and development.

Though the items are shown as discrete economic activities, many in fact are naturally interrelated. For example, "agriculture", "agri-tourism",

and "visitor serving recreational and commercial" are mutually supportive and related, especially when located in the same geographic area of the county (e.g., the Tapteal Greenway and Red Mountain Wineries). These symbiotic relationships should be identified, facilitated, and encouraged for economic growth.

Each of the priorities listed is a "regional" activity. For example, vineyards and wineries dot the regional landscape of Benton, Franklin and Yakima counties; therefore the construction of a Viticulture Center within Benton County to showcase regional wines and wineries would be an appropriate project for County involvement.

All the priorities listed below should be pursued simultaneously, with the overall level of effort allocated to each at any point in time being a reflection of its timeliness and cost/benefit outlook. For example, the local opportunities and demands of an expanding rail and waterborne transportation system for global commerce, and linked to area agricultural commodities, is currently significant and will likely continue to increase, i.e., the opportunities are now.

Conversely, Vernita Terrace recreational access and the "B" Reactor Museum are issues just emerging. They are not yet "ripe" for a major effort, but sufficient effort must

be steadily applied for them to move forward until they are ripe.

Where appropriate, "partnering" with local jurisdictions, and other private, public, and governmental entities for planning, public processes, and financing capital improvements is preferred.

1) Commodities, Trade, and Transport

Engage other public entities (e.g., the State of Washington, the federal government re: Hanford and the Columbia River, and local Port and Utility Districts) in planning for the provision of land and infrastructure capacities that anticipate the expanding demands of commerce, trade, and transport.

Locations: Opportunities for enhancing local employment through this economic sector exist in:

- the south Finley industrial area (discussion of Finley Industrial area in Chapters 4 and 5);
- the southern plain area of the Hanford Site within and north of the City of Richland

2) Agriculture, Processing And Value Added Industries

Assure through coordination with other public entities (e.g., the State of Washington, the federal government re: Hanford and the Columbia River, and local Port and Utility Districts), that the complex of

land and infrastructure resources necessary to support the expanding demands for agricultural products and food processing and value added industries exists. Essential components are all season farm to market roads, utilities service, and multi-modal transportation access to processing, shipping and storage areas; water resources for irrigation and processing, and industrial waste disposal facilities.

Locations: Opportunities to meet these needs exist in:

- Prosser and Finley industrial areas, (see Chapters 4 and 5)
- The north Richland area into Hanford

Locational requirements that can be integrated with those of Priority #1 above should be fully maximized.

3) Agri-tourism

Work with agricultural and related interests whose focus is on visitors and tourism (e.g., specialty retail, wineries, breweries, bed and breakfasts, farmers markets, etc.) to assure that zoning, development standards, and improved road access facilitate such activities.

Locations: Commercial agriculture in Benton County is ubiquitous over the landscape; any farmer or resident may seek to engage in agri-tourism enterprises. There are however locations that provide

notable opportunities because of such considerations as location and the stated intent of the farmers to engage in agri-tourism. These are:

- the Prosser area, Wine Country Road and Wittkopf Loop;
- east of Benton City, in the Red Mountain vineyards and wineries;
- south Finley vineyards and orchards (once access via the intertie is provided);
- Paterson area vineyards and wineries.

4) Visitor Serving Recreation And Commercial

Develop county owned recreational lands and facilities, and implement recreational plans of the Comprehensive Plan, which will improve the quality of life for local residents, and "spin-off" economic benefits to the local community from the regional visitor serving and recreational economic sectors. Integrate and connect county facilities with those of the cities, e.g., Rivershore Enhancement and the Taptéal Greenway.

Locations: Along over 100 miles of shoreline extending from Vernita bridge on the Columbia and Benton City on the Yakima to Hover Park in south Finley and further down river to Plymouth in south Benton County:

- the Taptéal Greenway in the lower Yakima River has the

potential to connect Columbia Point to Benton City and Red Mountain via West Richland and Horn Rapids County Park (see discussion of the Taptéal Greenway in Chapter 6).

- Hover Park in South Finley, with Intertie access, could bring visitors to south Finley orchards and vineyards;
- at Two Rivers Park in Finley;
- at Vernita Terrace and through the Hanford Reach (Hanford Reach Protection and Management Plan)
- an island partially owned by the Port of Kennewick off the rural community of Plymouth in south county;
- on lands zoned Agriculture and Rural for such as Resort Destinations and guest ranches.

5) Industrial Development

Work with the Port and Utility Districts, Washington State Department of Transportation, and owners of industrially zoned land to provide lands zoned for industrial uses with transportation access and power (gas and electric). Work with municipalities or the state and local Health Districts to provide water and waste treatment capabilities sufficient to render industrial zoned lands marketable for industrial uses. Notable locations of such lands in the unincorporated county are:

- on all agriculturally zoned lands

for agri-related industries (Chapter 5, Agricultural Lands);

- over 1280 acres of industrial zoned lands in south Finley (Chapter 5, Finley Rural Planning Area);
- approximately 85 acres of industrial zoned land at the I-82/Badger Road Interchange (Chapter 5, Red Mountain Rural Planning Area);
- 1453 acres of industrial zoned land at Plymouth in the south county (Chapter 5, Paterson-Plymouth Rural Planning Areas);
- 260 acres of industrial zoned land at Paterson in the south county (Chapter 5, Paterson-Plymouth Rural Planning Areas);

6) Agricultural Water Resources

Maintain a primary role in the preparation and implementation of the Yakima Watershed Plan, work with agricultural interests to define future water needs, work with the broad range of water using interests to identify and obtain additional supplies and improve water quality for all uses (see discussion on agricultural water resources, Chapters 4 and 5).

Locations: The geographic areas within which this effort should be pursued are as follows:

- Basin-wide in conjunction with Yakima and Kittitas counties;
- Within Benton County for those

water supply/quality objectives which can be accomplished unilaterally;

- On the Hanford Site regarding pre-Hanford water rights, as well as potential use of the existing functional water pumping and delivery systems previously used for production reactors.

7) Hanford Site Industrial & Medical Energy, national defense and nuclear medicine are among the opportunities and emerging issues on the Hanford Site:

Locations: Within the Industrial and Research & Development Zones of the Hanford Site, anchored by existing rail, road, energy and nuclear infrastructure:

- Medical isotope production by the FFTF in the Hanford Site's 400 Area;
- Tritium production for nuclear weapons triggering devices at FFTF;
- Hanford Energy Park, the Port of Benton has an MOU with local PUDs, the REA, City of Richland, Benton County and WPPSS to develop an industrial energy park in the Industrial zone of the Hanford Site.

8) Resource Use at Sustainable Levels

Coordinate with local jurisdictions and state and federal resource agencies

to manage and conserve natural and biological resources at sustainable levels in order that local economic growth be sustained. This requires that it be based on a broad array of sustained resources:

Locations: Generally within land features identified as "critical areas" (Chapter 4), but also relating to resource issues which transcend specific areas, such as ground and surface waters, air quality, and species survival:

- Along the main-stems and tributaries of the Yakima and Columbia Rivers and their associated riverine wetlands and near-shore uplands;
- Within the Hanford Reach and on the Hanford Site which combined represent a biological resources "bank" within Benton County;
- Within Benton County's jurisdictional portion of the Yakima River watershed relative to conservation of ground and surface waters.

9) Law and Justice

The quality of life and economic growth of an area are fundamentally influenced by the actual conditions and perception of public safety and welfare. These perceptions are held by residents, visitors, and prospective new business and industry. The documented shortfall of facilities and overcrowded conditions at the county

jail and court are not favorable to economic growth. Additionally, the extended utilization of local government energy and resources in the effort to remedy these conditions detracts from the more productive pursuits of economic growth and prosperity. This condition requires action and closure.

Locations: At the County Justice Center in Kennewick.

- Undertake the capital projects necessary to expand the county jail and court facilities sufficiently to accommodate existing and future demands.

Existing Conditions

In order to focus with clarity on the future, it is essential that the "past," as the basis of the current condition, be known.

In large measure, current trends at the regional level indicate growth and resurgence of the region's historic economies (agriculture and food processing, water and rail transportation for commerce).

Additional trends that are related to historic activities and the natural resource base of this area are agri-tourism, anchored by an emerging viticulture (wine), industry and specialty crop farming and retailing; visitor serving commercial and recreational activities, with the center attractions being the riverine environments at the confluence of the Snake, Columbia and Yakima Rivers in

the Tri-Cities.

The trend on the Hanford Site is to open the site for a much broader range of uses and activities than what was permitted under the old Cold War mission of weapons grade plutonium production, which ended in 1989.

A presentation of the history of the County's economic foundations of natural resource trade and commerce as it has evolved, and as it may be applicable to emerging economic opportunities and trends in Benton County and the region, occurs in the Land Use Element (Chapter 4, page 4-4).

Hanford's Impact On Today's Economy

The economic base of Benton County prior to the establishment of Hanford in 1943 was "uni-modal", i.e., it was almost singularly based upon agriculture. This was not atypical for the times, most if not all local and regional economies during the nation's westward expansion began with a relatively singular reliance upon an indigenous natural resource; the fur trade mining, agriculture, river transit, etc. However, those other regional economies which thrived and are vibrant and growing today, typically evolved over time to more diverse and complex socioeconomic environments with integrated melds of light and heavy industrial sectors, commercial retail, service, science, education, entertainment, banking/finance and insurance, tourism, retail, research and development etc. This was generally accomplished by successive

generations of small and family business enterprises who invested and stayed committed to an area because they had some assurance of the continuity of growth and stability. Eventually the aggregate of such enterprise forms a platform from which an economy diversifies and expands beyond its locality.

Hanford Nuclear Reservation

The establishment of the Hanford Reservation in 1943, just a decade or so after irrigation and reclamation district water began to make a difference in farming profitability, instantly transformed the local economy from uni-modal to "bi-modal," i.e., agriculture outside the site, and defense related construction and activities on the site.

At first glance, this instant transformation to a bi-modal economy in 1943 would appear to be a real "pump primer" for the more complex and diversified urban economies that naturally grow out of resource based communities. However, the reality is that the circumstances of the development of the Hanford Reservation, such as the secret and hazardous nature of its federal projects, the non-exportability and limited marketability of its product, its transient work force, chaotically inflating and deflating funding cycles, and the high wage and benefits scale of Hanford workers relative to private sector employment, actually served to discourage local private sector investment (not

dependent on Hanford), for other than housing and retail/service.

Consequently, for the almost 50 years of Hanford's nuclear defense mission, the non-farm leg of the local economy did not grow much beyond its narrow beginnings as a federally funded public works project with its off-site "bedroom" communities and a service sector. The typically gradual processes whereby urban communities weave a rich and stable socio-economic fabric did not occur in the non-farm sector during the Cold War years.

This situation remained until the cataclysmic dissolution of the USSR and the end of the Cold War in the late 1980s made the old Hanford defense mission an anachronism. The end of the Cold War enabled a new mission of cleanup of the Hanford Site. The new mission of waste cleanup is fundamentally different in scope, purpose and effect. It is pursued openly; its challenges drive new science and technologies that potentially will be in demand and marketable worldwide.

With the veil of secrecy lifted from the Site, its resources and infrastructure can be considered as opportunities. Its legacy of waste has in effect become a mine-able resource. The lines of a discernable weave, perhaps the beginnings of the rich socio-economic fabric similar to other communities, have begun to emerge from the historically stark patina of the

area's non-farm economic base. This is not to say that the strains on the local economy from Hanford are gone. For example, a Hanford work force of approximately 12,000 in 1990 ballooned to 18,100 workers in 1994. This accounted for 19.5% of Tri-Cities employment and 38% of all payroll income in the Tri-Cities (SWOT, 1996). Economic pressures on the non-Hanford (employed) local population become extreme: housing prices soared at the second highest rate in the nation, vacancy rates were at zero, new housing construction was at the high market end; schools became over crowded; prices soared. The medium income of Benton County was the second highest in the state, behind only the Boeing and Micro-soft driven areas of the Puget Sound. At the same time, a large indigenous population lives at the low and poverty income levels.

Beginning in 1995, a reverse trend occurred: the Hanford work force was precipitously cut to 13,500. In early 1997 it is 12,269 (10,089 on-site and 2180 in enterprise companies off-site). Hanford employment is likely to decline further in the near future.

There are however recent events which though portending a gradual reduction in the Hanford work force over time, do also provide reason to expect a stable rather than chaotic decline. Principal among these is the Tri-Party Agreement (TPA). Signed in its original form in 1989 by the State of Washington, the Environmental Protection Agency and the U.S. Department of Energy, it has been

amended numerous times. This document sets forth Site cleanup objectives, projects and milestones, which if funded by congress annually, do extend but gradually reduce Hanford employment levels as cleanup is achieved over time.

The Contemporary Farm Economy

"Agriculture is an immensely important segment of the Tri-Cities economy. It employs many workers and generates a large payroll. The number of jobs in the sector has been growing every year. In 1999 there were approximately 10,409 workers (8,701 in crop production, 1,708 in livestock or services). Approximately 52 percent of these were employed in Benton County and 42 percent in Franklin County" (Tri-Cities Profile, WA State 4/99).

"Jobs in food processing have increased over the last year and growth in wine production has also provided new jobs throughout the area", reported Dean Schau Regional Labor Economist, TriCity Herald, June 2006. In 2003, the fastest growth rates in all industries were the following:

Fastest Growth in Employment

Healthcare	52.9%
Wineries	45.9%
Professional & Technical	41.9%
Entertainment	39.7%
Finance & Insurance	29.1%
Construction	24.3%

The growth trends in the agricultural sector are likely to continue. The end of the Cold War has also enabled the international community to refocus its resources and aggressive energies

from a preoccupation with ideological and military confrontation, to economic enterprise, trade, and growth.

As a result, the local and regional farm economy has enjoyed an unprecedented growth of global markets during the 1990s. Locally irrigated acreage within the county has expanded significantly and continues to expand (estimated between 20,000 and 40,000 acres since 1985, with the bulk of that occurring in the 1990s).

New specialty crop plantings have increased, along with innovations in harvesting, storage and transport. Viticulture and agri-tourism are emerging as new players in the agricultural economy. New value added processing plants, as well as cold storage and transport facilities have been constructed.

Both the county and its farm products are advantageously situated to serve expanding and potentially huge Asian markets (a more complete discussion of agriculture in Benton County occurs in Chapter 4).

Current Economic Base and Condition

General

"The Tri City area has a fundamentally strong economy supported primarily by agriculture, food processing, and related industry on one hand and government related industry on the other. While the nuclear work at Hanford continues to fluctuate in the

midst of some downsizing, the project is a long-range effort that will employ substantial amounts of people for years to come. Agriculture is growing at a fast rate with employment increasing each year. The trade and services sectors are large and growing; construction has recently taken a sharp upturn; and the government sector has a large and stable work force. Along with a good infrastructure of plants and irrigation, the area has ports on the Columbia River with access to the Pacific Rim, as well as an excellent rail system" (Tri-Cities Profile 1997 & 2001).

State and Regional Growth

The Pacific Northwest region of the country is experiencing rapid growth of population and economy. The state of Washington is growing at 100,000 persons per year and is projected to continue that pace. Eastern Washington communities from Yakima to the Tri-Cities, Moses Lake, Othello and Spokane are experiencing high levels of growth. Regionally, the farm economy has been very strong, with steady increases in "farm gate" and "value added" dollars, as well as employment numbers.

Table 7.0 following, presents population and economic indicators in Benton County and adjacent eastern Washington counties. Major increases have occurred in all of the counties in the 1990's, Benton and Franklin Counties standout.

The Non-Farm Economic Sector Remains Too Dependent On Hanford

In spite of the above optimistic outlook regionally in the eastern Washington area, there is an urgent need to reduce significantly the local non-farm economy's critical dependence upon federally funded Hanford projects. This must be done before those projects begin to wind down as cleanup milestones are completed, or before congressional budgetary considerations negatively affect project outlays. The current optimistic outlook for the local non-farm economy assumes a relatively stable projected Hanford budget of 1+ billion dollars/year for 10 years. However, the Hanford payroll is likely to continue a steady decline "as a consequence of reduction in overall government procurement and operations" (SWOT). Meaningful strides toward a diversified local economy, independent of federal budgets for Hanford, must be made within the time frame identified above wherein relatively stable levels of Hanford program funding are most probable - but never assured.

7.0 POPULATION GROWTH AND ECONOMIC INDICATORS

County	Population ¹			Civilian Labor Force ² (in thousands)			Housing Units ¹		
	1990	2000	2005	1990	2000	2005	1990	2000	2005
Benton	112,560	142,475	158,100	60.9	76.3	90.3	44,877	55,963	62,897
Franklin	37,473	49,347	60,500	19.0	23.0	28.5	13,664	16,084	20,313
Grant	54,798	74,698	79,100	27.0	35.7	38.6	22,807	25,204	31,453
Yakima	188,823	222,581	229,300	102.3	113.4	119.5	70,861	73,993	82,748

A Lack of Economic Diversity/ A Need For Industry "Clusters"

"The reduction of federal support will force a shift in the Tri-Cities toward an economy comprised of more private enterprise than the region has today. As the Tri-Cities undergoes this inevitable transformation, the regional economy is likely to first contract, and then level off to a smaller overall size. The challenge to regional leaders and stakeholders is to redefine their vision of the Tri-Cities economy and accelerate the transition to a more diverse and sustainable future" (SWOT: *The Tri-*

Cities' Challenge, a Strategy for Economic Transformation, Strengths, Weaknesses, Opportunities, Threats;

DRI/McGraw Hill, Feb. 15, 1996).

A strategy of the SWOT analysis is that healthy economies are characterized by "clusters" of related industries within a defined region, wherein "each cluster relies on a wide range of regional resources such as training, financing, technology, and communications". SWOT notes that successful clustering occurs in regions where local and private institutions supply "economic infrastructure" resources to their industries in ways which can create competitive advantages.

SWOT notes that by harnessing its regional assets, the Tri-Cities has the potential to develop in six strategic directions (cluster development areas)

¹ Washington State Office of Financial Management

² Washington State Employment Security Department

with strong projected growth in U.S. output. These are:

- Environmental Services Equipment and Resources.
 - Computer and Information Technology
 - Energy and Energy Systems
 - Advanced Materials
 - Medical Technology
 - Agri-business and Food Processing
- SWOT indicates that the above cluster development areas build primarily on three existing clusters within the Tri-Cities region, which are:
- Agriculture and food processing
 - Energy, Environmental Engineering and R&D
 - Specialty Metals

SWOT notes that "most of the six development areas that represent the future economy are technology driven clusters selected as strategic directions because of the unique competencies identified at Hanford."

It would appear that of the six development areas, the one with the least direct connection to "Hanford competencies" is that of Agri-business and food processing, though even here there are potential opportunities for beneficial technology transfer from Hanford, given that the increasing productivity of modern agri-business from soil preparation and irrigation through harvesting, processing, and shipping is science and technology driven.

To this point in time however, the agri-business and food service cluster within Benton County and the region has prospered and grown absent significant contributions of science and technology from Hanford, and in the main is likely to continue to do so as long as market conditions favor growth. There are however, a few subject areas currently identifiable where Hanford techno-science capabilities may be useful to regional agriculture, such as in hydrogeology (groundwater monitoring and characterizations)

Agriculture -Food Processing Cluster is the only Viable Cluster Today

SWOT notes that within the region "the agri-business and Food Products Cluster is the only sizeable industry cluster that currently exists in the Tri-Cities region." The other two existing clusters (Energy and Environmental Engineering and R&D and Specialty Metals) are underdeveloped and not independent of Hanford.

The County's Role In Economic Development and Diversification

The county's role is identified in its vision and policy statements at the top of this chapter, it promotes economic development by providing basic regional services and infrastructure, where such provisions will promote economic development, public health and welfare, and environmental quality. The Economic Development Policies and the project related actions in Chapter 3 of the Plan are the bridge that connects the

county's vision to the local and regional economic assets, resources, and activities that are managed and applied by the Benton County residents and business interests.

Planning And Infrastructure

Though the range of regional service responsibilities of the county is broad (See Chapter 9), within the context of economic development, the principal responsibilities are:

- long range planning,
- productive coordination with other jurisdictions and interests, and
- the provision and/or operation, and maintenance of infrastructure necessary to support the current economic base and provide competitive advantages to attract new economic growth.

Depending upon the circumstance, the county may fulfill these responsibilities unilaterally, or in partnership with other entities such as the Port Districts, private industry and business, the state, other local and regional political jurisdictions, etc. For any given issue or project, the county's contribution may range from direct capital expenditures to in-kind services, to coordination, integration and facilitation.

TRANSPORTATION ELEMENT

CHAPTER 8

INTRODUCTION

The Transportation Element of the Comprehensive Plan describes the existing condition of the transportation network, and sets forth policies and objectives, which integrate the network functionally with the Land Use Map of the Comprehensive Plan. The Chapter also sets forth performance standards (levels of service) for county roads which play a major role within the transportation network.

This Element includes those items required under R.C.W. 36.70A.070 (6), which describes a Transportation Element as one of six required elements in a GMA Comprehensive Plan for a county.

Transportation systems in Benton County form a multi modal network that provides for the movement of people and goods locally. The systems connect to regional, national and international systems. Transportation systems which comprise the local network are: road, rail, air, water-borne, transit, and non-motorized (bicycle, pedestrian).

Efficient transportation links to regional, national, and global markets are essential to the maintenance and growth of the county's economic base. Additionally, the ease with which people can move throughout the county is an important factor in its desirability as a place to live.

GMA Planning Goals

RCW 36.70A.020 provides goals to guide local governments in the preparation and adoption of comprehensive plans. Below are two of those goals which relate directly to the Transportation Element:

Transportation - Encourage an efficient multi-modal transportation network that is based on regional priorities and coordinated with county and city comprehensive plans.

Public Facilities and Services - Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

Minimum GMA Requirements for the Transportation Element

RCW 36.70A.070 (6) states that planning jurisdictions must have a transportation element that implements and is consistent with the land use element. The transportation element shall include the following sub-elements:

a) Land use assumptions used in estimating travel (*county land uses are primarily rural and agricultural, such uses generate new traffic*)

demands only gradually; major increases in traffic generators from new localized sources are unknown; future volume estimates are accomplished by projecting percentage increases over time -see LOS Table 8-1 in the appendix).

b) Facilities and service needs, including;

(i) Inventory of air, water and land transportation facilities and services, including transit alignments, to define existing capital facilities and travel levels as a basis for future planning.

(ii) Regionally coordinated level of service standards for all arterial and transit routes to serve as a gauge to judge performance of the system.

(iii) Identification of specific actions and requirements for bringing into compliance any facilities and services that are below an established level of service standard (*currently all roadways with designated Levels Of Service are operating within that level*).

(iv) Forecast of traffic for a least ten years based on the adopted land use plan to provide information on the location, timing, and capacity needs of future growth (see a above).

(v) Identification of system expansion needs and transportation system management needs to meet current and future demands (see *Transportation Plan Maps for each Planning Region, this chapter*);

c) Finance -

(i) Analysis of funding capability to judge needs against probable

funding resources (see *current Six Year Road Program*);

(ii) Multi-year financing plan based on the needs identified in the comprehensive plan; the appropriate parts of which shall serve as the basis for the six-year street, road or transit program required by RCW 35.77.010 for cities, and RCW 35.81.121 for counties and RCW 35.58.2795 for public transportation systems;

(iii) If probable funding falls short of meeting identified needs, a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that level of service standards will be met;

d) Intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions (see *Benton Franklin Regional Council Metropolitan Transportation Plan*).

e) Demand management strategies (*not applicable to the County Plan*).

f) State Transportation Level of Service Mandates -

(i) Estimate traffic impacts to state owned transportation facilities resulting from land use assumptions in order to assist the Washington State Department of Transportation (WSDOT) in monitoring the performance of state facilities, planning for improvements, and assessing the impact of local land use decisions on state-owned facilities.

(ii) State-owned transportation

facilities (highways of statewide significance) inventory must be included in the plan.

REGIONAL TRANSPORTATION PLANS

The Benton-Franklin Council of Governments (BFCG) is the lead agency for both the Tri-Cities Metropolitan Planning Organization (MPO) and the Benton Franklin-Walla Walla Regional Transportation Planning Organization (RTPO). As lead agency for the RTPO, the BFCG reviews each local jurisdiction's land use and transportation elements of their comprehensive plans to certify each plan is in conformity with the transportation provisions of the GMA and consistent with the regional transportation plan, in accordance with GMA transportation planning requirements.

The Regional Transportation Plan (RTP) 2006-2025, was adopted in November 2006. The RTP is a comprehensive transportation plan that combines the review of urban and rural areas; provides a comprehensive vision of the entire region; and meets both the planning requirements of the Growth Management Act (GMA) and the federal requirements of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and other state and federal programs. The RTP coordinates the region's diverse transportation systems to support anticipated growth; identify and document system deficiencies and provide regional strategies for the

maintenance and preservation of those systems; and prioritizes and identifies funding for existing and future projects and needs.

The RTP guides multi-modal transportation planning and programming decisions for the future of the region. The Plan establishes consistency with jurisdictional six-year Transportation Improvement Programs (TIPs) and the MPO/RTPO six year TIP; the land use and transportation elements of city and county comprehensive plans; and the Washington Transportation Plan. The RTP includes a 20-year list of projected improvements to the county road system and a financial analysis based on county road revenues over the past ten-year period.

The "Regional Bicycle and Pedestrian Transportation Plan for Benton, Franklin, and Walla Walla Counties and the Tri-Cities Urban Area" was adopted by the BFRC in November 2005. This document contains bicycle and pedestrian policies and regulations, system maps with preferred routes, facility design and standards, state, federal, and local funding sources, jurisdiction project lists, and a discussion of bicycle and pedestrian safety.

In addition to these regional plans the Benton County Comprehensive Plan includes goals, policies, and actions relevant to the development of bicycle and pedestrian facilities within the County in Chapter Three, Plan

Goals and Policies and Chapter Six, the Parks and Recreation Element. These goals and polices endorse the development of bicycle and pedestrian facilities and provide a public participation program for public involvement in the process. Chapter Six, the Parks and Recreation Element also contains a map of existing and proposed trails.

Levels Of Service (LOS)

"LOS" is the standard of operating efficiency which the local government identifies as appropriate for a service system. As a tool, "LOS" standards can be applied to all public service systems; e.g., municipal water systems, sewer collection and processing systems, students per classroom, acres of park land per unit of population, etc. GMA requires the use of LOS only for road transportation systems. In Benton County, LOSs are applied to roadways designated as "major collectors, and arterials".

The county can apply Levels of Service for its public roads ranging from "A" (free-flow traffic without delays), through "F" (congestion and gridlock). Level "C" represents an efficient flow of traffic without delays related to volume and congestion.

Determinants Of The LOS At Which A Roadway Is Operating

On any section of roadway, the actual volume of traffic measured against the roadway's capacity to carry that volume (i.e., volume over capacity, or V/C) at a defined level of

efficiency (rate of flow), is its LOS.

Traffic volume is measured as "Average Daily Traffic" (ADT) and "Peak Hour Traffic" (PHT). PHT is measured during the "peak (volume) hours" of each daily commuter period, which occur between 7:00 and 8:00 a.m. and 4:30 to 6:00 p.m.). PHT is usually about 10. percent of ADT, except during the Christmas shopping season, or special events (e.g., the Columbia Cup Boat Race) when the LOS of a roadway is typically exceeded.

There are numerous ways to measure the efficiency of a roadway's rate of flow. On urban roadways, which carry heavy traffic volumes, the rate of flow may be measured by the jurisdiction as the "travel time" between points on a roadway; or the standard of measurement may be related to "delay times" at signalized intersection; or simply whether or not traffic actually moves at the posted rate of speed.

For any volume of traffic, the LOS is invariably a function of roadway geometrics including the width and number of travel lanes; the nature of road shoulders; the quality of the roadway surface; the number of stops and two and four way inter-sections, and access entry points onto the roadway, whether passing is allowed (i.e., solid or dashed median line) etc.

On rural roads with relatively light traffic volumes, where flow is

uncomplicated by frequent entry points and signalized intersections, sophisticated methodologies to measure LOS are not necessary.

Available Roadway Capacity

The difference between the current volume of traffic on a roadway and its capacity at the designated LOS is the remaining or **available capacity** for that section of roadway. When new demands on the service system "use up" the available capacity, new capacity must be created in order to maintain the designated LOS. Typically this is done by modifying the geometrics of the roadway. Examples of modifications are: adding a new traffic lane, turning lanes at intersections, widening shoulders, reducing the linear mileage of "no passing" zones, or eliminating points along the roadway that interrupt what would normally be good traffic flow.

Transportation Demand Management (TDM)

New capital projects are not the only way to expand the capacity of a system. Additional capacity can be obtained through "transportation demand management" strategies. Such strategies often, but not always, include incentives and/or disincentives.

Examples of TDM strategies include:

- staggered work shifts which diffuse peak traffic volume over a longer time period, which "decongests" the peak hour;
- the addition of a new bus route,

which may entice some commuters to leave their car at home or at a park and ride lot;

- designating strategically located parking their commute, or, area as "park and ride" lots;
- paying commuters to carry co-workers on their commute; or,
- charging for parking at the work site.

All these serve to either "spread" peak traffic demand over a greater number of hours, or increase the overall "vehicle occupancy rate." Both outcomes improve the V/C ratio.

LOS on State-owned Facilities

The LOS for regional highways will be set through a coordinated process through the County's RTPO, along with state, regional, and local input. The LOS for state highways of statewide significance will be set by the state in consultation with local jurisdictions, with the state having final authority to establish LOS.

In determining impacts to state owned facilities the impact portion is a calculation by the county of the future Annual Average Daily Trips or AADT's based on the land use assumptions through the build-out of the 1998 Comprehensive Plan. The State Highway Inventory Matrix shown in the Chapter 8 Appendix 8-1a, provides an inventory of state owned facilities and the 2018 AADT calculations using the land use assumptions in the Plan.

Concurrency - Pay As We Go

Under GMA, service capacity for a

new project is supposed to be available "concurrent" with the approval of a new project, or when the project is occupied. This requirement for **concurrency** is intended to prevent past situations statewide, where existing residents of communities were saddled with expensive new capital projects necessary to serve new development, but where significant portions of the expense were actually used to erase long deferred existing deficits in a service capacity. Too often, where this occurred, adverse public reaction jeopardized both the service upgrade and the proposed development.

Concurrency is supposed to prevent large deficits in capacity, thereby enabling the costs of providing new public service capacity for new development to be incremental, smaller, more precisely identified, and easier to pay for. This also enables the costs of serving new development to be borne equitably between the community and the developer according to an accounting of the benefits accruing to each from the development.

Under GMA, if the county were to designate an LOS which is actually higher (better) than that which exists under the current volume of traffic, the county would have to arrange for the completion of the capital improvement projects necessary to bring the roadway up to the designated LOS before it approves other land uses which would add to

the traffic volumes on that section of roadway. The costs of undertaking capital projects in order to erase existing deficits are not supposed to be charged against a new development; rather the existing revenue stream pays for existing service capacity deficits, while sponsors of new developments must contribute only to capital projects necessary to meet their project demands.

Concurrency Management System

The principal mechanism for review of new development impacts on designated LOS is the County's SEPA process review ordinance. Under the Benton County Code, Chapter 6.35, those projects that are not "categorically exempt" from SEPA review will address traffic generation in the SEPA Checklist, wherein project related trip generation is identified. Under the ordinance, projects that are categorically exempt are generally diminimus relative to traffic generation.

In order for the county to insure that there is available road capacity for new developments, it must coordinate with adjacent jurisdictions to make sure that traffic demands of all Land Use Maps are accurately projected, and it must design and implement a "monitoring program" which provides an ongoing assessment of the volume over capacity (V/C) conditions on individual sections of road. In this way, planning and funding of capital projects necessary to meet projected

demands can occur in advance, or "concurrently" with the demands.

The **County Public Works Department** and the **Benton-Franklin Regional Council** (BFRC) cooperatively conduct traffic counts on the road network to record traffic volumes over time. The data from these recordings is factored into the annual update of the Six Year Road Program, which identifies capital projects to be carried out in the near term.

The "condition" of roadways is also monitored to assess their surface and bed condition, and to indicate where the condition of a road is not sufficient to carry existing and projected volumes, as well as the volumes that would occur at the designated LOS. This data is also factored into the Six Year Road Program.

The LOS For A Roadway Should Reflect The Projected Demands Of The Land Use Map

GMA requires that LOS for circulation systems be adopted within the Transportation Element, and that the traffic volumes and flows generated from the aggregate of the land uses and densities of the Land Use Map be supported within that LOS.

Planning jurisdictions must show in the Transportation Element how they intend to fund and construct the capital projects necessary to maintain the LOS as the land uses and densities on the Land Use Map become a reality on the ground.

If LOS Cannot Be Maintained, The Land Use Map Should Be Amended To Affect Lower Transportation Demands

If the LOS cannot be maintained in the face of increasing demands, the land uses and densities on the Land Use Map of the comprehensive plan must be revisited to assess whether they are realistic in light of the ability to capitalize the construction of improvements needed to serve them at the designated LOS. An alternative to amending land uses or densities would be to lower the LOS.

There Are Consequences Associated With the Selected LOS

Designating appropriate LOS(s) is of fundamental importance for numerous reasons, including the following:

- Inherent within the selection of an LOS is the establishment of qualitative values; i.e., when the LOS on a particular section of roadway is reached, the conditions along that roadway will be tangible and observable. For example, there will be a rate of flow and level of convenience experienced by the driver, who depending upon how efficiently he/she moves along the road, will be either pleased or irritated. For residents or businesses occupying the lands adjacent to the roadway, there will be a quality of living and/or working environment influenced in large measure by the traffic volume and its rate of flow;

- Inherent within the selection of an LOS are quantitative commitments; e.g., designating a section of roadway which serves a growth area with a LOS of "A" for qualitative reasons (e.g., to protect a residential environment), will require a greater expenditure of capital funds over time, than would a LOS of "C."
- Selecting and maintaining a LOS requires citizens and decision-makers to deliberate over density, land use, and design considerations. For example, selecting a LOS of "C" on a travel corridor intended as a major arterial requires considerations such as frequency of intersection, use of frontage roads, maximum densities, and types of land uses.

On Major Collectors And Minor Arterials Outside of The UGA, The County Designates A LOS "C" At A specified "Average Rate Of Speed" (C/xxmph)

Only "major collectors" and "minor arterials" in unincorporated Benton County have designated LOSs.

The designated LOS is "C." LOS "C" is defined as: a condition where the "average rate of speed" between any two points on the roadway which are one mile apart, is equal to the posted speed limit. The intent of this standard is that the streams of traffic flow remain uninterrupted, even at peak hours, by congestion or delays related to traffic volume and road

configuration.

Unless specified otherwise in Table 8-1 of the Appendix, the average rate of speed for LOS "C" on major collectors is a minimum of 50 miles per hour (mph).

LOS "C" must be maintained except where the following circumstances occur:

- special events temporarily raise traffic levels to levels exceeding the designated LOS.
- wherever a major collector is a travel corridor through an Urban Growth Area or City Boundary, or connects with a state Arterial, and the LOS of the travel corridor (on the urban side), or the Arterial is lower than "C", then the LOS on the Collector for a distance of one mile in any direction is the same as the lower LOS.
- within Urban Growth Areas which are not unincorporated islands, the LOS of the appropriate municipality prevails, if it is lower than level "C."
- in unincorporated islands the LOS(s) is that of the surrounding jurisdiction.

Current LOS On County Roads

Outside of unincorporated islands the current LOS on major collectors is higher than "C." This being the case, all major collectors currently have available capacity.

Table 8-1, in the Appendix, shows the current volumes of traffic over major

collectors, the designated LOS, and the ten-year projected traffic volumes for each collector.

Roads: Existing Conditions

Within and around its Metropolitan Planning Area (Kennewick, Richland, West Richland), the road system within Benton County is well developed with interstates, state highways, collectors, and local access routes. The system "thins out" and may be considered to provide less than convenient access to some of the outlying rural areas, such as Finley and in areas in the south county. However in large measure, road access for rural and agricultural areas is good and improving.

Peak hour congestion problems do exist within the urban areas, notably on routes such as SR-240 and George Washington Way used by Hanford Site commuters, and on Columbia Center Boulevard related to the Columbia Center Commercial Retail complex in Kennewick.

However congestion problems are absent on county roads serving rural or agricultural areas; existing LOS is "B" or higher. Generally, principle road concerns in rural areas are "all weather" access for agricultural product transport, and more direct "farm to market" routes for agricultural products.

Functional Classifications For The Road System Of Benton County

At its beginning and end, the essential function of any road system is to serve

land uses: people or goods use the system to go from one land use to another. Within the local system, roads can generally be classified as having one of three principle functions, depending upon their location and design. These functional systems are described below. Combined, the three functional classifications constitute a complete road system.

Functional Level 3 (local access roads)

Local roads - Their primary function is to provide direct access to individual land holdings and uses, whether they be residential, industrial or agricultural. Local roads generally lead to collectors which collect or merge the traffic from the local roads. Local roads do not have designated Levels of Service.

Minor Collectors - Their primary function is to conduct traffic "intra-county" from local roads to the major collectors and arterials. This function is often divided between movement and access to land uses. Minor collectors do not handle long thru-trips and are not continuous for any great length. Minor collectors do not have a designated LOS.

Major Collectors - Their primary function is to provide service to any county seat not on an arterial, or to towns or rural centers not served by an arterial, or to other traffic generators such as schools, shipping points, parks, important agricultural areas, etc. They

collect large volumes of traffic from access roads and minor collectors and move it to major and minor arterials and between major activity centers and traffic generators.

Access to individual holdings along the right-of-way is a secondary function to the primary purpose, and to the extent that significant access is provided, the primary function of movement is compromised. Design speed is generally 50-60 mph with a 50-mph average travelling speeds intended. Major collectors serve the volumes of traffic within areas that are not served by arterials. Major Collectors have a designated LOS of "C" in the unincorporated county outside of UGAs.

Functional Level 2 (Arterials)

State Highways/Routes and a few local routes - are minor arterials. Their primary function is as major carriers. They are woven through and fully integrated with local collectors and roads that reach beyond the local network to act as regional links, and to bridge the distances between interstate corridors, to which they provide major connections for interstate travel. They are typically all weather two lane roads with travel speeds ranging from 45 to 55mph in rural areas, but as low as 25mph through developed areas.

Depending upon circumstances, access is provided in various configurations including at-grade intersections to local access roads

and even private ingress and egress (with state granted encroachment permits). Levels Of Service (LOS) are designated by the State Department of Transportation.

Functional Level 1 (Interstate Highways)

Interstate Highways -Their primary function is to serve large volumes of high-speed traffic for long distances, often of an interstate nature. They typically have design speeds of 80 miles per hour, with enforced speed limits of 70 mph in Washington State. Access is generally provided only at spaced, grade-separated interchanges. Freeways are usually multi-lane, divided highways. They are the component of the road system which connects the regions of the nation e.g., the interstate gets a traveler or product from the local collector street in Prosser, Washington, to a residential, business, or industrial land use on a local collector street in Lincoln, Nebraska.

Map 8.0, depicts the major collectors, arterials and interstate highways in Benton County. Maps 8.1 thru 8.4 present the road and rail systems, including local public roads in each Planning Region.

CURRENT TRENDS

Under conditions of economic growth of the local farm and non-farm economies, the current trend to convert raw land for agriculture, residential, commercial and industrial land uses will continue. These

conversions engender new land uses which drive maintenance and expansion of road capacity for commuter, "farm to market," leisure, recreation, business and other vehicle trips. Transportation related land use demands ultimately manifest themselves as capital projects in the County's Six Year Road Program.

Notable current projects are a good example of how and where such demands occur, e.g., safety and capacity demands require a project to replace the Twin Bridges crossing over the Yakima River just north of West Richland, and the construction of a new rural arterial connecting the south Finley industrial area to SR-395; and to accommodate increased agricultural production a new "farm to market" connection is necessary in the southwest Horse Heaven Hills Planning Region.

An additional trend, perhaps given added impetus by population/demographic changes in the Tri-Cities and the county over the past 6-8 years, is a growing interest in non-motorized travel routes for both commuting and recreation. There is growing citizen interest in bicycle, running and equestrian trails which connect activity centers.

FUTURE CONSIDERATIONS

Future considerations regarding the maintenance and expansion of the road circulation system within the county are numerous. They range from the relatively immediate need to accomplish the projects outlined in

the County's Six Year Road Program, to the need for consistent application of transportation policy, to addressing specific needs which can be seen emerging, or have been identified by Planning Advisory Committees involved in The Plan preparation.

County Six Year Road Program

The Six-Year Road Program is the county's principal directive for "near term" capital expenditures to carry out the adopted Transportation Element as it relates to the construction of new facilities. The Program is updated annually by the County Public Works Department with each update approved by the Board of Commissioners. The purpose of the Six Year Road Program is to correlate funding sources to needed improvements and identify projects for dedicated revenues. It enables long range decision-making and helps assure the continuity of Commissioner goals and objectives, it helps to identify the impacts in future years of decisions made currently. It also identifies existing and future revenues, revenue sources, maintenance and operating costs, expenditure categories and improvements for the transportation system. The Program is coordinated with the transportation project planning of other jurisdictions through the Benton Franklin Regional Council, which is responsible for coordinating and preparing the Regional Transportation Plan.

The Benton County Public Works Department is responsible for

accomplishing the projects in its Six Year Road Program. Many projects are accomplished in phases including planning, right-of-way acquisition, and new construction of roads, trails, parking etc., and maintenance or improvement of existing facilities.

Projects included within the Six Year Program must have identified sources of funding. Under GMA, projects necessary to maintain designated LOS are a priority.

Because the Six Year Program is amended annually, it is not included as a part of this document, but it is incorporated by reference. A direct link from the Transportation Element to the Six Year Program is that any project for the construction of a new road or trail alignment which appears in the Six Year Program must be in the adopted Transportation Element.

Coordinating Land & Use Transportation At The Planning And Project Level

Policy need - as a matter of policy, capital project planning, design and construction for roads should be consistent with, and driven by, the land use designations on the 20 year Land Use Map and community design preferences as expressed in the Rural Element (e.g., in rural southwest Finley, where low density residential and agriculture are likely to be long term uses, citizens want "rural" roads with trails alongside).

However, acquisition of right-of-way should look beyond the 20 year

horizon in areas where it is logical that the long term outlook for land uses and densities is one of greater intensity than is shown on the current Land Use Map (e.g., to the south of Kennewick in the Locust Grove interchange area and in northeast Finley north of SR-397 where the attractions of the river for residential and recreation use encourage intensification of land uses).

Considerations - GMA recognizes that in order to "sustain" development and community, the land use designations over the entire landscape emanating out from an urban area have to be more than just "interim" designations awaiting conversion to low density residential and other related more intense uses. Rather, an underlying principle is that certain land use designations on the Land Use Map, e.g., Rural, Agricultural, Recreation, and Open space/Wildlife, have enduring importance and value to the local and regional socio-economic fabric. Accordingly, public projects, such as road planning and construction, should deliberately consider, protect and nurture those values in order to minimize the tensions which exist between them.

Actions - There is a need for the Planning, Public Works, and where appropriate, Facilities Departments within the county to become cooperatively pro-active and "target," for the Board of Commissioners a selection of capital projects to serve the community. Where appropriate,

port districts should be involved in planning and funding of projects. Potential targets include:

- construction and improvement of "farm to market" roads as agriculture continues to expand within the county;
- anticipation and/or promotion of increased industrialization in specific Planning Areas, with transportation facilities planned to accommodate-facilitate;
- development of the Horn Rapids Park Master Plan, beginning with basic transportation related infrastructure such as access/parking, trails, boat launch, power, water, and sanitary improvements (park should first be surveyed for historical and archaeological constraints);
- participation in acquisitions and construction of Tapteal Greenway project elements as well as trails planning and construction as per the Bikeway/trails system as adopted herein as part of the Element;
- initiation of discussions with federal and state agencies regarding increased recreational access on public lands and waters including the Hanford Site;
- exploration of the need and potential sites for a county land fill or transfer station to reduce illegal dumping along county

roads;

- refinement of the transportation plan (including all modes of transport) for the Finley Rural community as an adjunct to the current "intertie" project planning, and including trail/bike path and rail line considerations;

Regional Rail System

Existing conditions

Freight rail service to the Tri-Cities and Benton County, as well as surrounding counties is provided by Union Pacific and Burlington Northern & Santa Fe Railroads as shown on Map 8-0.

The Tri-Cities area is one of the few areas between the Rockies and the Cascade Range to be linked by as many carriers. Through this area moves vast tonnages of export and import products associated with seaports on both the Pacific and Atlantic coasts. Major quantities of agricultural products from the mid-west and the Pacific Northwest are transported to the Puget Sound and Portland area for transshipment to Pacific Rim countries.

Passenger Rail Service: Rail passenger service is at Amtrak facilities at Pasco in Franklin County. Connections from Pasco are Spokane and Portland.

Hanford Rail Line: A short rail line operated by the U.S. Department of Energy runs off the Union Pacific tracks southeast of the Richland "Wye" and

extends into the Hanford Site, where it services the various Hanford facilities spread across the site. Portions of this line are no longer in service, nor are they maintained. However, the old right-of-way does extend through the site to exit at its northwest corner.

Current Trends

The current trend is for the expansion of rail transport service through the Tri-Cities and Benton County area. There is a proposal from Burlington Northern & Santa Fe to add a new line into the Finley area where an expanding light and heavy industrial base exists.

The expansion of rail service and capacity is in response to major changes including technical innovations relating to the amount of freight which can be carried on rail (double decker cars), changes in the economics of truck versus rail transport as well as transcontinental shipments overland versus by ship through the Panama canal; and major expansions of the export and import markets in response to trade agreements and emerging national economies in Asia.

Future Considerations

Expansions of rail traffic and facilities are a mixed blessing, and will challenge the local jurisdictions' ability to land use plan and maintain the often delicately balanced operating efficiencies of their transportation systems. On the plus side, such expansion is an adjunct to the expansion of regional, national and global economic conditions, which

foster local and regional economic growth.

On the minus side, expanding rail facilities/use causes adverse land use, transportation and aesthetic impacts. Land use and aesthetic impacts derive from the impacts of noise, dust, and vibration, on lands along rail lines, the need for new rail related industrial sites may arise to the detriment of values on adjacent lands. Transportation impacts derive from interference with the operation of the urban and suburban road system as increased train crossings of major urban commuter and arterial routes cause delay and congestion, whereupon drivers begin to alter travel patterns, creating unanticipated demands elsewhere in the circulation system.

There is little that local jurisdictions can do to alter the flow of globally and nationally driven commerce over existing transportation systems. The effort must be to factor such expansions into land use planning and local transportation planning. New road projects must anticipate auto/rail conflicts.

Relative to the potential conflicts between rail and local auto traffic in the Tri-Cities area, there is a potential alternative route through the Hanford site upon which regional freight traffic could move, thereby avoiding potential adverse impacts to the efficiency of the road transportation

system in the Tri-Cities area. Transportation Policies in Chapter Three, Goal 27-1, policies A, B, and E, page 3-8, enable this alternative.

Air Transportation

Existing Conditions

Benton County (and the Tri-Cities) is served by four public airports as shown in TABLE 8.0.

TABLE 8.0 PUBLIC AIRPORTS SERVING BENTON COUNTY AND THE TRI-CITIES

NAME OF AIRPORT	LOCATION	CLASSIFICATION (FAA)	OWNER
Tri-Cities Airport	City of Pasco	"Air Carrier" (regional)	Port of Pasco
Richland Airport	City of Richland	"Commuter Service"	Port of Benton
Vista Field	City of Kennewick	"General Aviation"	Port of Kennewick
Prosser Airport	City of Prosser	"General Aviation"	Port of Benton

The **Tri-Cities Airport** in Pasco serves as the major air carrier airport for both Benton and Franklin Counties and is in fact a regional air facility-serving portions of seven counties in Washington and Oregon. It is one of four air carrier airports in the state, the other three being Seattle-Tacoma International Airport, Spokane International Airport and Yakima Air Terminal.

The total annual commercial passenger boardings at the Tri-Cities Airport since 1985 have fluctuated significantly from year to year, however, the trend is for steady growth. In 1985 there were 142,911 boardings, a number which has been exceeded in every subsequent year. There were 168,245 boardings in 1995, and over 240,000 boardings in 2006. The **Richland Airport** has provided

most general aviation activities including recreation flying, flight training, charter flights, air taxi service, business flying, glider operations, and skydiving activities. Activities at **Vista Field** include recreational flying, flight training, and charter service. Activities at the **Prosser Airport** included recreational flying, flight training, air charter, and agricultural application operations.

Current Trends

The current trend is for expansion of service at all four public airports as population and economic growth continues in the area.

Future Considerations

Since all four public airports are within municipal boundaries, there are few future considerations which can be directly influenced by county planning. However, if the county

pursues the realization of a major resort destination land use in the unincorporated area, the adequacy of air passenger service will be a relevant planning consideration. Cities may be first to the issue for projects such as conference centers, which are currently being discussed.

New sites for airports and heliports must be appropriately planned to assure that areas impacted by airport/heliport operations are compatible and the regulations to protect life and property, and to prevent the establishment of airspace obstructions and other hazards which may interfere with safe airport operations.

Water Transportation/The Columbia-Snake System

Existing Conditions

The Columbia and Snake Rivers provide an inland commercial waterway consisting of navigational locks in eight dams over a length of 465 miles, extending from Astoria, Oregon, at the mouth to Lewiston, Idaho. Within the system a navigational channel of 14 feet deep (minimum) is maintained for bulk commodity transportation by ocean-going barge. This inland waterway which links the Pacific Ocean with the state's agricultural "Inland Empire" forms Benton County's eastern and southern boundaries. In addition to the Port of Benton facilities at Richland, barges can be loaded and unloaded at facilities in Kennewick and Finley. This capability

is especially important to the industrial land use designations in the South Finley area, where rail and overland road access complete a true "multi-modal" freight transportation resource.

Commodities Shipped: the principal commodities shipped out of Benton County by barge are wheat and fertilizer products. Wheat moving downstream comprised 5.15 million tons (171,482,550 bushels) or seventy-seven percent of the overall downstream tonnage. Wheat is not alone on the river. Over 25,000 containers of goods move on the river including "refrigerated" moves, of value added, processed agricultural products.

Agricultural products are shipped from privately owned docking facilities located at grain storage and industrial sites. The principal commodity brought into the County by barge is anhydrous ammonia, which is used in the manufacture of fertilizer. Occasionally, special shipments of items used for the construction projects at Hanford are barged to the Port of Benton dock at Richland.

Amount of Tonnage: U.S. Corps of Engineers tonnage figures show 9.05 million tons (short tons) of freight moved through the John Day lock (both up stream and downstream) in 1996, including a wide array of products from food and manufactured goods to numerous wood related products. Bonneville Dam had 9.7 million tons traverse its

lock. A recent publication by the Merchants Exchange in Portland pegged total volume of all cargo moved on the entire river system at 54 million tons in 2004, with an import/export value of waterborne trade of Columbia River Ports totaling over \$13.9 billion.

Efficiency of Movement: For perspective on the relative efficiency of barge transport: 5.15 million tons of wheat moved by 1,715 barges on the river would require 514,500 farm trucks, or 147,069 semi-trucks (based on 1,100 bushels per truck), or 51,964 rail cars or 1,000 (fifty-two-car) unit trains. Overland transport of this magnitude would further congest road and rail systems and have significantly higher energy costs with proportional emissions of air pollutants.

The efficiency of barge use can be shown by comparing barge transport to alternative forms of transportation. One barge can transport one ton of commodity 514 miles on one gallon of fuel. By comparison, rail transport can move the same ton only 202 miles and trucks move the ton just 59.2 miles on a gallon of fuel.

Port Districts: the Port of Kennewick owns properties along a twelve mile stretch of the Columbia River at various locations south of Kennewick, and also a site at Plymouth. The Port of Benton is currently in the process of acquiring land immediately west of Plymouth, with the intention of locating a docking facility in the area

once the land is acquired. All of the Port of Kennewick lands on the Columbia have the potential for development of facilities to accommodate barge traffic.

Current Trends

A mainstay of commerce: the demand for waterborne transport fluctuates with markets, commodity supply and in relationship to the economics of transport by rail and overland truck. However, over the long term, because of its inherent efficiencies, waterborne transport will likely remain an integral part of the Inland Empire transportation system and will continue to play a vital and expanding role as global trade expands.

Salmon issues: potential threats to the viability of this transport mode do arise from federal efforts to manage Columbia and Snake River system flows in response to salmon preservation efforts. Draw-downs of water levels in the system to improve salmonid survival rates could adversely impact the water-borne transport system. At this point, whether or not drawdowns of the pools behind dams will occur in order to enhance salmonid survival is an open question. The county must assure that deliberations on this matter include the importance of the existing flow management regime for hydroelectric power generation, farm irrigation, and barge transportation.

North Richland barge access: the Port

of Benton operates a barge landing facility on its property in north Richland. Principal use of the facility is the transport of spent U.S. Naval reactors to the 200 Plateau Areas of the Hanford Site for disposal by burial.

Recent construction of buildings and other facilities on the Port property are rendering the barge landing, in its current location on the river, potentially in conflict with newer land uses. Full development of the Port property to conventional land uses is hindered by the presence of the barge site. The Port would like to move the landing further up-river onto the Hanford Site north of the 300 Area.

Future Considerations

Shoreland sites suitable for barge facilities and with access to rail and overland road transport infrastructure should be reviewed for their growth potential and ramifications to on-site and off-site transportation/land use needs.

The South Finley industrial area: is a good example of this consideration. Significant expansion of heavy industrial uses and freight transport facilities here is a certainty. The area may also be suitable for agricultural storage and processing facilities inland of the shoreland sites. The success of the area for these uses may in significant part be dependent upon the development of an efficient circulation system, including as a component barge/water borne transport facilities.

Pipeline Transport

Existing Conditions

Benton County has within it two interstate natural gas pipelines: Pacific Gas and Transmission Company (PGT) and Northwest Pipeline Company. The PGT line crosses the southeast corner of the county as it extends from Walla Walla County, into Oregon.

The Northwest Pipeline Corporation line runs up the Columbia River Gorge from Vancouver Washington, to Plymouth. There it branches into two lines, one to the Yakima Valley and Wenatchee, the other serves the Tri-Cities and Spokane. The system distributes natural gas to Washington's seven utility companies. The maximum pipe size is 30 inches.

Future Considerations

Gas energy from this distribution system directly serves the Plymouth and south Finley area industrial land use designations. Substantial undeveloped industrial designated lands exist within these two areas. The presence of large acreages with gas energy, and road, rail and barge transport opportunities provides economic opportunities which should not be prejudiced by piece-meal developments. Proactive advanced planning should occur in these areas to preserve their future industrial/commerce values.

Public Transit Service, Park and Ride Lots, Bicycle Transport

Existing Conditions

Ben Franklin Transit (BFT) operates over

20 fixed routes throughout the Tri-Cities urban area. The routes are within the Transit District's Public Transit Benefit Area (PTBA), which is a taxing district.

In the fall of 1997, the PTBA was expanded to include areas of Prosser and Benton City, establishing a transit route that links the two areas to the Tri-Cities. Item 8-2 in the Appendix, shows the recently approved boundaries of the PTBA.

Rideshare/Vanpool Program: BFT currently has one hundred and ten passenger vans (each carrying 15 passengers) operating throughout the region. About 80 of these commute to the Hanford Site daily from the cities of Pasco, Richland and Kennewick, to the 3000, 1100, 300 and 400 areas, and the Washington Public Power Supply System (WNP) Site. The Headstart Program (pre-school) uses 17 vans.

Prosser Rural Transit: Since the recent inclusion of the Prosser Rural Transit (PRT) into the PTBA of Ben Franklin Transit, the City of Prosser has entered into an interim agreement with BFT to provide both administrative and transit services. The PRT currently serves the area within the City of Prosser with scheduled routes, dial-a-ride service, and medical transportation through the People for People program.

Park and Ride Lots: there are currently nine park and ride lots in the Tri-Cities area including one at the intersection of SR- 225 and I-82 at Benton City. An

additional lot is located at Prosser. WSDOT is owner and/or operator of several of the lots, BFT operates others, and the City of Kennewick has two lots. BFT buses serve six of the sites in the urban area.

Bicycle System/Plans: at the present time, with the exception of a bike path in Columbia Park, which is essentially an urban park, and a short section north of Prosser, there are no bicycle facilities available in unincorporated Benton County, though the cities of Richland and Pasco have in recent years begun to construct paths and support facilities along the Columbia River.

There are several bicycle plans prepared by various jurisdictions in the County:

- The Benton-Franklin Regional Bikeway System Plan includes proposed bicycle routes for MPO in the two-county area.
- The Cities of Kennewick and Richland have adopted Bikeway Plans.
- The Taptal Greenway Foundation has prepared a Greenway Plan which includes a multi-modal "non-motorized" trail system extending up the lower Yakima River from Columbia Point in Richland to the bridge crossing of the Yakima River at Benton City.

Current Bikeway Projects: Benton County has purchased a two-mile section of abandoned railroad right-

of-way which it intends to convert to a bikeway connecting Prosser to the City of Grandview in Yakima County to the west. The state has constructed a bicycle lane on SR-225 from its intersection with I-82 into Benton City.

Demand and Usage: within both the cities and the unincorporated areas of the county, bicycling as means of recreation and commute has increased in popularity over the past decade. Residents have discovered the area as especially favorable to recreational bicycling. There are many bicycle commuters to Hanford from Richland. Out of town visitors are attracted for the specific purpose of recreational bicycling. However, local governing bodies in general have not met the increase in bicycle use with planning and capital expenditures to serve the use.

Funding Sources: R.C.W. 47.30 requires cities and counties to allocate one-half of one percent of the amount of funds received from the motor vehicle fund for trails and paths. In order to spend these funds on the construction of a trail or path, the trail or path must be included in a comprehensive trail plan adopted by the governing body.

Additional planning and construction funds are available through various grants, most notably from the Federal Intermodal Surface Transportation Enhancement Act (ISTEA).

Current Trends

The significant increases in population growth, commercial transport and

farming activities in eastern Washington generally and within Benton County over the past decade will continue into the near and medium term. This has and will continue to drive the need to expand all system components of the transportation network, i.e., roads, transit, rail, water borne, air, non-motorized and motorized support facilities. At all levels, i.e., commerce, daily commuter, rural planning area and neighborhood, the demands for expansion and increasingly, cost effectiveness, will require integration of relevant transportation system components.

Intermodal Connections: the increasing interdependence of rail, overland road and water borne transport systems for interstate and global commerce has been identified as a major planning issue within this document.

At the very local level, outside the context of commerce, continued population growth and demographic changes as a result of the improving economy and diversifying life styles within the Tri-Cities area and the county are changing residents' demands and expectations of the local transportation network. There is an emerging demand for a local network that offers more "modal" options than the current automobile dedicated system, and more utility than for just business, shopping and commuter trips (see pie charts and recreational survey results in Chapter

6).

Demands for public transit, for increased opportunities to integrate the auto, transit, and non-motorized modes, and for the provision of interconnecting non-motorized routes which double as recreational and commuter facilities will likely increase.

Such demands should grow at a pace related to that of the successful diversification of the local non-farm economy, and the local farm economy's cultivation of tourism attractions (vineyards, farmers markets, and specialty crops).

Planning decisions under the GMA which effect the concentration of a significant portion of new population growth into the Urban Growth Areas of the Metropolitan area as well as the small cities such as Benton City and Prosser, should increase the demand, viability and usage of public transit as well as other non-motorized modes.

Emerging Opportunities: opportunities to provide connecting non-motorized transportation links between activity centers within the county do occur. In 1993, Washington Central Railroad (WCRR) abandoned 60 miles of rail track and right-of-way, which connected Columbia Center in Kennewick to the Yakima County line. This section of rail provided "off-road" connectivity between Kennewick, Richland, West Richland, Benton City, and Prosser along what is essentially the Yakima River corridor. However only minor disconnected sections of the rail right-of-way were acquired by

local governments. The concept of a connecting trail was not of interest at the time, the major pieces of the right-of-way were sold to various interests.

Opportunities similar to the WCRR example in using existing public or quasi-public rights-of-way for augmentation of bikeway/trail network will likely occur in the future. As an example, irrigation districts throughout the Yakima Valley are converting open canal rights-of-way to piped systems buried beneath the old canal right-of-way, which could function as trail sections.

Future Considerations

Improve The Utility Of The Transportation Network: the utility and adaptability of an area's transportation network is one of the primary characteristics upon which the "quality of life" is based.

By in large, the road transportation network within the county and the Tri-Cities is an excellent and efficient one, consisting of interstate highways, state routes and local arterials, collectors and local access routes; it has a well defined and institutionalized mechanisms for eliminating its deficiencies and maintaining its high level of performance.

However, the existing transportation network is almost singularly dedicated to the personal automobile. This is not a fault, but rather a limitation to the larger community's realization of other land uses, commercial enterprises, human activity and socioeconomic

diversity.

A truly multi-modal transportation system invites increased personal mobility (via pedestrian, bicycle, equestrian and transit modes); it energizes existing, and fosters the creation of new activity centers; it melds business, casual, tourism, and recreational activities into a richer and more resilient community fabric.

policy needs - there should be a bicycle/pedestrian, equestrian trail(s) which connects the major urban and rural activity centers of the county.

action- the county should initiate a cooperative effort with adjacent jurisdictions, relevant state agencies, business and private interest groups, and citizens, to pull together the various bikeway and trails plans of each jurisdiction, into an integrated plan.

The plan should use open space corridors, public lands, special district rights-of-way, existing public roads, and new acquisitions, to connect urban and rural residential, business, governmental, visitor, and recreational activity centers and amenities via a network of non-motorized travel corridors. The Plan should integrate with existing transit and automobile system components.

There should be an adopted implementation program and construction schedules for plan components.

Agreement should be sought from participating jurisdictions to annually fund, either jointly or unilaterally, depending upon the nature of the project component, the construction of a component of the plan. Where feasible, the funding should be targeted so that it integrates functionally with other parks and recreational facilities or trails construction projects in the County, or in other jurisdictions.

Capital Facilities and Regional transportation Planning

For Benton, Franklin and Walla Walla Counties, the Benton Franklin Regional Council functions as the Regional Transportation Planning Organization (RTPO) that melds the Transportation Elements of local government's Comprehensive Plans into an integrated and internally consistent Regional Transportation Plan for certification as consistent with the State Transportation Plan and system requirements. One tool that the Regional Council and the local jurisdictions use for transportation planning is to operate a feedback loop wherein the regional transportation system for the Metropolitan Planning Area is divided into Transportation Analysis Zones (TAZs). Within each of their jurisdictions local land use planners supply current and future density and growth information for the TAZs. The Regional Council enters the information into a predictive Transportation Model that produces forecasted traffic

demand/capacity analyses from which future transportation improvement planning and projects are identified for planning and funding. Local governments use the model results to assess LOS impacts/needs, to inform their six year road programs, and where practical, to plan municipal infrastructure extensions and upgrades in conjunction with transportation projects.

Richland Urban Growth Area Expansion

In 2006 the Board of County Commissioners approved the "Badger Mountain UGA Addition" expanding the City of Richland's UGA by approximately 2100 acres on the south flank of Badger Mountain and northeast of the I-82 travel corridor. The addition of this area to the Richland UGA means that over the next 20 years, the area will develop to urban uses, most likely residential, general and highway commercial, and light industrial. Also approved as a part of the UGA expansion was a Capital Facilities Plan titled the Badger Mountain Valley View Urban Growth Area Expansion Capability Analysis that includes, in Chapters II, III, IV, V, VI, and VII respectively, an inventory and analysis of the existing transportation service levels in the UGA expansion area (Chapters II and III); a projection of land use demands from build-out of the UGA expansion area to urban uses; identification of the improvements to the transportation system that would be

needed to service build-out at specific Levels of Service over time; and projections of the costs of making those improvements and an identification of the various funding sources that would be available for accomplishing the improvements.

The Badger Mountain Valley View Urban Growth Area Expansion Capability Analysis is not included in this document but is incorporated by reference. The transportation and road projects identified in Chapter V of the Badger Mountain Valley View Urban Growth Area Expansion Capability Analysis that will be necessary to serve the Badger Mountain area, both as a consequence of the UGA expansion and of the general population and traffic growth within the larger area, and that are the responsibility of the County in whole or part, will appear first in the County's annual update of its Six Year Road Plan (page 8-9) which is the principal directive for "near term" capital expenditures for road projects by the County.

BENTON COUNTY

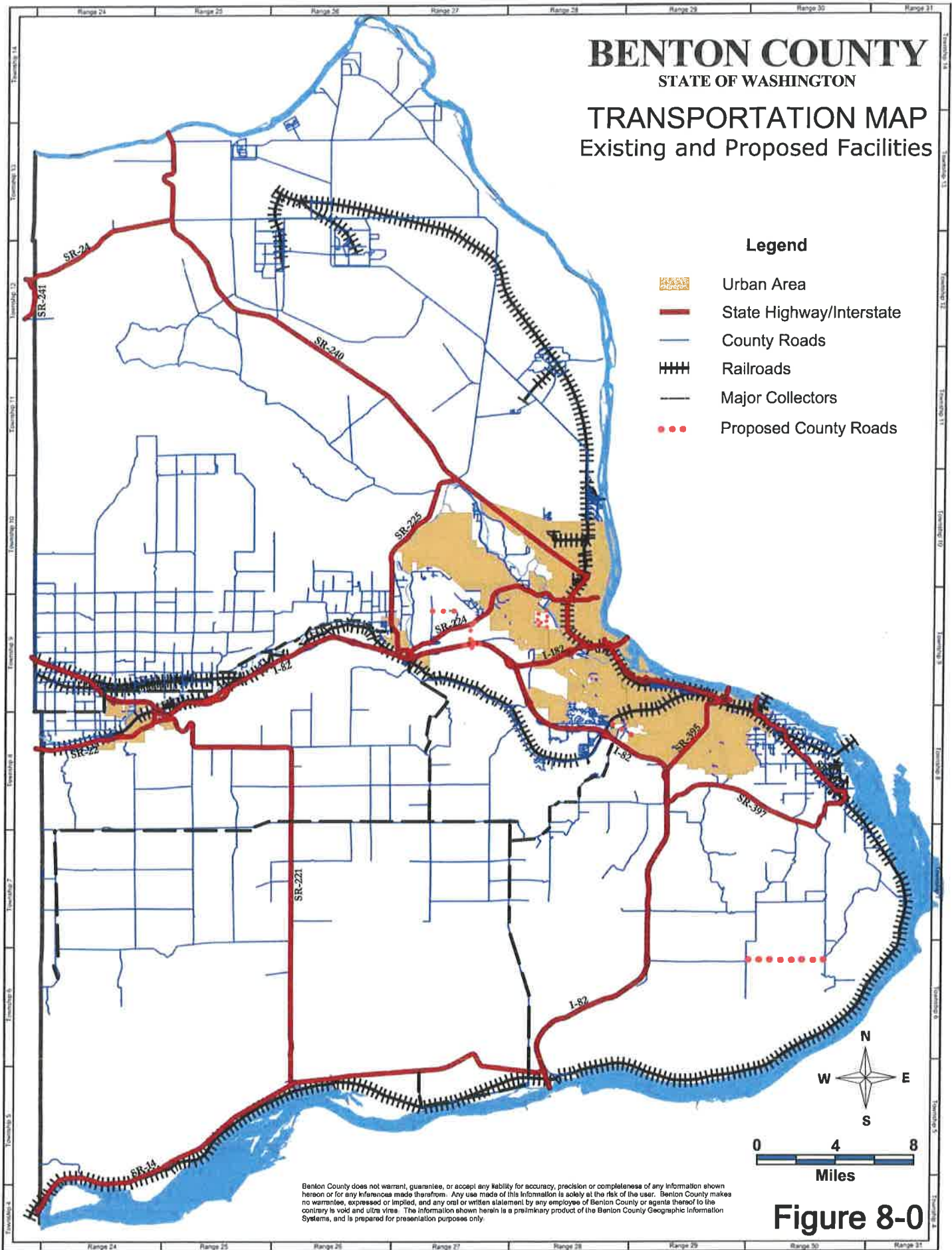
STATE OF WASHINGTON

TRANSPORTATION MAP

Existing and Proposed Facilities

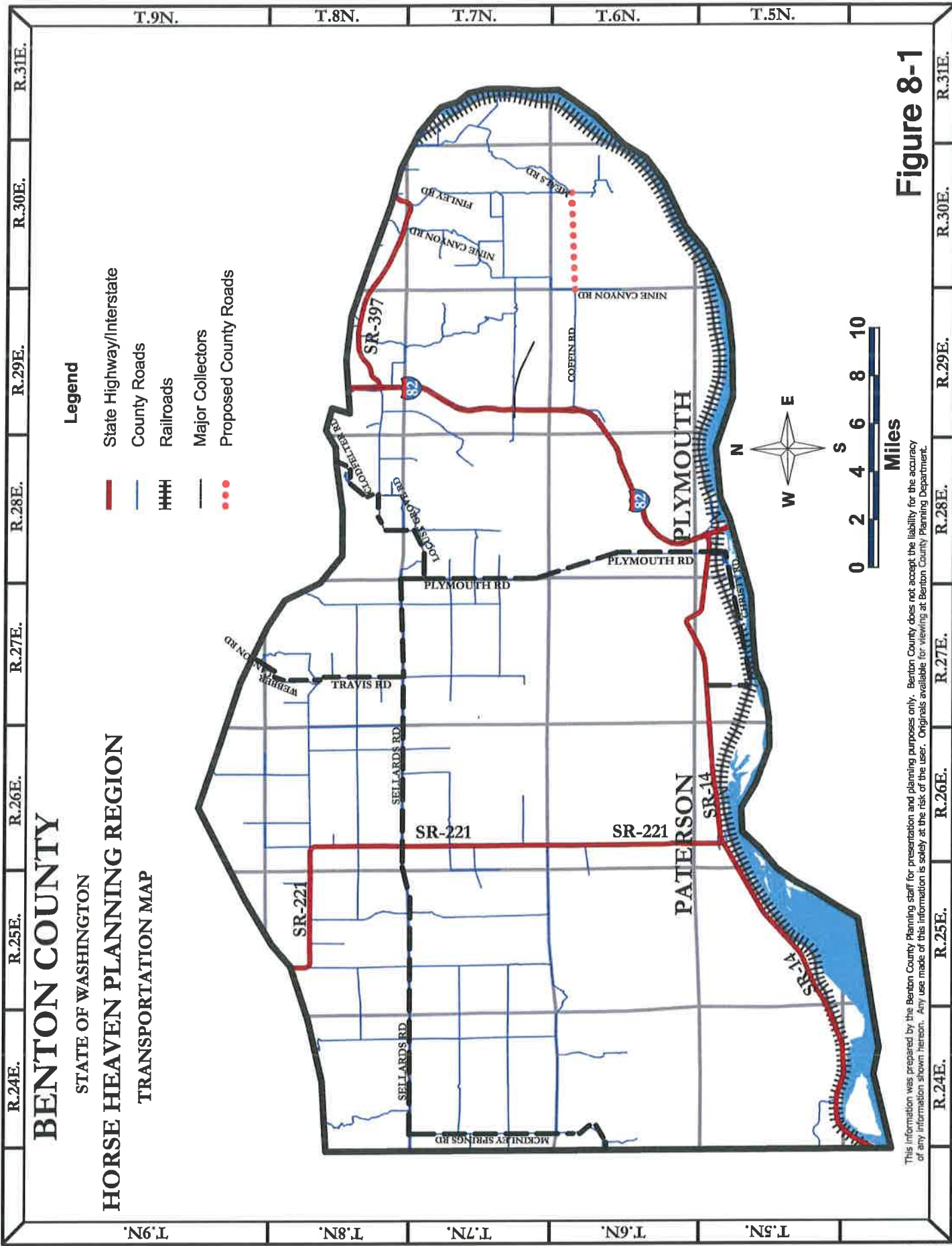
Legend

-  Urban Area
-  State Highway/Interstate
-  County Roads
-  Railroads
-  Major Collectors
-  Proposed County Roads



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Figure 8-0



BENTON COUNTY
 STATE OF WASHINGTON
HORSE HEAVEN PLANNING REGION
 TRANSPORTATION MAP

- Legend**
- State Highway/Interstate
 - County Roads
 - ≡≡≡ Railroads
 - Major Collectors
 - Proposed County Roads

Figure 8-1

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BENTON COUNTY

STATE OF WASHINGTON

RED MOUNTAIN PLANNING REGION

TRANSPORTATION MAP



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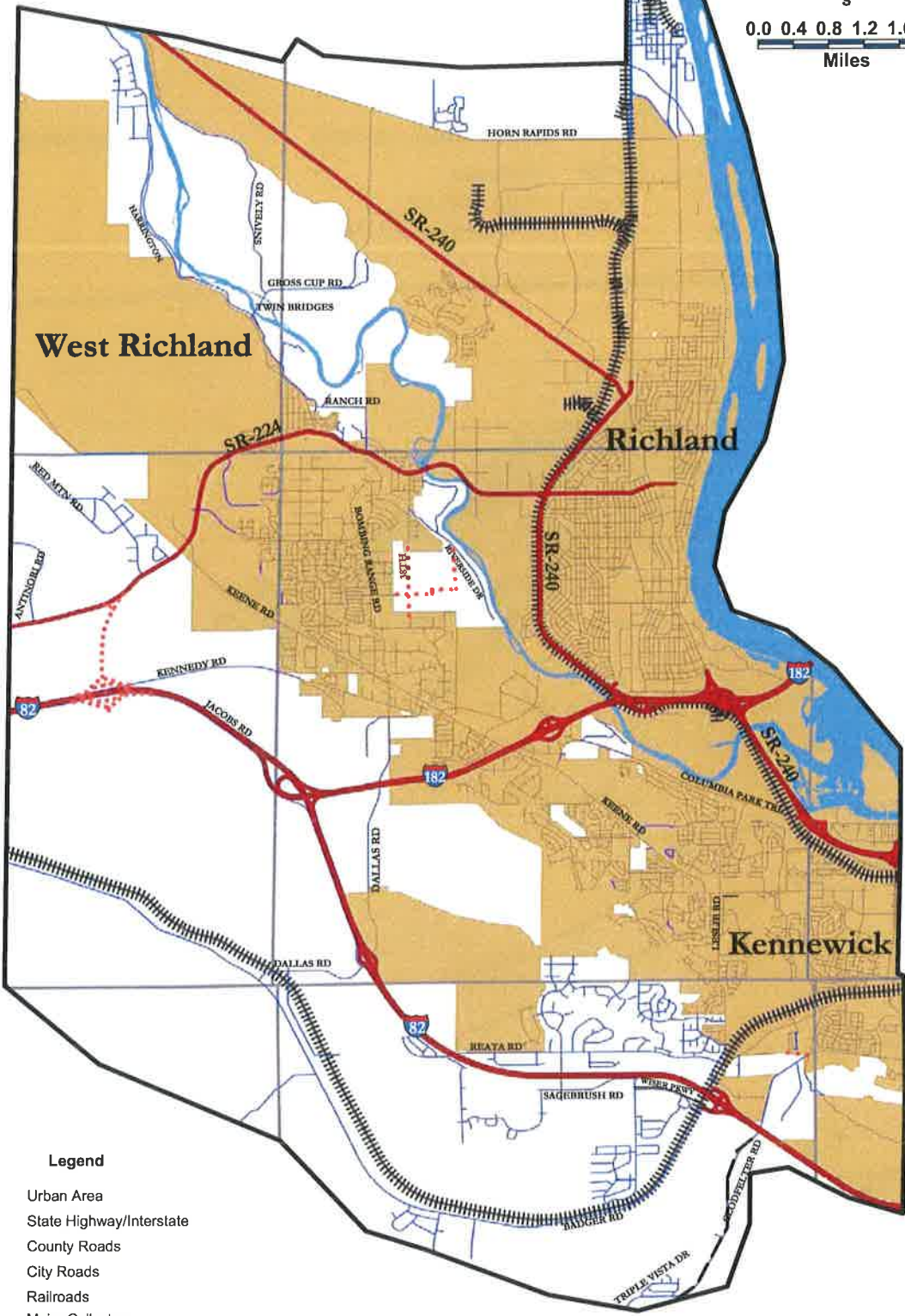
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T.8N.



West Richland

Richland

Kennewick

Legend

- Urban Area
- State Highway/Interstate
- County Roads
- City Roads
- Railroads
- Major Collectors
- Proposed County Roads

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Figure 8-2

R.29E.

R.30E.

R.31E.









BENTON COUNTY

STATE OF WASHINGTON

FINLEY PLANNING REGION

TRANSPORTATION MAP

Legend

- | | | |
|--|--|---|
|  Urban Area |  State Highway/Interstate |  Barge Portage |
|  County Roads |  Railroads | |
|  City Roads |  Major Collectors | |
| |  Proposed County Roads | |

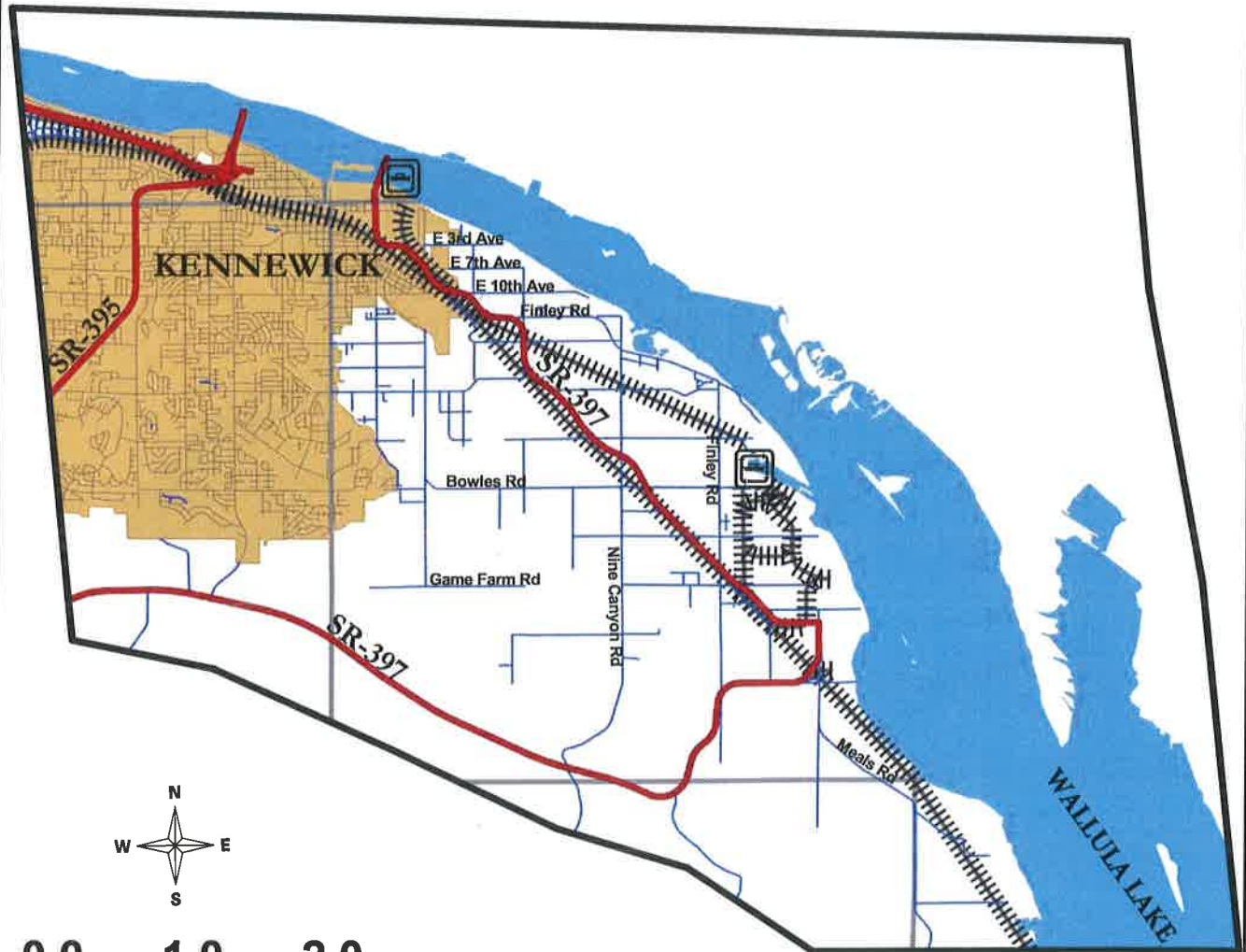


Figure 8-3

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R.29E.

R.30E.

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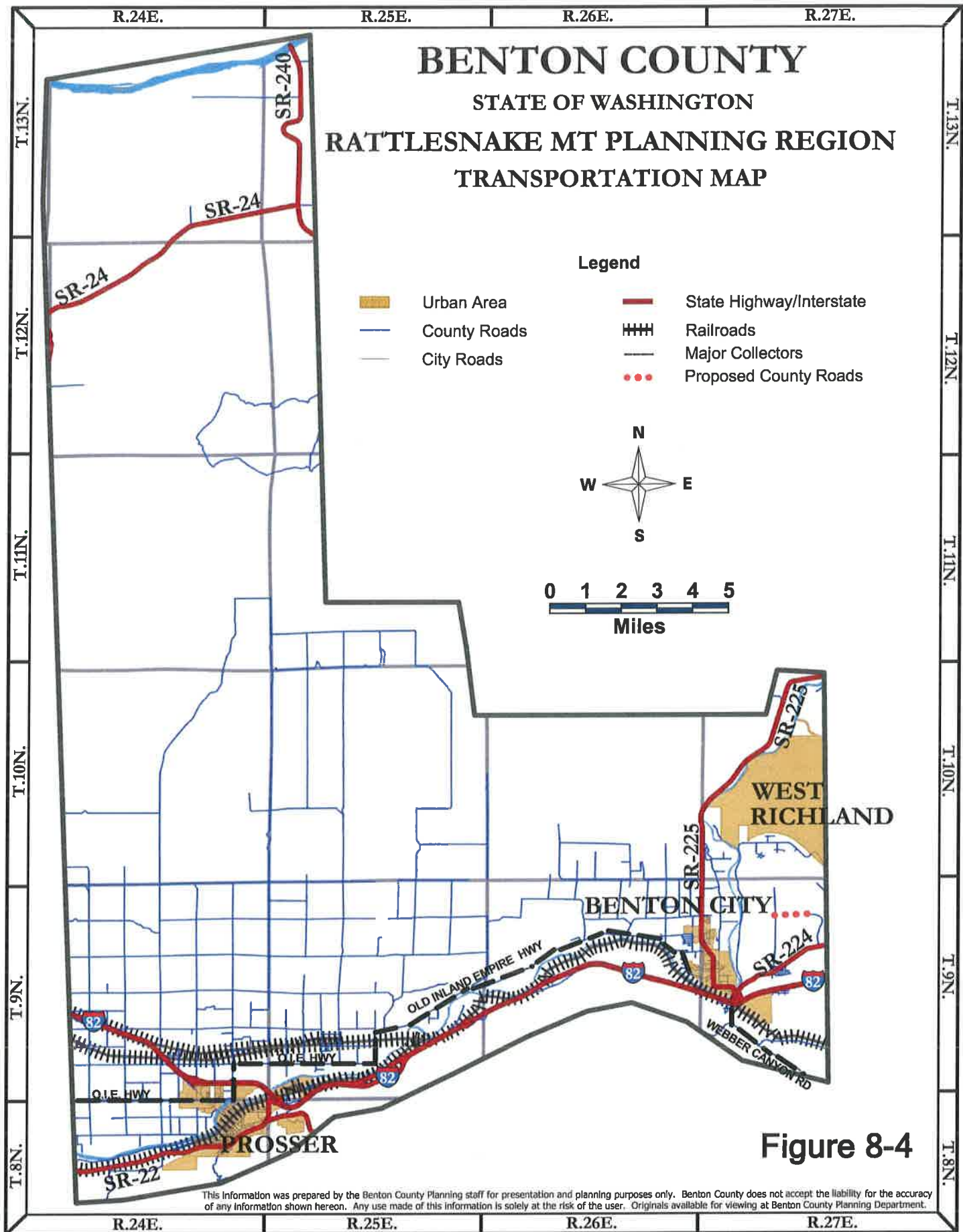


Figure 8-4

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CAPITAL FACILITIES

CHAPTER 9

INTRODUCTION

Purpose

The Capital Facilities Element of the Comprehensive Plan describes the current status of the various county facilities relative to condition and capacity. It identifies necessary and planned capital improvements, improvement schedules, and funding resources. It sets forth policies, objectives, and actions (Capital Facilities Policies, Chapter 3), that integrate the capital facilities functionally with the Comprehensive Plan.

For the purposes of this Comprehensive Plan Element, capital facilities are the infrastructure(s) the county is responsible for constructing, operating and maintaining, and which enable the county to provide public services to county residents. Such services are those required of the county under state law, or those for which the county has otherwise assumed responsibility.

Requirements of Growth Management Act Relative to Capital Facilities.

The Growth Management Act requires that counties planning under its provisions include a Capital Facilities Element in the Comprehensive Plan. The Capital Facilities Element must contain:

- an inventory of facilities owned by public entities;
- a forecast of future needs for such facilities;
- the proposed location and the capacities of expanded or new

facilities;

- minimum levels of service of facility capacity;
- at least a six year plan for financing those facilities with projected funding capacities and identified funding for such capacities; and
- a requirement to reassess the land use element of this plan if probable funding falls short of meeting existing needs, and to ensure that the land use element, capital facilities plan element, and its financing plan, are coordinated and consistent.

The significant weight of these requirements is directed at municipal governments, or county governments, which provide municipal type "urban" services. Benton County is neither of these.

Levels of Service (LOS)

With respect to GMA's requirement for adoption and maintenance of minimum Levels Of Service (LOS): the county's interpretation is that the adoption and mandatory maintenance of Levels Of Service is required only for the Transportation Element. Accordingly, this Capital Facilities Element contains no Levels of Service which the county must adhere to as a matter of law. However, examples of Levels Of Service are identified in Item 9-1 in the Appendix as a standard against which the county can measure its provision of basic services. The guide for regional parks within the county

is 5 acres/1000 population.

Benton County's Capital Facilities

The county does not currently provide sewer, water, or utility service. Accordingly, its capital facilities do not include processing or production plants and the distribution/collection systems typically associated with such services. The only exception to this general condition occurs when a private water or disposal system fails, whereupon if placed in "receivership" under state law the county must assume responsibility as an interim condition.

Though the services which the county provides are wide ranging, its supporting infrastructure is basic, and consists of:

- roads or road related improvements (roads are covered in the Transportation Element [Chapter 8] of this document);
- office or support buildings for county administrative functions and public works;
- parklands and recreational facilities.

This Element is divided into two principal sections. The first section addresses capital improvements which provide and support public recreation in county parks. The second section addresses capital facilities necessary to house and support the full range of the county's administrative and public works functions, including administrative offices, law and justice, roads and engineering.

Benton County does have capital facilities issues which are unique to its "geography" of administration: while the County Seat,

which is the administrative "center" of the county has historically been, and for the foreseeable future will remain in the western and more sparsely populated area of the county, increasingly the preponderance of its administrative effort is directed to the more populated and faster growing east and southeast areas adjacent to the Tri-Cities Metropolitan Planning Area.

This delivery of service at two locations has represented the diverse interests of the county well. However, with continued population growth, significant unavoidable inefficiencies with such a system were considered inevitable - until the recent advent of digital communications technology, which can enable the county to link satellite offices and project functions, rather than duplicating them wholesale at different locations.

As county population growth increases demands on services, the challenge of administering the county from two venues will be to strike a cost effective balance between capital facilities and electronic communications capabilities.

Counties Are Regional Service Providers

Under GMA, Benton County is responsible for providing "regional services" on a landscape put to land uses which are primarily rural, or natural resources based (i.e., minerals, agriculture).

The Difference Between "Urban" And "Regional" Level Services

Urban level services

Municipal governments are typically responsible for urban level services which include: water and sewer plants and delivery systems; urban scale storm water systems; utilities, in some cases; infrastructure to support central business districts and commercial centers; fire and police capabilities scaled, trained and equipped to the urban environment and densities; and urban and neighborhood parks and recreational facilities with administered programs and developed amenities such a tennis courts, swimming pools, ball fields, etc.

Regional Services

Regional services have not been specifically identified by the legislature in GMA. However, the intent is that they are different in both a "type" and "level" than what cities provide within their boundaries.

For example, law and justice and the administration of the district and superior court systems "county-wide" are the responsibility of county not city governments, as are property tax collections and assessments, auditors functions including voter registration and elections, coroners office, and law enforcement outside of city boundaries. There may be various other functions such as public health, air pollution control, watershed management, waste management, etc. that are often undertaken jointly by counties within a region.

At present, Benton County's range of services falls without question into the

regional and rural level. In unincorporated areas of the county water, sewer and utilities services are provided exclusively by private property owners, private enterprise, co-ops such as the Rural Electric Association, or the port districts for their industrial sites.

Benton County As A Regional Service Provider

The regional service responsibilities which require the county to fund, construct and operate and maintain capital facilities include:

- County administrative office support including: auditor, treasurer, assessor, prosecuting attorney, planning and building, coroner, facilities and recreation, public works etc.;
- Construction and maintenance of rural and "farm to market" roads;
- Law and justice, including the operation and administration of the courts, jail, and sheriff's functions;
- Juvenile justice facilities including detention;
- Regional parks and recreational facilities;
- Bi-County regional health and human services;
- Drainage improvement districts for low lying areas along river main-stems;
- Waste management;
- Regional Fairground facilities.

Other Services In Unincorporated Areas

The county is indirectly involved (usually by state statute) with other private, public

or quasi public service providers which have geographically defined "service districts" within which they provide customer service.

These providers fund, construct and maintain their own capital facilities, for which the county is not responsible. Such providers include: fire, school, and transit districts, electric and gas suppliers, hospitals, irrigation districts, "public" water supply systems (*for health reasons, under state law any water system serving more than one dwelling is a public system, even though operated privately*), solid waste, telephone, libraries, etc.

Many of these providers are considered "utilities," their integration with the Comprehensive Plan occurs in the Utilities Element, Chapter 10.

It is the intent of the county that, for the foreseeable future, it continues as a regional service provider only. The exception to this intent applies to major industrial land use designations outside of UGA's. The county's vital interest in facilitating the successful build-out of these designations requires that it leave open all available options to enable or provide essential water, sewer, and other services.

The Benton County Capital Improvement Plan (CIP) is a six year administrative planning and budgeting document used to schedule future construction and maintenance of County facilities. The County prepares a comprehensive capital projects list that correlates funding sources to needed improvements and identifies project funding. The CIP is reviewed and updated in conjunction with the County budget process. Each update to the County's Capital

improvement Plan is adopted by reference into the Comprehensive Plan.

Because the CIP is a working document amended annually, it is not included in its entirety as a part of the Comprehensive Plan, but is incorporated by reference with specific projects added to the Tables in Chapter Nine.

PARKS & RECREATIONAL FACILITIES

Existing Conditions

Table 9.0 at the end of this chapter provides an inventory of existing park and recreational facilities. Park improvements are shown in the recreational facilities improvement program identified in the County's "Capital Improvement Plan", and in the County's "Comprehensive Parks Plan", which looks at a twenty-year planning horizon for recreational needs of the public. Using these two documents, the Park Board continually works together with elected officials, staff and the public, to assess needs that may not be adequately met and identify those opportunities for new facilities and partnerships.

Financing of Capital Improvements On Park Lands

Improvements to State and Federal Lands

Financial resources from the county will only be used on county owned or leased park lands, or on projects or programs specifically determined to have a direct beneficial impact on County park lands. Recreational lands which are owned and managed by federal or state agencies must be improved with funds from other than county revenues, though the county is amenable to applying jointly and cooperatively with state or federal agencies for grant funds to improve state or federal lands used for recreation by county

residents. The county will consider providing "in kind services."

Improvements To County Owned or leased Park lands

There are numerous sources of capital improvement funds for constructing recreational facilities.

Funding packages for recreational facilities are usually comprised of different sources. For example, a project could be funded by monies from grants or loans from federal and state agencies, with local "matching" funds from "general" or "dedicated" funds, with "in kind services" from local agencies, and private donations. If the project were to cross jurisdictional boundaries (e.g., a trail), the funding sources increase per the number of jurisdictions.

Existing and potential sources of funding currently available to the county include the following:

RCO Funds (Washington State Recreation and Conservation Office) are annually available as grants for a broad range of recreational facilities;

County General funds may be budgeted by the Board of Commissioners to specific projects;

County Park Development Fund. As a matter of current policy the Board of Commissioners annually budgets monies to the Park Development Fund for expenditures at the discretion of the County Park Board;

Other grants and loans and donations may be obtained from federal and state agencies, and from other community

partners such as non-profit organizations or project-specific public funding sources; **Gas tax funds** for trails. The County Public Works Department receives annually a 1/10th of 1% gas tax refund from the state for trails development;

ISTEA, this federal (Intermodal Surface Transportation Efficiency Act) annually allocates 10% of its total transportation budget as grant funds for transportation "enhancement" projects. Such projects are surface transportation related (e.g., trails, bike-racks, and multi-modal transportation support facilities);

Private donations, non-profit public interest organizations such as the Taptal Greenway Association can partner with both the private sector and local governments to involve the private sector in facilities development;

Economic development grants and loans from state and federal agencies that fund recreational improvements which enhance and expand economic activity;

Real Estate Excise Tax, under GMA, a real-estate excise tax of 1/2 of 1% may be levied for construction of capital facilities which are proposed in the Capital Facilities Element of the Comprehensive Plan;

PILT, Federal (Payments In Lieu of Taxes) for lands within the Hanford Site. Such payments are annual.

BENTON COUNTY FAIRGROUNDS

Existing Conditions

In addition to its role as the home for the annual weeklong Benton-Franklin Fair and Rodeo, the Benton County Fairgrounds provides a wide variety of patron and event activities throughout the year. The Fairgrounds offer indoor and outdoor

facilities of varying sizes that can accommodate many uses. Table 9.0, at the end of this chapter provides an inventory for the fairgrounds.

Current Trends

Upgrades and renovation are being made to a number of the buildings on the Fairground campus in an effort to enhance the family "fair" experience and to help attract new customers to the facility during the off season. The Fairgrounds are being marketed to groups that hold events requiring large indoor and/or outdoor spaces, plentiful parking, or are otherwise seeking a unique type of venue other than hotels, convention centers, community halls, or municipal parks offer.

Future Considerations

As population growth in the region continues, use will increase along with the demand for services. Future planning initiated by County management and the various user groups regarding fairground needs and capital projects is essential to keep the fairgrounds economically viable and responsive to the needs of the fairground patrons and fair-goers.

COUNTY ADMINISTRATION AND SUPPORT FACILITIES

Existing Conditions

Capital Facilities Study

In January of 1991, a capital facilities study for Benton County described the county as "a complex 'Corporation' with public safety, business, justice and corrections service activities in six separate county owned buildings in 36 separate department components housing approximately 350 office employees."

The above numbers did not include field, patrol and maintenance and operations personnel. Nor did they include other county personnel who were housed in 'satellite' rental spaces not owned and managed by the county.

The study identified significant "critical areas" of need for facilities expansion, and recommended that the county develop a "multi-phase, long term financial and physical plan to accommodate the current and anticipated county growth."

The study identified the most critical areas of need as those where "task areas" were less than 75% of that required for the existing activity. The following facilities met this criteria:

County Courthouse

Planning
Roads (Public Works)
Information Technology

Human Services

Juvenile Justice Center

Detention
Courtroom support area

Kennewick Annex

Facilities, Civil Service, Information Technology, Assessor, Coroner, Solid Waste Mgmt, Parks, Cooperative Extension

Justice Center

District Court Clerks Office
Superior Court/support areas
Superior Court Administration
Archival storage
Prosecutors Office
County Clerks Office

Acquisition of Properties -Expansion of The Administrative Complex

Based upon the 1991 Capital Facilities Study, and ongoing efforts of the county to anticipate and accommodate the needs of an expanding population, the County entered a period of strategic land acquisitions, additional studies, and major projects including the following:

Justice Center Campus/Vista Field

In September 1991, 16.38 acres in two parcels were purchased at Vista Field in Kennewick adjacent to the existing Justice Center for expansion and growth. In October of 1993 4.54 additional acres were purchased, for total of 20.92 acres. In 1996 a land exchange was made to obtain a dedicated easement for a second access to the Vista Field property.

In July of 1992, a consultant was contracted to prepare recommendations and a conceptual design to relieve overcrowding in the jail at the Justice Center.

In 1994, the Justice Center Master Plan Site Study and Capital Facilities Planning Study Update Report was completed by a consultant. In 1995 a consultant was contracted for a feasibility study for a 28 bed remodel at the jail.

In 1995, authorization to design a 28-bed dormitory cell pod within the original men's recreation area of the Justice Center jail was given. Construction was completed in 1996.

In December of 1996, a consultant was contracted by the county to provide an updated needs assessment, programming/space planning, and

conceptual design work for expansion of space in departments located in Prosser and at the Justice Center in Kennewick. The update, completed in 2000, concurred with a number of previous independent needs-assessment studies that documented adequate space for staff, inmates, and the public has been in short supply since 1990. In 1997, the Board of County Commissioners began the planning process for updating and future expansion of the Justice Center for courts, jail and other county departments and services.

The expansion began at the Justice Center in 2000 and was completed in 2002. The site consolidates offices for Superior Court, District Court, Information Technology, Coroner, County Clerk, Facilities & Parks, Sheriff, Personnel Resources, Prosecuting Attorney, Sustainable Development, and the Civil Service Commission. The County's 740 bed Jail facility is also located at the Justice Center Campus.

Juvenile Justice Center/Canal Annex

In 1991, connection to city sewer service was accomplished. In 1994 the process of design work for the expansion of detention facilities and remodeling at the Benton-Franklin Juvenile Justice Center was begun. Construction was completed in 1999 at a cost of \$6,339,500. The Juvenile Justice Center is located at the County Annex in Kennewick, and contains annex offices for the Auditor, Assessor, Building Department, Treasurer, and WSU Cooperative Extension Agent.

Prosser Courthouse

In 1992, the old Assessors Annex at 1002

Dudley was remodeled and occupied by the Planning Department who vacated its office on the first floor of the Courthouse for the Engineering Department. In 1994, offices on the second floor of the Courthouse were remodeled for occupancy by the Information Technology Department, and a new roof was put on the building. In 1995, District Court opened on the 3rd floor. In 1995 the lot at 703 Main St. (across from the Courthouse) was purchased for Courthouse parking, which was constructed in 1996. Property at 608 Main and 704 Market was purchased in 2000 and additional Courthouse parking was constructed in 2002.

Current Trends

Since the study of 1991, while the county has been proceeding with the development of a multi-phase plan, and the acquisitions of necessary property in preparation for implementing the plan, the northwest regional economy has undergone significant growth and the economy in the county has "ballooned" in response to massive federal spending on the Hanford Site. As a consequence, growth in the complexity, as well as quantity of county services required has exacerbated the county's shortfall of physical space.

Contemporary increases in the size of county's administrative offices and support responsibilities have numerous drivers including the following:

- a 27 percent increase in county population (since 1992);
- significant increases in law and justice

demands;

- unavoidable new planning and legal responsibilities relating to federal activities on the Hanford Site as well as off the site;
- new state legislation relating to local planning, zoning, housing, public health and safety requirements;
- significant regional economic growth of the 1990s fueled by expanding global trade, transport, and private and federal spending.

Future Considerations

Capital Facilities Expansion

Table 9.1 presents an inventory of County administrative and support facilities. The County's Capital Improvement Plan identifies potential funding resources for specific projects.

Consolidation of Administrative Services

Briefly described, the county intends to consolidate its administrative/support functions in expanded facilities at the County Courthouse in Prosser, and at its property in Kennewick where the Justice Center is now located. The consolidations would be generally as follows:

In Prosser, the Courthouse Annex immediately to the east of the Courthouse will be demolished and replaced with a multi-story addition to the Courthouse, within which county functions now conducted off-site will be consolidated, and court functions expanded. The Planning Department, Cooperative Extension, District court and clerk, sheriffs department and Health District will occupy the addition.

In **Kennewick**, new construction will add a maintenance/supply building and a coroner's office and morgue east of the existing Justice Center building. The parking will be moved to an at-grade lot on the recently purchased Vista Field acreage. County administrative services currently housed at the Kennewick Annex on Canal Ave will be consolidated at the expanded Justice Center facility, thereby enabling the Juvenile Justice functions currently at the Canal Avenue location to expand into the vacated space.

Except for road and transportation infrastructure, regional park and County Fair amenities, and the physical plant housing County administrative services, the County does not provide capital facilities infrastructure that delivers utilities, water, sewer, power, schools, communication, etc., services for on site development of private lands.

Financing Capital Improvements For Administrative/Support Facilities

Existing and potential sources of funding currently available to the county include the following:

- **General Obligation Bonds** approved by the voters for the funding of specific capital projects;
- **County General Funds** may be budgeted by the Board of Commissioners to specific projects;
- **Real Estate Excise Tax**, under GMA, a real-estate excise tax of 1/2 of 1% may be levied by the county for the construction of capital facilities projects included in the adopted Capital Facilities Element;
- **PILT**, federal (Payments In Lieu of

Taxes) for lands within the Hanford Site.

Capital Facility Plans (CFPs) for development of Urban Growth Areas (UGAs).

City's within Benton County are required to prepare Capital Facilities Plans (CFP's) for areas they propose for inclusion within their UGAs. These CFP's, are required by RCW 36.70A.110 and Benton County Code in 16.14. The capital facilities plans must include an inventory of existing facilities as defined by RCW 36.70A.030 and their capacities; a forecast of the needs for the next twenty years of such public facilities; and a six-year financial plan for the provision of these services. These CFP's do not appear within the Comprehensive Plan but are incorporated in the Plan by reference.

The inventories and provisions for these services within UGA's are found in each respective City's CFP.

TABLE 9.0 CAPITAL FACILITIES: RECREATION - INVENTORY (10 Yr)

Park Facility	Location	owned or leased	Size ac/dev	Current Uses	Existing Facilities	bldg. sq. ft.	Park Plan
Horn Rapids Park	Benton Co. on the Yakima River 5 mi. downstream of Benton City	owned	784/20	Informal Rec. Large Events Outdoor Education Niche Recreation River Related Recreation	Boat launch ramp & Parking area, well, electric service, restrooms, caretakers housing, RV camping-spaces Model airplane Facility Multi Purpose Bldg Hiking-Bridle trails Multiple informal river accesses Self-Pay Kiosk Flag Pole	900	yes
Rattlesnake Mountain Public Shooting Facility	6 mi. N. of Benton City, N side of SR225, across from Horn Rapids Park	450 ac. of BLM & 650 ac. of WDW, all used under a lease administered by BLM	1100/600	Target range	Well Shooting Range covered platform Electricity pistol bay Sport clays 1000 yard range		Yes, MST Plan
Two Rivers Park	Finley Area 2 Mi. E of Kennewick on the Columbia River	Leased from the Corps	210/17	Picnic Swim Boating Fishing Birding/ Nature Disc Golf	Boat ramp Launch Dock Parking Restroom Pump house Day Park Area Compound Office Disc Golf Course Trails Flag Pole		Yes

TABLE 9.0 CAPITAL FACILITIES: RECREATION - INVENTORY (10 Yr)

Park Facility	Location	owned or leased	Size ac/dev	Current Uses	Existing Facilities	bidg. sq. ft.	Park Plan
Hover Park	S. Finley on Col. River	leased from Corps, access needed	145/0	picnic swim fishing	none	none	Yes, MST Plan
Wallula Gap Preserve	S. of Finley on slope above Lake Wallula	owned, (easement needed over private prop. for land access) 3 parcels	163/0	Viewing Boat landfall Cross-country Hiking Equestrian	none	none	no
Vista Park	in an unincorporated "island" of Kennewick aka Tri-City Heights	owned	0.5/100	neighborhood park	play equip.	none	no
Horse Heaven Vista	SR221 3 mi. S.E. of Prosser	owned	2.3	Overlook	picnic shelter interpretive sign vaulted double restroom Parking	150	Yes
Badger Mountain Centennial Preserve	Slopes & Upper ridge line of Badger Mountain	Owned	574 Ac.	Walking Trails	none	none	yes
Benton County Fairground Facility	1500 S Oak St Kennewick	owned	180	Fairgrounds	5shwbldgs 8livestk pavilion Horse arena Horse barns rodeo arena grandstands 3 plazas RV sites parking lots restroom building Maintenance Shop	41.9K 47.4K 38.4 K 400stls 53.2K 3K seat various 230hks various	No

TABLE 9.0 CAPITAL FACILITIES: RECREATION - INVENTORY (10 Yr)

Park Facility	location	owned or leased	Size ac/dev	Current Uses	Existing Facilities	bldg. sq. ft.	Park Plan
Fairground <i>Maintenance</i> Projects Approved in Annual Budget		owned	NA	Fairgrounds	Various	NA	NA
Trails	Prosser to Yakima Co. line	Owned	4 mi.	Bike & walking path	Paved asphalt	NA	Yes
County-wide	All	All	NA	All	All	NA	NA
					Horn Rapids Badger Mt. HH Vista Two Rivers		

TABLE 9.1 CAPITAL FACILITIES: ADMIN OFFICE & SUPPORT - INVENTORY (10 Yr.)

#	County (or Other) Facility/ Function	location	owned/ leased	Co. Use (Current)	Bldg. type	Sq. ft./ floors	Size ac/% dev
1	Justice Center Campus	7320 W. Quinault, Kennewick	owned	-Courts Admin -P.A.s Office -Sheriff Dept -Co. Jail JC Complex Expansion Benton-Franklin Health Dept. Human Services	fixed parking Fixed Fixed	97033/2	20.92/75
2	Parking	Same	owned	County Jail -vacant	Fixed	7-12.5K None	
3	Co. Annex Building	5600 W. Canal Dr., Kennewick	Bldg. owned; 72% BC 28% FC prop. BC	Juvenile Justice Center w/detention classrooms kitchen Juvenile Courtrooms -Bldg. Dept. -Treas. Office -Assessor -Auditor -Coop Ext.	fixed parking fixed	102000 N/A 990	9.85/100 N/A
4		5600 W. Canal Drive	owned		fixed parking		
5	Human Services	2624 W. Kennewick Ave., Kennewick	owned	-office	fixed parking	3240	0.36
6	Detox Center	1020 S. 7th, Pasco	Bldg owned 50/50 w/Franklin Co. which owns the land	-detox ctr.	fixed	1500	100%

TABLE 9.1 CAPITAL FACILITIES: ADMIN OFFICE & SUPPORT - INVENTORY (10 Yr.)

#	County (or Other) Facility/ Function	Location	owned/ leased	Co. Use (Current)	Bldg. type	Sq. ft./ floors	Size ac/% dev
7	Auditor (Richland)	101 Wellsian Way Ste E	leased	satellite office	fixed	1190	N/A
8	Prosser Courthouse	620 Market St., Prosser	owned	-BOCC Offices & hearing room -Treasurer Off. -Assessor's Off. -Auditor's Off. -Central Services -a P.A.'s Office -Pub. Works -Personnel Dept -a Sheriff Off -Mail room -Court Clerk	fixed	32700/3	1.43/ 23%
9	Courthouse Annex Bldg	1120 Prosser Ave., Prosser	owned	Courthouse Storage	fixed bldg.	5780 on 2 floors	
10	Courthouse Parking (Prosser)	703 Main 608 Main 704 Market	owned owned owned	parking parking parking	parking parking parking	8625 9000 6375	no
11	Planning Annex	1002 Dudley, Prosser	owned	Current & Long Range Planning Offices and Hearing Room	fixed parking	3776	0.29
12	Planning Annex parking	Lots 20, 21 & W. 9' of Lot 19	owned	Planning and Courthouse Parking	parking	N/A	0.18
13	Co-op Extension	1121 Dudley, Prosser	owned	-storage for elections dept. -auditor office -voting place -WSU Ag, Extension Off.	fixed	1950/1	0.09

TABLE 9.1 CAPITAL FACILITIES: ADMIN OFFICE & SUPPORT - INVENTORY (10 Yr.)

#	County (or Other) Facility/ Function	location	owned/ leased	Co. Use (Current)	Bldg. type	Sq. ft./ floors	Size ac/% dev
14	Public Works Yard Kennewick	Ely St., Kennewick Lot 46 Highlands Plat C	owned	-repair shop -equip storage -fuel station -asphalt storage	fixed	19000	2.98/15
15	Maint. Shop Parking	Lot 29 Highlands Plat C	owned	parking	parking		0.86
16	Public Works Shop	Prosser		-Maint Shop -sign shop -truck barn -fuel station	fixed fixed fixed open concrete pad	20461 7560 3326	10
17	Public Works Shop	Kennewick		-Maint Shop -sign shop -truck barn -fuel station	fixed fixed fixed open concrete pad	+/-24379	10
18	Communications	Chandler Butte, S28-T9-R26	owned	-sign shop	block	100	100%
19	Sheriffs Satellite Office	46404 Prior Ave Paterson	owned	-truck barn	fixed steel	1800	26000
20	800 MHz Expansion	1 base and 5 remote Richland	own 1/3 assets	-fuel station	N/A	N/A	N/A
21	Capital Improvement Plan Roads	County-wide	N/A	Roads	N/A	N/A	N/A

TABLE 9.1 CAPITAL FACILITIES: ADMIN OFFICE & SUPPORT - INVENTORY (10 Yr.)

#	County (or Other) Facility/ Function	location	owned/ leased	Co. Use (Current)	Bldg. type	Sq. ft./ floors	Size ac/% dev
22	Capital Improvement Plan-Other	Countywide	N/A	Various	N/A	N/A	N/A

UTILITIES ELEMENT

CHAPTER 10

AND SPECIAL SERVICE PROVIDERS

INTRODUCTION

Utility systems in Benton County include lines and facilities used to distribute or transmit electric power, natural gas, petroleum products, information (telecommunications), and water and sewage. All utilities in Benton County are operated by public utility districts and private companies, or by cities. In this chapter, existing conditions, current trends, and future considerations are noted where the county has current or future service obligations, i.e., solid waste and public water systems.

Purpose

The GMA has given local jurisdictions the obligation and requirement to plan for utilities including identification of utility corridors. The intent of this Element is to support utility providers in meeting their public service obligations to provide service on demand to existing and future customers. It is also the intent to minimize negative impacts resulting from the provision of services on the residents, infrastructure and environment of the county. The county's responsibilities for utilities ranges from regulating their land use, to permitting their activities in public rights-of-way.

Special Districts

Information on other special service providers such as fire, port, and school districts, is included in this chapter.

State Planning Law Requirements

State Planning Law mandates that GMA counties adopt as part of their comprehensive plan, a "Utilities Element describing the general location and capacities of all existing and proposed utilities, including, but not limited to electrical lines, telecommunication lines, and natural gas lines".

State planning law also requires that the Comprehensive Plan should be internally consistent. This means that the Utility Element must be fully coordinated with other elements of the Comprehensive Plan, particularly the Land Use Element.

Planning for utilities should be recognized as the primary responsibility of the utility providers. The county should rely on plans prepared by the utility providers. However, the land use map, plan policies and capital facilities plan of the Comprehensive Plan offer opportunities for providers to improve the quality and cost effectiveness of service to county residents. The Utility Element will help assure that provision of utilities is properly coordinated with land use.

Agency Jurisdiction

Several independent federal government agencies, such as the Federal Communication Commission (FCC) and the Federal Energy Regulatory Commission (FERC), were set up to implement policy, encourage competition, and protect public interest. The agencies and their authorities often subordinate

local interests in utility matters. For example, the county cannot prohibit the placement of communications towers, though it may adopt standards relating to their siting and impacts.

The **Federal Communication Commission** is a five-member board appointed by the President and confirmed by the Senate for 5-year terms. Their mission is to encourage competition in all communications markets and to protect the public interest. In response to direction from the Congress, the FCC develops and implements policies concerning interstate and international communications by radio, television, wire, satellite, and cable.

The **Common Carrier Bureau** an operating bureau of the FCC, is responsible for administering the FCC's policies concerning telephone companies that provide long distance and local service to consumers. It is their charge to ensure that all customers have rapid, efficient, nationwide and worldwide access to these services at reasonable rates.

Federal Energy Regulatory Commission (FERC) is an independent five-member commission within the US Department of Energy. FERC sets rates and charges for the interstate transportation and sale of natural gas, for the sale of electricity, and the licensing of hydroelectric power projects. In addition, the Commission establishes rates or charges for the interstate transportation of oil by pipeline.

The **Washington Utilities and Transportation Commission (WUTC)** is an agency of Washington state government

that has a three member board and associated staff who regulate the rates, services and practices of **privately owned** utilities and transportation companies. Regulated utilities include electric, telecommunications, bus companies, natural gas, rail, water, and solid waste collection. The WUTC utilizes state law to define the costs that the utility can recover, and consequently has oversight to ensure that the utility acts prudently and responsibly. WUTC jurisdiction does not extend to public utility districts, municipal utilities, or cooperatives.

The Northwest Power Planning Council- The northwest Power Planning Council (NWPPC) focuses on the generation of electricity; however, its policies have implications for gas. The NWPPC, in its recently released Power Plan, has directed the region to develop co-generation as a energy resource, and hydro-firming as a power back-up system.

"Co-generation" is the use of heat, as a by-product of power generation, for industrial processes or for space and water heating. Natural gas is often used as a fuel source for co-generation.

"Hydro-firming" is the backup of the region's intermittent excess spring hydro generation with gas-fired combustion turbines to provide backup if Hydroelectric power is insufficient.

NWPPC policies could have a major impact on natural gas consumption in the Northwest. The most efficient use of natural gas is its direct application for space and water heating, this can contribute to a balanced regional energy

policy.

ELECTRICITY

Bonneville Power Administration (BPA)

The Bonneville Power Agency is an agency of the U.S. Department of Energy. It wholesales electric power produced at 29 federal dams located in the Columbia-Snake River Basin, as well as one non-federal nuclear plant. BPA does not own or operate any federal dams, however it does sell the power produced by these dams as well as power produced by Washington Nuclear Plan 2, at Richland, Washington. The U.S. Army Corp of Engineers owns and operates Bonneville Dam, and Grand Coulee Dam is owned and operated by the Federal Bureau of Reclamation. Between them, these two agencies run all of the dams whose power is sold by BPA.

Today the Bonneville Power Administration sells about 46% of the electric power consumed in the Northwestern United States. To deliver that power, BPA owns and operates one of the largest high-voltage electrical transmission systems in the world. BPA transmission lines in Benton County are shown on Map Figure 10-1.

BPA's principle service territory covers approximately 300,000 square miles and includes the states of Oregon, Washington, Idaho, and the portion of Montana west of the Continental Divide. BPA also directly serve small portions of California, Nevada, Utah, and Wyoming. In addition, it sells surplus power to California and Southwestern United States.

Electricity is purchased from the

Bonneville Power Administration (BPA) and supplied to areas in Benton County via two local public utilities: the Benton County Public Utility District and Benton Rural Electric Association.

Benton Public Utility District (BPUD)

The Benton PUD was established by vote of the residents and began electric distribution operations in October 1946.

BPUD is empowered to: (1) purchase energy, (2) sell energy at wholesale and retail, (3) acquire, construct and operate generating plants and transmission and distribution facilities, and (4) issue revenue obligations for financing the acquisition and construction of electric properties and other corporate purposes.

Benton PUD has the exclusive authority to set rates and charges for electric energy and services and is free from the rate-making jurisdiction and control of the WUTC and any other federal, state, or local agency having the authority to set rates and charges for electric energy and services.

The Benton PUD service area is entirely within Benton County and includes the cities of Kennewick, Benton City, Prosser, and portions of West Richland. BPUD serves Benton County except for the City of Richland, the Department of Energy's operations on the Hanford Reservation, and those rural areas of the county which are served by Benton Rural Electric Association. Its general office is located in Kennewick. Service boundaries and substation locations are shown on Map Figure 10-2 at the end of this chapter.

In 2005, BPUD served 37,236 residential customers in Benton County. Table 10.0 provides a profile of BPUD customers.

TABLE 10.0 BPUD CUSTOMER PROFILE

Customer Class	Number	AKWH*
Residential	37,236	622,639
Small/Med General	4,755	278,752
Large General	123	242,555
Industrial	3	218,055
Small Irrigation	619	15,724
Large Irrigation	96	381,927
Street & Light	1443	5,133,262

* AKWH is the annual kilowatt-hours utilized by the customer class.

Benton Rural Electric Association (BREA)

Incorporated in 1937, the BREA is a consumer owned rural cooperative, which serves 13,873 accounts in portions of Benton, Lewis, and Yakima Counties. BREA's 1,300 square mile territory extends from the Columbia River at Paterson north to the Hanford Reservation and west to White Pass in the Cascade Mountains. Its service district and substation locations in Benton County are shown on Map Figure 10-2.

BREA serves the rural areas of the county and some urban areas. While BREA was originally set up to serve the rural customers of Benton and Yakima Counties, the cooperative is becoming more of an urban player as the cities expand into rural areas. BREA also serves the community of West Richland and many parts of the urban growth area

around Richland, Benton City, Prosser and parts of the Hanford Reservation.

BREA has worked with Benton PUD, and the City of Richland to minimize duplication of service areas, although some parts of the systems are intermixed with the neighboring utilities. The three utilities continue to negotiate to determine territorial agreements to ensure the best possible service with the least redundancy of electrical facilities.

The BREA maintains a "20 year Long Range System Planning Report". This report reflects the expected electrical facility additions, based upon projected load growth and system operating requirements. This report is submitted and approved by the U.S. Department of Agriculture Rural Utilities Service. BREA serves a huge geographical area with very low densities. However, availability of affordable and reliable electric service from BREA has allowed productivity and development to occur throughout the entire county.

BREA has concerns about future electrical services to the lower density areas of the county. To protect system reliability and the cost effectiveness of electric service to the remote areas of the county, it is necessary to protect the integrity of the BREA system.

WIND ENERGY

Deregulation of the electric industry and subsequent energy supply issues have emphasized the need for new and diverse energy sources in the Bonneville Power Administrations' service area. Renewable resources such as wind provides an

environmentally friendly, “green” source of energy and allows BPA’s to diversify its energy sources. Several wind “Farms” have located in the County on privately owned agricultural land pursuant to leases between landowners and the project developer. Large turbines are strategically placed along the major ridges to capture wind and generate power which is fed back to BPA facilities through substations. Wind farms in Benton County are shown on Map Figure 10-1.

NATURAL GAS

Williams-West operates and maintains its natural gas pipeline that runs through Benton County as shown on Map Figure 10-3.

Virtually all natural gas is now transported through pipelines. “Gathering” lines collect and carry the natural gas from wells to transmission lines or plants for processing. A series of compressor stations propel the fuel long distances overland through major transmission pipelines to local distribution and service lines or storage facilities. A network of small-diameter distribution mains and service lines transport the gas to end-users. Related facilities include, but are not limited to; cathodic protection stations, test posts, mile markers, meter stations, valves, etc.

Future pipeline safety concerns are related to the adverse impact and encroachment of development near transmission lines. With more people living and working near transmission lines the severity of pipeline failures from all causes are likely to increase. Currently, only 16% of natural gas transmission pipelines and 13% of

liquid pipelines are located in areas of high building densities. Opportunities available to local governments to reduce the potential for accidents are limited vis-à-vis quality control and safety maintenance of the pipeline structure itself and enforcement of pipeline easement agreements between land owners and the pipeline owners, but opportunities are available as part of the permitting and planning procedures such as the following:

- include pipeline operators in the review process for subdivisions, short plats, Comp. Plan reviews, amendments, sub area planning, etc.;
- avoid siting development on pipeline right-of-ways;
- require setbacks from pipeline easements for developments that are sensitive receptors (e.g. schools, hospitals);
- include within the permit review process a “consultation zone” extending outward from pipeline easements, wherein certain categories of land use action (.e.g., blasting, grading, filling, drilling, stock-piling, or water diversion) and proposed permits would have to be reviewed and commented upon by the pipeline operator prior to commencing the action or receiving a permit;
- influence the selection of the pipeline route itself.

CASCADE NATURAL GAS

Cascade Natural Gas Corporation (CNG) builds operates and maintains natural gas

facilities serving Benton County. CNG is an investor owned utility serving customers in sixteen counties in Washington State.

The Pacific Northwest receives its natural gas from the Southwest United States, and from neighboring Canada. Natural Gas is supplied to the entire region via two interstate pipeline systems. The Northwest Pipeline Corporation owns and operates the network that supplies natural gas to Benton County.

Natural gas is stored in a facility in Plymouth by cooling it to -258 degrees Fahrenheit. At this temperature it becomes a very dense liquid and can be placed in storage tanks.

Other components of the CNG system include gate stations which are the delivery point from the interstate pipeline to the CNG system. They include metering station, odorizing stations and pressure reduction stations. High-pressure lines transport gas to district regulators throughout the CNG service area. Pressure reduction stations are installed at the point of delivery of natural gas from the high pressure lines to the lower pressure distribution systems.

The location, capacity and timing of system improvements depend greatly on opportunities for expansion, and on how quickly the county grows. The possible routes to connect different parts of the system will depend on right-of-way permitting, environmental impact, and opportunities to install gas mains along with new development, or other utilities.

CNG has an active policy of expanding its supply system to serve additional natural gas customers. CNG's engineering department continually performs load studies to determine CNG's capacity to serve its customers. If CNG receives a feasible project request outside our service area, the boundary can be easily increased. The service boundaries for CNG are shown on Map Figure 10-3.

TELECOMMUNICATIONS

The Telecommunications Act of 1996, enacted into law the first comprehensive rewrite of the Communications Act of 1934. The Act establishes national guidelines for enabling equitable competition in all telecommunication markets, including the local telephone market, and identifies respective roles of the FCC and the states to accomplish the transition.

The Act deals with five major areas: telephone, telecommunications equipment manufacturing, video services, radio and television broadcasting, and online computer services. Generally, the Act reduces cross-market entry barriers, relaxes merger and acquisition rules and provides guidelines to the FCC and state regulators on decisions necessary to increase competition in telecommunications. These changes in the 1934 statute allow customers the ability to choose their local and long distance service providers and to retain their telephone numbers when they change local telephone providers. It also gives rural consumers access to services similar to those that are available to urban consumers at comparable rates.

Included in this section is a list of wire and cellular phone service operators, and a map, Figure 10-4, depicting communication towers and fiber optic cable locations within Benton County.

Standard Telephone

The following companies supply local and long distance service in Benton County:

AT&T, Century Tel, Sprint, Tel West Verizon, MCI, Q West, & Unicom

Cellular Telephone

Cellular telecommunications is a rapidly expanding technology that allows people to have high quality telephone communications capability without the constraint of wires. Mobile telephone communication via radios which send and receive signals from a network of receivers placed at several cellular communication ("cell") sites.

Cell sites are placed on tall poles, lattice-

type towers, or on existing buildings. Each cell site has a coverage area of several miles depending on topography and number of customers.

Unlike other utilities, the cellular telephone industry does not plan facilities far into the future. Rather it periodically analyzes market demand to determine whether expansions into new service areas can be profitable. Benton County is served by the following companies: *Verizon, Cingular, US Cellular, Sprint, T Mobile, Nextel, Q West & AT&T Wireless.*

WATER AND SEWER SYSTEMS

Benton County does not currently own, operate, or maintain a water or sewage treatment facility with the exception of occasional temporary responsibility for water systems under "receivership" per RCW 70.119A. Source of water and sewer disposal for housing units countywide is shown in the following Table 10.1.

TABLE 10.1 SOURCE OF WATER AND SEWER DISPOSAL¹

SOURCE	HOW SERVED	# OF HOUSING UNITS
WATER	PUBLIC/PRIVATE SYSTEM	42,637
	PRIVATE WELL/OTHER	7,384
SEWER DISPOSAL	PUBLIC SYSTEM	50,248
	SEPTIC TANK/	15,604

Existing Conditions

According to the State of Washington Department of Health (DOH) there are currently (2/97) 602 public and private water supply systems located in Benton County providing domestic water. A public supply is generally defined as any

system, excluding systems serving only one single-family residence that provides piped water for human consumption. DOH keeps an inventory of water systems in the County that includes classification of systems according to type of system and number of customers served. The criteria

1. State Department of Health 2006

used in establishing the classifications are described in Table 10.2.

DOH defines a “community” water system as a public water system that serves a permanent or seasonal population (subdivisions, mobile home parks, etc.), and a “non-community” water system as a public water system that serves a transitory population (restaurant, motel, etc.). According to DOH figures, as of June 19, 2006, there were a total of 78 Group A water systems in Benton County. Thirty nine were “Community” systems, 24 “Non-Transient Non-Community”, and 15 “Transient Non-Community” systems (rest areas, campgrounds, etc.). In addition, there are 524 group B water systems located in Benton County.

The source of water supply is ground water for all these systems with the exception of the Cities of Kennewick and Richland, which in addition to ground water receive water from the Columbia River. Information for each city’s water system, the population served, and the average daily amount of water used, can be found in each entities comprehensive plan.

TABLE 10.2 DOH SYSTEM CRITERIA

CLASS	SYSTEM CRITERIA
Group A	15 + systems/ or serves 25 + people for over 60 days a year
Group B	a system with 4+ service connections but <15, serving < 25 people a day for over 60 days a year.

Most rural residents rely on on-site septic tanks and drain fields for their wastewater system needs. While adequately designed and installed on-site septic systems can be appropriate for rural level development,

maintenance of such systems varies from excellent to none at all. Poorly maintained septic systems are a source of ground and surface water pollution, and have been identified both at the state and local level as significant contributors to high nitrate levels in soil and coliform bacteria in surface water. All on-site systems in the County are permitted and regulated by the Benton-Franklin Health District.

Current Trends

Living in rural areas has become a lifestyle preference in today’s society. The influx of people moving into newly-developed areas of Benton County means more individual or community wells which depend on groundwater, and an increased demand on the groundwater supply.

Under state law, all new public water systems must be owned or operated by a satellite system management agency (SMA). This ensures that the new system has sufficient management and the financial resources to provide safe and reliable service to the system users.

If a SMA is not available to receive ownership/or operation of the system and DOH determines that the new system has met sufficient management and financial resource criteria to provide safe and reliable service, then the new system may be conditionally approved. The conditions may include future inclusion into a SMA, or findings that the system meets the DOH criteria for management, and include an ongoing review of its operational history and status.

Currently the City of Richland and an entity named Water System Management

operate SMA's in Benton County. If a system loses its owner/operator due to non-compliance the system goes into "receivership". During receivership actions, DOH meets with water systems owners and users to discuss restructuring options. If no other SMA or person is willing to be named as a receiver the court appoints the county as receiver. At present the county is in receivership of one such water system, with the City of Richland Satellite Management Agency operating the system.

New state regulations were enacted in 1995 for on-site septic systems. Many of the changes were in response to pollution problems on the west side of the state caused by inadequate treatment performance capability of very gravely, or coarse sand soils. The criteria for sewage treatment of these soils may include minimum land area requirements, or special engineered systems, i.e., mound, sand line trench systems, etc. There are several areas in the County where these soils exist. The Benton-Franklin Health District oversees the placement and permitting of onsite sewer systems. Those systems over 3,500 gallons per day are permitted through the Department of Ecology.

Future Considerations

On-site water and waste systems for multiple users may be a desirable alternative to the single user systems and the extension of municipal systems. The option to cluster development in rural areas opens the opportunities for the use of such systems.

In the rural communities of Whitstran,

Paterson, Plymouth and Finley, there is a desire among residents for public water systems which are perceived to be more affordable than individual wells. If such systems were to become a reality the logical next step could be public waste disposal systems.

A water resource management program to conserve and maintain the County's groundwater supply will be necessary to provide a long term dependable supply sufficient to sustain the future needs for potable water and water for agricultural purposes.

SOLID WASTE

Existing Conditions

The "2013 Benton County Comprehensive Solid Waste Management and Moderate Risk Waste Management Plan" (2013 Plan) provides background and guidance for a long-term approach to solid waste and moderate risk waste (MRW) management in the region. This 2013 Plan comprises the combined comprehensive solid waste management plan (CSWMP) and Local Hazardous Waste/Moderate Risk Waste (MRW) Plan for the incorporated and unincorporated areas of Benton County (combined Plan).

The purpose of the 2013 Plan is to serve as a "roadmap" to managing the comprehensive solid waste and MRW management systems in Benton County. The 2013 Plan was developed as a joint effort of Benton County and the cities of Benton City, Kennewick, Prosser, Richland, and West Richland. It is intended to provide citizens and decision makers in Benton County with a guide to implement, monitor, and evaluate future

activities in the solid waste for a 20-year period. The recommendations for the 2013 Plan not only guide local decision makers, but substantiate the need for local funds and state grants to underwrite solid waste and MRW projects.

SPECIAL SERVICE PROVIDERS

School Districts

The County is divided into seven school districts, the boundaries of which are shown on Map Figure 10-5. All districts are located entirely within the County, with the exception of the Grandview District, which is principally located in Yakima County but includes approximately six square miles of Benton County (stretching three miles north and south of Highway 12 at the Yakima County line).

All school districts offer kindergarten through twelfth grade education except the Paterson School District, which contracts grades 6-12 (middle and high school levels) with the Prosser School District. Public school districts and pupil enrollments for each district for the 2004-05 school year are presented in Table 10.4.

TABLE 10.4
SCHOOL DISTRICT ENROLLMENT²

DISTRICT	ENROLLMENT
PROSSER #116	2,842
PATERSON #50	100
RICHLAND #400	9,911
KENNEWICK #17	14,500
BENTON CITY #52	1,653
FINLEY #53	965
GRANDVIEW #200	3,115

² 2005 Washington State Yearbook

Higher Learning

Increasingly, education is the key to individual economic success. Frequently, this means a college degree. For counties a well-educated population is also an ingredient in economic success. Those in the Benton County area who wish to earn a four-year college or higher degree must commute to nearby counties or leave the area entirely to do so.

Columbia Basin College (CBC), located at Pasco in adjacent Franklin County, is the primary college in the area; they also have a branch campus in Richland. Columbia Basin College is a two-year community college offering a wide range of academic, vocational and night school programs. 2004-05 enrollment totaled 12,728.

Both Washington State University (Pullman) and City University (Bellevue) have branch campuses located in Richland. They offer both graduate and masters education programs.

Library Districts

The Mid-Columbia Library includes both Benton and Franklin Counties and is directed by a board of seven members appointed jointly by the Benton and Franklin County Commissioners. The district's main library is located in Kennewick, while branch libraries are located in towns in both counties. The rural areas are served by a bookmobile that maintains a scheduled route throughout the district. The Cities of Richland and Prosser have their own city libraries which

are not part of the countywide district.

Fire Districts

The five incorporated communities and portions of the remaining unincorporated area of Benton County are served by a mixture of municipal and rural fire departments. Richland and Kennewick municipal fire departments are manned by full-time firemen. Prosser, Benton City, and West Richland operate with full and part-time positions along with volunteer staff. The rural districts are principally manned by volunteer personnel. A mutual aid cooperative-agreement exists between Richland, Kennewick, Pasco, and Benton City, Prosser and the rural districts. The Benton County rural fire district boundaries are shown on Map Figure 10-6.

Long-range fire protection needs will also require increases in equipment and manpower to maintain an effective level of protection. With increased urbanization of the County, increased full-time employment due to increased level of service required by residents as opposed to volunteer service can be expected to occur in some of the County's fire protection organizations.

An additional factor is the integration of fire protection needs with long-range water needs. The source, storage capacity, and distribution systems of water systems, as well as fire hydrant placement in urban density developments, must be adequate to provide sufficient volume and pressure for fire fighting needs.

Hospital Districts

General hospitals are located in Richland,

Kennewick and Prosser providing County residents with in-patient care. The Kennewick and Prosser hospitals are each operated by a public entity in the form of a hospital district directed by elected board members, while the Richland hospital is privately owned and operated. Benton County is also served by a variety of public and private medical clinics providing treatment for most medical concerns.

Benton-Franklin District Health

This regional health agency is responsible for a wide variety of health related programs in Benton and Franklin Counties. Some examples of its activities are in the environmental health division: solid waste, permitting community wells (2-4 hookups), approval of on-site sewage disposal systems, and restaurant inspections. The public health division serves the public with immunizations, tuberculosis and sexually transmitted disease clinics, and registration of birth and death certificates.

Mosquito Control District

The Benton County Mosquito Control District is established to eradicate mosquitoes, particularly the mosquito *Culex tarsalis*, which is a carrier of sleeping sickness. The district is administered by a manager, who is directed by a twelve-member board appointed by the Commissioners of Benton and Yakima Counties, and mayors from the respective city councils of the cities who are within the district (Kennewick, Benton City, Prosser, Richland, West Richland, Mabton, and Grandview). There are three board members representing the unincorporated

area of Benton County. The district encompasses 354 square miles within the Yakima and Columbia River drainages, exclusive of the Horse Heaven and Rattlesnake Hills, and the Hanford Reservation.

Benton Clean Air Authority

The Benton Clean Air Authority (BCAA) carries out the requirements of the Washington State Clean Air Act, RCW 70.94, within boundaries of Benton County. The BCAA functions as a single county authority to control the emissions of air contaminants from all sources within the County. The agency is charged with implementation and oversight of agricultural and backyard burn programs; air quality monitoring; asbestos removal notifications and inspections; industrial and commercial air permitting; and enforcement of federal, state, and local air quality regulations.

Irrigation Districts

Agricultural production that takes place across the midsection of the county, from the Yakima County line to the Finley area, is made possible by the ***Yakima Project*** developed by the U.S. Bureau of Reclamation. The Yakima Project was developed primarily for the purpose of providing irrigation water for the fertile Yakima River Valley and consists of over 200 miles of canals and laterals. This irrigation system provides the water that enables the Yakima Valley, which extends into Benton County, to continually be one of the nations premier producers of such crops as apples, mint, hops, cherries, and grapes. The irrigation district locations in Benton County are shown on Map Figure 10-7, and are listed below:

Roza District

Sunnyside Valley Irrigation District

Benton Irrigation District

Grandview Irrigation District

Kennewick Irrigation District

*Kiona Irrigation District**

*Columbia Irrigation District**

Badger Mountain Irrigation District

* Early Districts, not a part of the Yakima Project

Noxious Weed Control District

The Benton County Noxious Weed Control District is directed by a board of five members appointed by the County Commissioners. The intent of the District is to promote weed control by instituting a program that emphasizes on education as a means to assist land owners in the identification and control of noxious weeds listed on the county's noxious weed list.

Port Districts

Ports can develop property for industrial use and can lease and sell land, buildings, and facilities to private industry in accordance with state laws. State laws specify that ports may acquire, construct, maintain, operate, develop and regulate within the district: harbor improvements; rail or motor vehicles transfer and terminal facilities; water transfer and terminal facilities; air transfer and terminal facilities; and other commercial transportation; transfer; handling storage and terminal facilities and industrial improvements.

Port districts are funded by revenues from the operation of terminals, the sale or lease of properties, and tax levies. A port district may incur debt including issuing general

obligation bonds up to 0.25 percent of the assessed value of taxable property in the district without vote of the people. An additional 0.05 percent debt may be incurred if 60% of the electorate approves. They also have the power to issue revenue bonds for the acquisition, construction, reconstructions or extension of various improvements.

There are two port districts in Benton County, the Port of Benton and the Port of Kennewick. They are governed by a three member elected board of commissioners who appoint the Executive Director. The Port District boundaries are shown on Map Figure 10-8.

The Port of Benton District was formed in 1958 and covers approximately two-thirds of Benton County. Port of Benton sites encompass 1,156 acres and are found in the Prosser, Richland, and the Benton City areas.

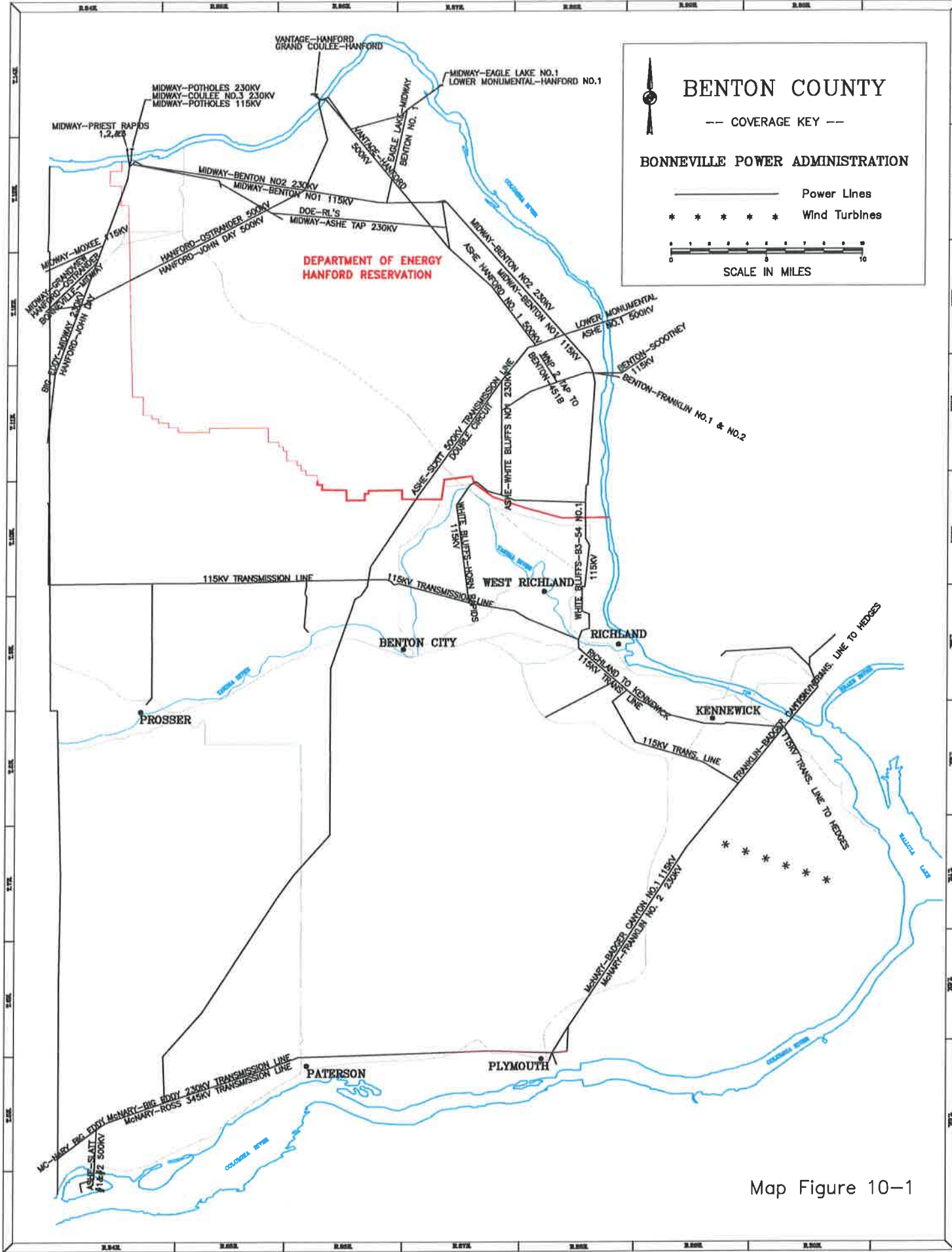
The Port of Kennewick has approximately 1,300 acres for development. There are four sites in the Finley industrial area, one in Kennewick, and a 270-acre site in Plymouth.

Richland Urban Growth Area Expansion

In 2006 the Board of County Commissioners approved the "Badger Mountain UGA Addition" expanding the City of Richland's UGA by approximately 2100 acres on the south flank of Badger Mountain and northeast of the I-82 travel corridor. The addition of this area to the Richland UGA means that over the next 20 years, the area will develop to urban uses, most likely residential, general and highway commercial, and light industrial.

Also approved as a part of the UGA expansion was a Capital Facilities Plan titled the Badger Mountain Valley View Urban Growth Area Expansion Capability Analysis that includes Chapters II, III, IV, V, VI, and VII, respectively, an inventory and analysis of the existing levels of utility service in the UGA expansion area (Chapters II and III); a projection of land use demands from build-out of the UGA expansion area to urban uses; identification of the improvements to the utilities service infrastructures that would be needed to service build-out at specific Levels of Service over time; and projections of the costs of making those improvements and an identification of the various funding sources that would be available for accomplishing the improvements.

The County is not a utility service provider. Within the unincorporated County, water, electric power, communications, irrigation and potable water, and waste disposal services are all provided by regional agencies, rural electric associations, local special purpose districts or municipalities other than the County. Utilities infrastructure is historically capitalized by rate-paying customers. The Badger Mountain Valley View Urban Growth Area Expansion Capability Analysis is not included in this document but is incorporated by reference and describes who are the providers of those services within the expanded UGA, what additional infrastructure will be necessary to provide the services at identified levels of service over time, the estimated costs of the new utilities infrastructure, and the sources of funding.



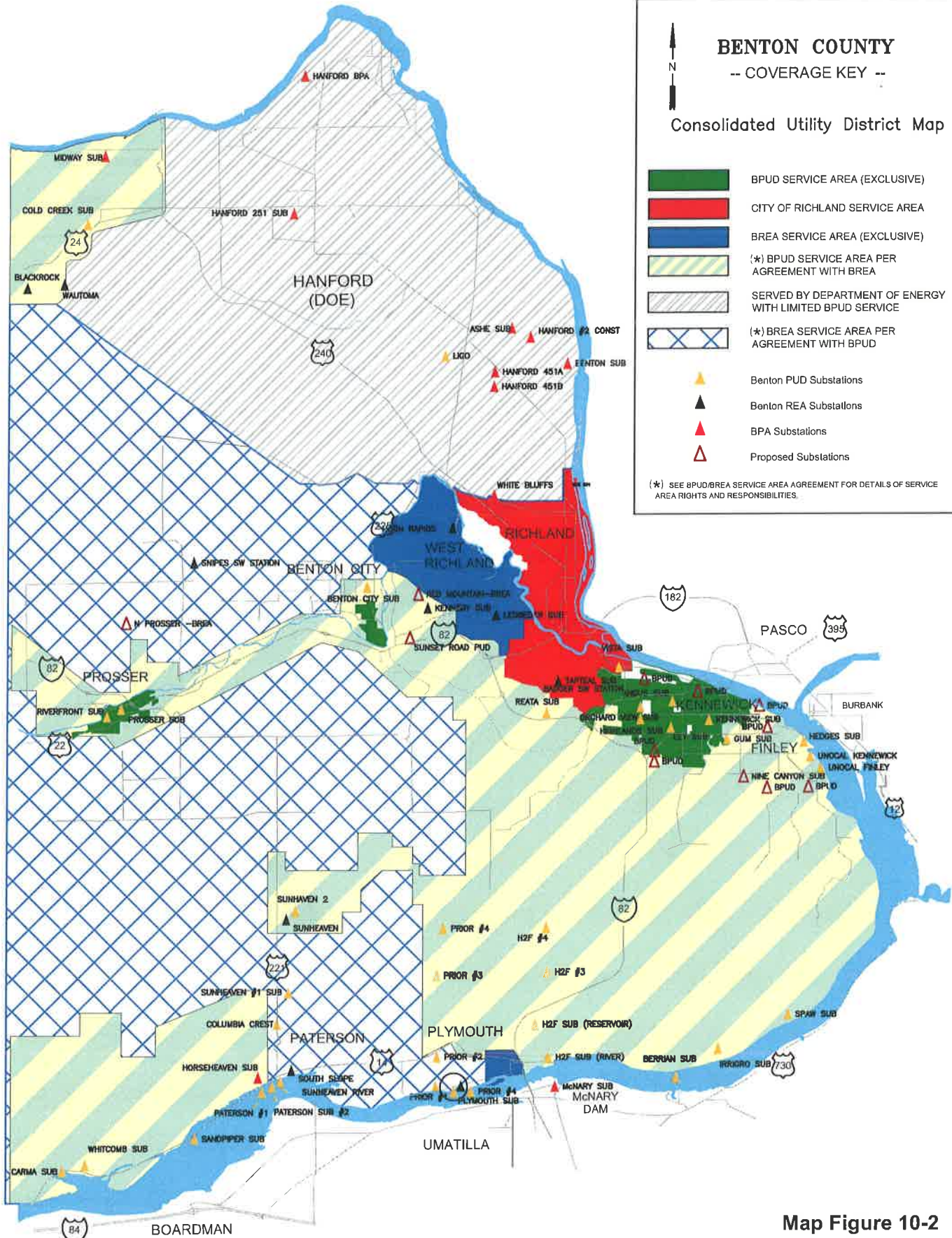
Map Figure 10-1

BENTON COUNTY
-- COVERAGE KEY --

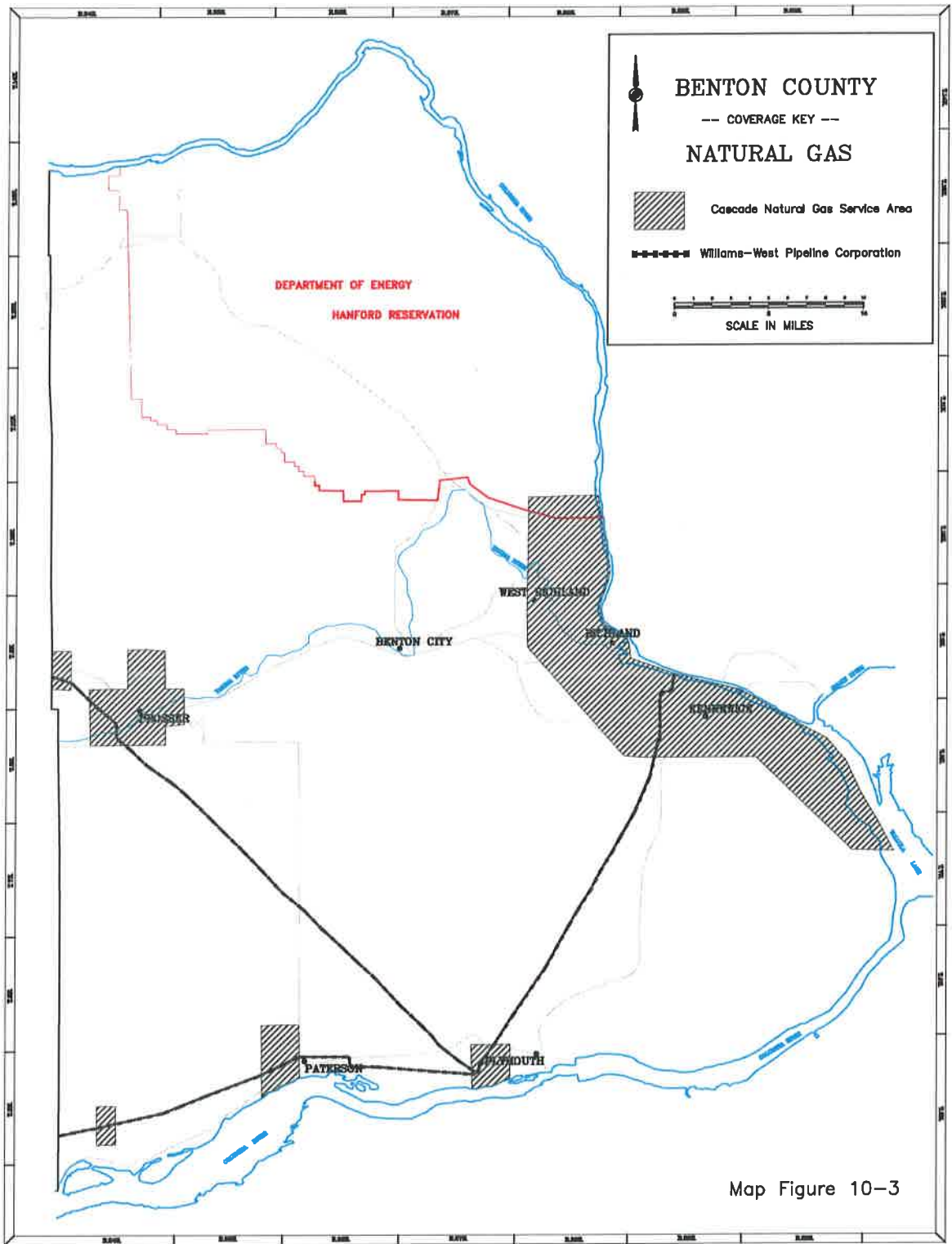
Consolidated Utility District Map

- BPUD SERVICE AREA (EXCLUSIVE)
- CITY OF RICHLAND SERVICE AREA
- BRE A SERVICE AREA (EXCLUSIVE)
- (*) BPUD SERVICE AREA PER AGREEMENT WITH BRE A
- SERVED BY DEPARTMENT OF ENERGY WITH LIMITED BPUD SERVICE
- (*) BRE A SERVICE AREA PER AGREEMENT WITH BPUD
- Benton PUD Substations
- Benton REA Substations
- BPA Substations
- Proposed Substations

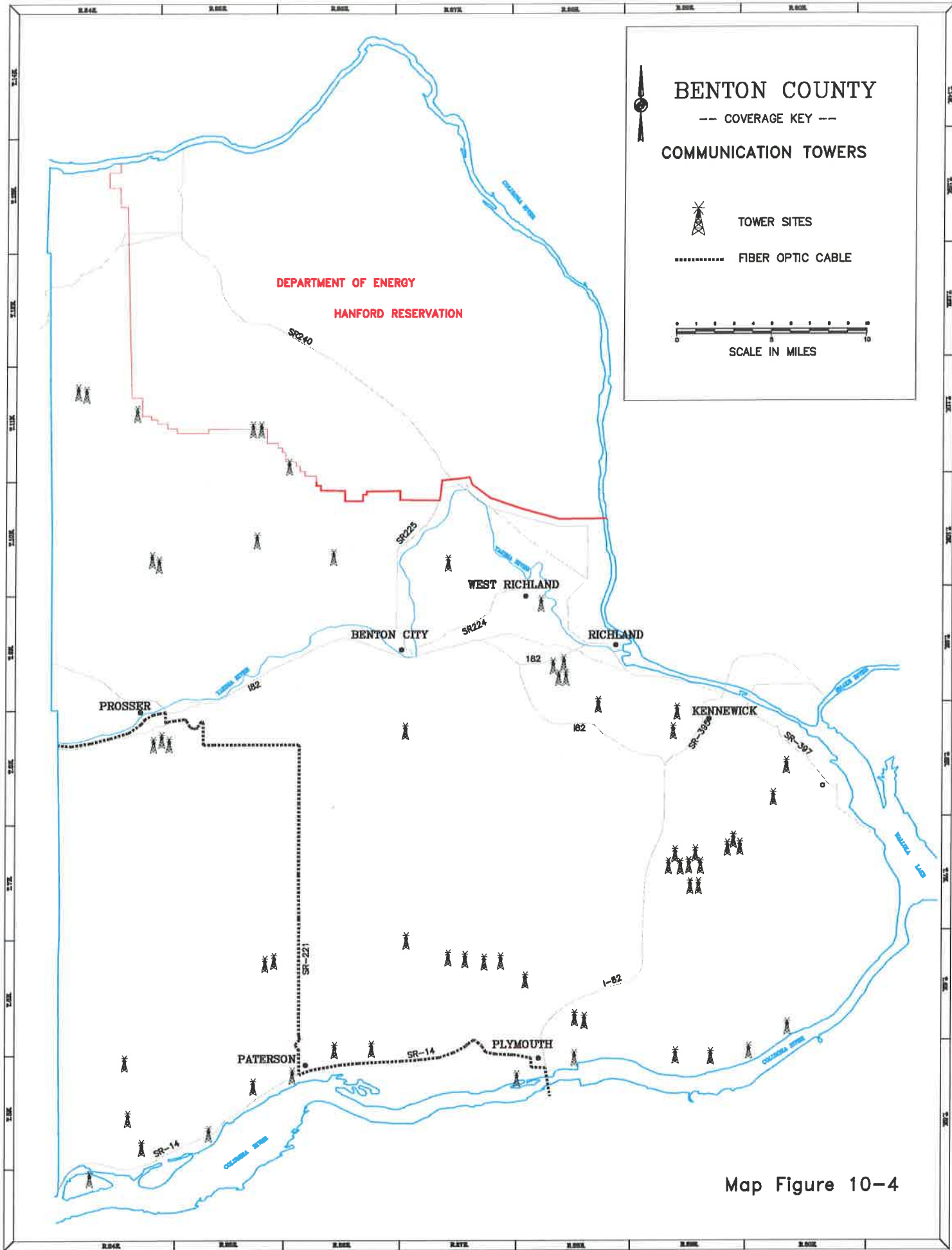
(*) SEE BPUD/BRE A SERVICE AREA AGREEMENT FOR DETAILS OF SERVICE AREA RIGHTS AND RESPONSIBILITIES.



Map Figure 10-2



Map Figure 10-3



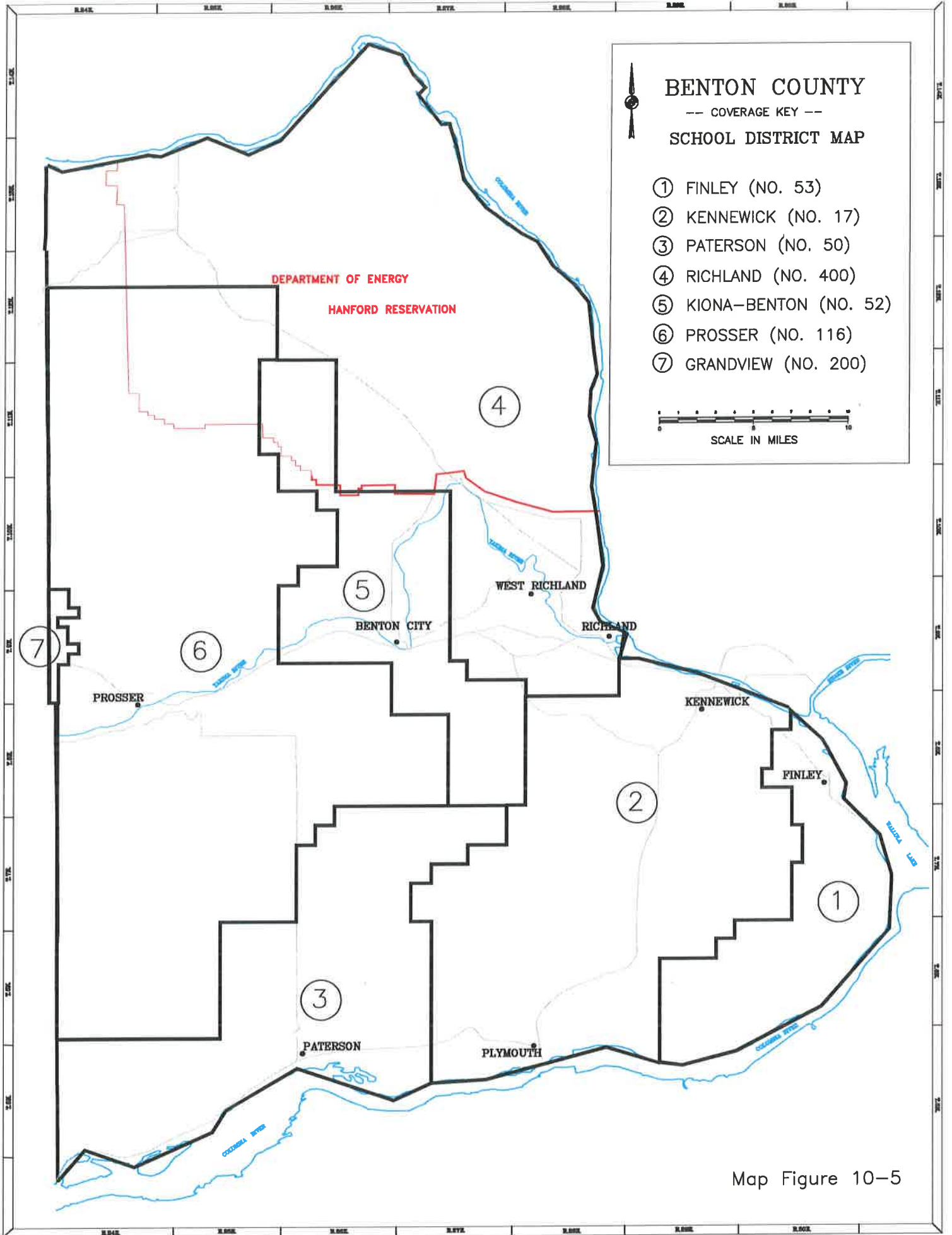
Map Figure 10-4

BENTON COUNTY

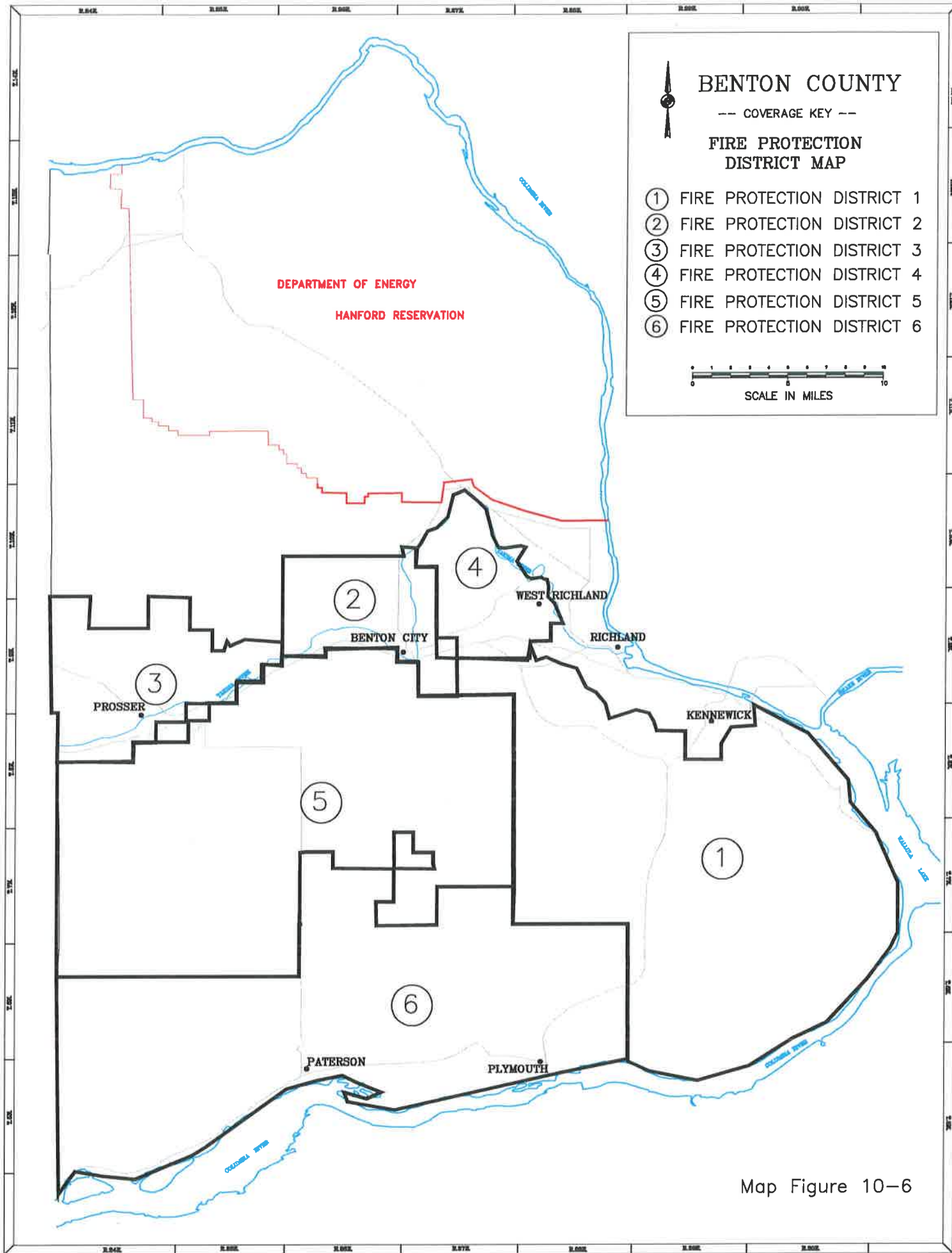
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SCHOOL DISTRICT MAP

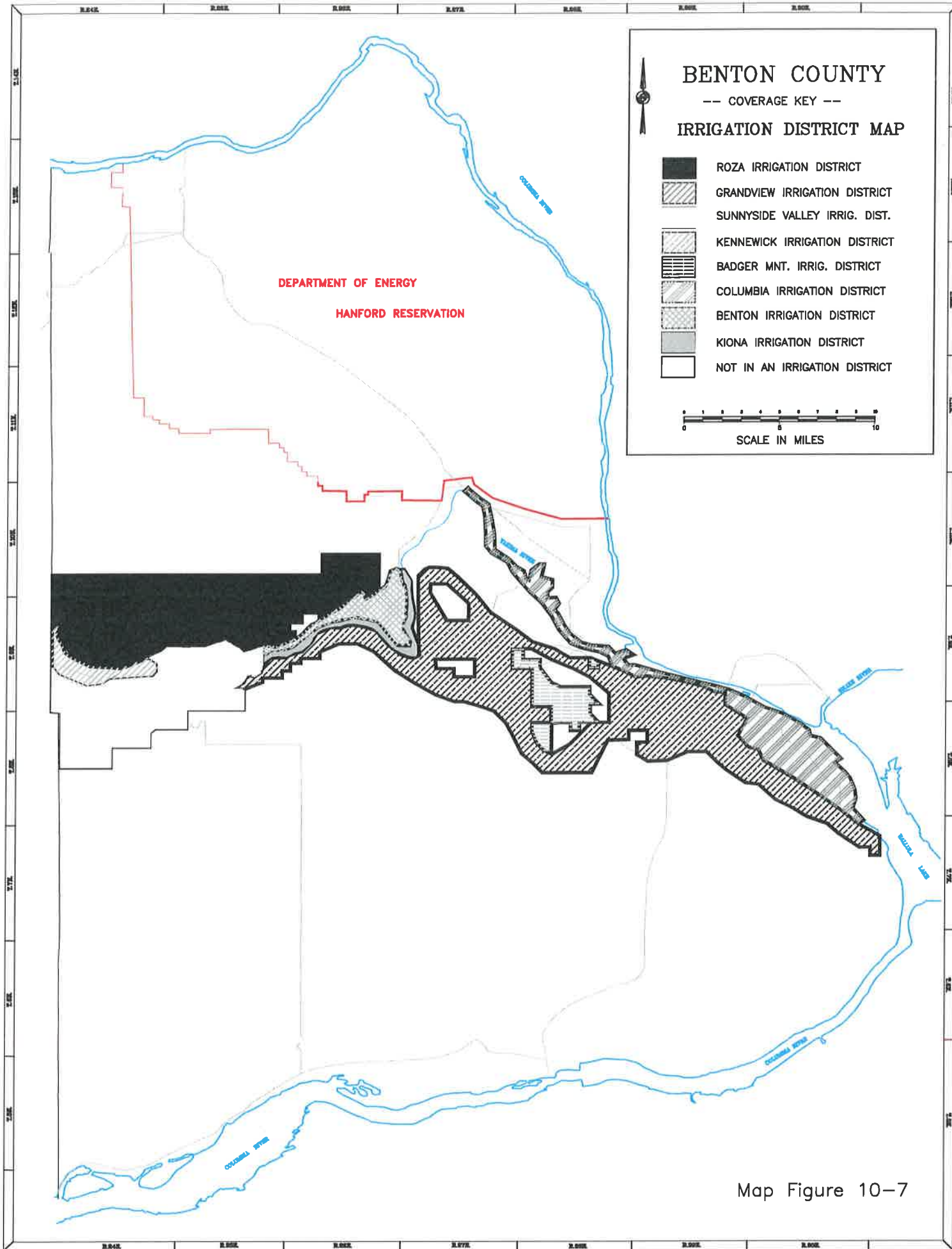
- ① FINLEY (NO. 53)
- ② KENNEWICK (NO. 17)
- ③ PATERSON (NO. 50)
- ④ RICHLAND (NO. 400)
- ⑤ KIONA-BENTON (NO. 52)
- ⑥ PROSSER (NO. 116)
- ⑦ GRANDVIEW (NO. 200)



Map Figure 10-5



Map Figure 10-6



BENTON COUNTY

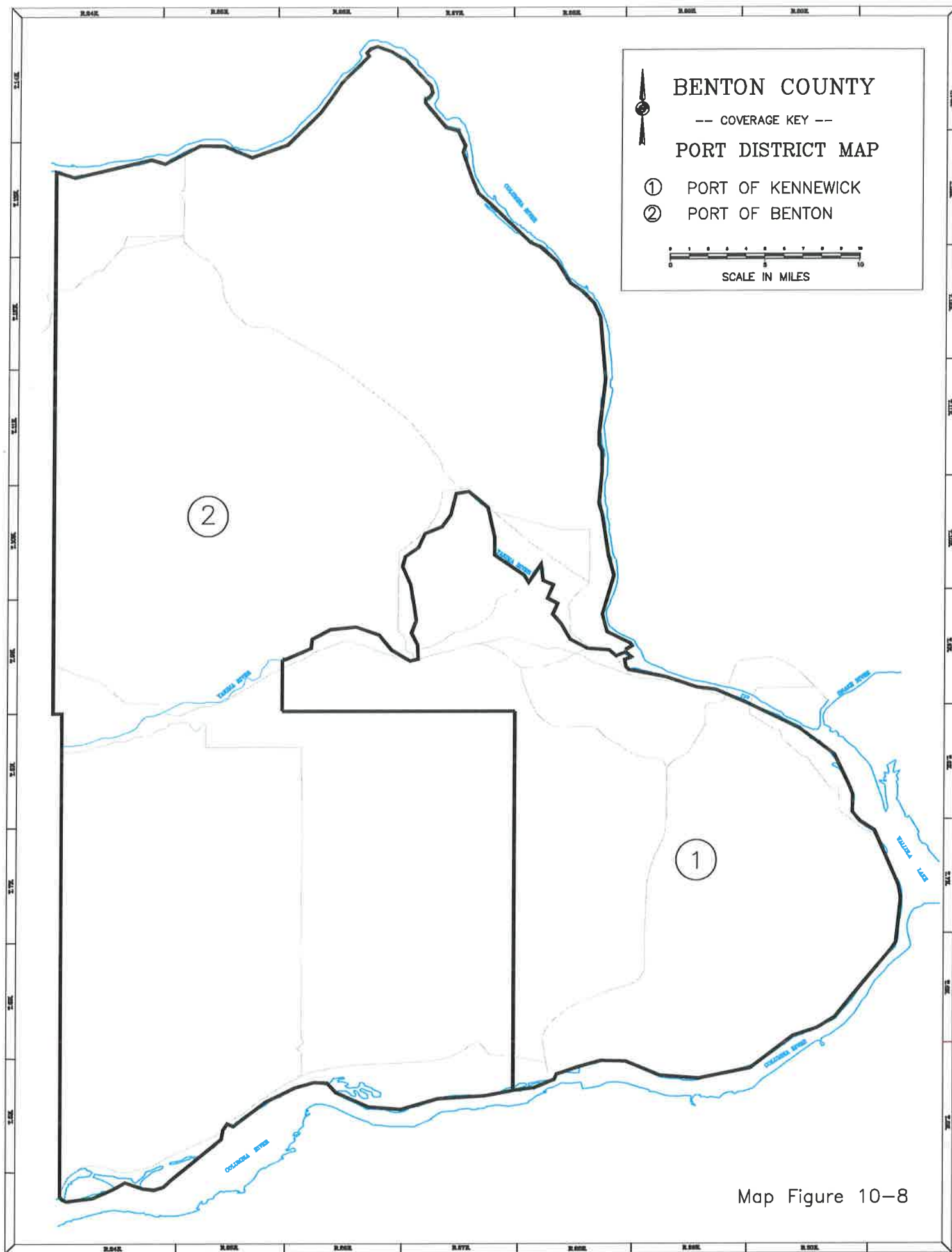
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IRRIGATION DISTRICT MAP

- ROZA IRRIGATION DISTRICT
- GRANDVIEW IRRIGATION DISTRICT
- SUNNYSIDE VALLEY IRRIG. DIST.
- KENNEWICK IRRIGATION DISTRICT
- BADGER MNT. IRRIG. DISTRICT
- COLUMBIA IRRIGATION DISTRICT
- BENTON IRRIGATION DISTRICT
- KIONA IRRIGATION DISTRICT
- NOT IN AN IRRIGATION DISTRICT



Map Figure 10-7



BENTON COUNTY

-- COVERAGE KEY --

PORT DISTRICT MAP

- ① PORT OF KENNEWICK
- ② PORT OF BENTON



Map Figure 10-8

HOUSING

CHAPTER 11

INTRODUCTION

The Housing Element is integrated with the other Elements of the Comprehensive Plan: the Land Use Element defines the intensities and location of residential land use designations; the Rural Element contains development preferences and goals of the residents in specific planning areas of the County; and Chapter 3 contains policies relevant to housing, infrastructure, and services which are detailed in their respective Elements. A full understanding of the County's housing policy and plans should include a study of these other Elements of the Comprehensive Plan.

GMA REQUIREMENTS RE: HOUSING ELEMENT

The GMA planning goals for housing are as follows:

- Encourage the availability of housing to all economic segments of the population;
- Promote a variety of residential densities and housing types;
- and encourage the preservation of existing housing stock.

Mandatory components of the Housing Element include inventory and analysis of existing and projected housing needs within the county, as well as clear goals, policies, and objectives for the preservation, improvement, and development of housing. The Element must also provide procedures or mechanisms to identify sufficient land for housing for

government-assisted projects, housing for low-income families, manufactured housing, multi-family housing, group homes, and foster care facilities (RCW 36.70A.020). There must also be procedures established in the comprehensive plan that ensure adequate provisions of housing for existing population as well as the projected needs of all economic segments of the County (RCW 36.70A.020).

GMA also encourages the use of innovative land use techniques to enhance affordable housing opportunities including, "density bonuses, cluster housing, planned unit developments, and the transfer of development rights". (RCW36.70A.090)

Existing Conditions

In 2002, the Office of Financial Management (OFM) projected a twenty-year (2025) countywide population of 225,108. Currently, the 2005 estimated population of the County also furnished by OFM is at 158,100. The unincorporated county maintains a 23% share of the total countywide population. Much of the population increase is attributed to immigration as opposed to the birthrate¹.

In addition to increasing the number of people living in the County, immigration is changing the demographic makeup. Increased

¹ Based on 2000 Bureau of U.S. Census.

minority, retirement-age, and single parent household populations characterize the changes. Benton County has a younger population than the State as a whole, and a higher median income.

The average household size has declined from 3.27 in 1970, to 2.68 persons in 2000. These numbers reflect the nationwide trend toward smaller household sizes. Single parent and retired households are on the rise and are more sensitive to factors contributing to poverty and substandard living conditions such as health-care, housing, and general cost of living expenses. There is a need for farm worker housing in the rural areas where farm worker population has grown rapidly in recent years. These are a few examples of how Benton County's demographics are affecting the housing needs.

TABLE 11.0 EXISTING HOUSING UNITS²

Jurisdiction	1990	2000
Benton County (total)	44,877	55,963
City of Kennewick	17,207	22,043
City of Richland	13,872	16,454
City of Prosser	1,665	1,781
City of West Richland	1,564	3,094
City of Benton City	682	1,022
Total Units Incorporated	34,990 (78%)	44,394 (79%)
Total Units Unincorporated	9,887 (22%)	11,569 (21%)

² Based on 2000 U.S. Bureau of Census.

Affordability

The term affordable, when used in regard to housing, is usually relative to a specific economic segment of the population. What is affordable to a family earning \$100,000 a year may be completely out of reach for a family with a yearly income of \$30,000. Household income is most commonly measured in terms of a region's median income.

Median income³ for Benton County is \$51,694 and is divided into four household income groups:

Low-Income Households: households with gross earnings that are 50% of Benton County median income (\$25,847 is currently 50% of median);

Moderate -Income Households: households with incomes between 50% and 80% of median income (\$25,847-41,355 annually);

Median-Income Households: households at 80%-120% of median income (\$41,355-62,032 annually); and,

Above Median Income Households: households making above 120% Of median income (above \$62,032 annually).

A home is considered affordable if no more than 30% of the households gross monthly income goes toward rent/mortgage and utility payments. Taxes, insurance and other expenses are usually included in this percentage. This is a standard used by lending institutions, the real estate industry and government.

³ 2003 Federal Census Estimate, money income data

Historically, housing types, market conditions and existing plans have been successful in adequately meeting the housing needs of the County's low and moderate-income residents.

Housing Costs

Most of the new housing being built in the County's Metropolitan Planning Area (MPA) is for the custom home market. The average sell price of a house in the Tri City area in 1995 was \$115,500, the average sell price in 2005 is \$171,100. This indicates a higher percentage of the houses are being built for the above median income range in the Tri-City area.

The information provided in a report by the Tri-City Realtors (4/26/06) showed active residential listings in February 2000 as 799, while in the same month in 2006 the available listings were up to 1,427. The number of houses sold were 140 and 181 respectively. The Apartment Rental Survey conducted by TRIDEC⁴ in December 2005 showed an average rental rate for a two-bedroom two bath apartment at \$687 a month in the Tri-City area. An 8-9 percent rental vacancy rate occurs in both cities.

Special Needs Housing

Those citizens with special needs living in the county include those people who require some assistance in their day-to-day living, such as the physically or mentally disabled, senior

citizens, and institutional and group home settings. Table 11.1 shows special housing needs countywide. Social service programs and assisted housing in Benton County all serve a portion of those with special needs.

TABLE 11.1 SPECIAL NEEDS HOUSING 1993⁵

Need Type	
Households needing assistance excluding Homeless, 1990	5,430
Households at risk of Homelessness, 1990	1,911
Working Poor affordability Gap, 1993	(\$55)
Homelessness	
Shelter Clients (ESAP-funded Only), 92-93	585
Shelter Turnaways (ESAP)	165
One Night Count-	
Emergency Shelters	0
Shelters for Children	0
Shelters for abused Women	8
Visible in Street Locations	30

Current Trends

The latest population projections from O.F.M., using the "high" series estimates, indicate that Benton County can expect a population increase of 82,633 by the year 2025. The unincorporated county's 23% allocation of the county-wide 2025 O.F.M. population projection is estimated to be 18,606 additional people. At an estimated unincorporated ratio of 2.68 residents per household, this increase in

⁴ Tri Cities Development Council.

⁵ Washington State 1994 Comprehensive Housing Affordability Strategy Report (CHAS).

population would require up to 6,943 new homes in the next 20 years.

Table 11.2 shows the current housing mix in Benton County. Most housing units in Benton County are single family. In 2000, 60% of all units were single family, multi-family dwellings

represented 27%, and Manufactured homes or Factory Assembled Structures (FAS's) 14% of the dwellings.

In 2005, building permits issued by the county showed that 57% were for FAS's.

TABLE 11.2 HOUSING MIX, CITIES IN BENTON COUNTY, 2000⁶

Jurisdiction	Single family	Multi-family	Manufactured Homes	Total Dwellings
Unincorporated	7,220	606	3,743	11,569
Kennewick	11,747	8,338	1,958	22,043
Richland	10,329	5,361	764	16,454
Prosser	1,182	349	250	1,781
West Richland	2,206	204	684	3,094
Benton City	643	113	266	1,022
TOTAL	33,327	14,971	7,665	55,963

⁶ 2000 Bureau of U.S. Census.

Future Considerations Affordable Housing

The following sections summarize some of the provisions and techniques currently used by the county to encourage affordable housing.

Density

A range of residential densities is provided for within the unincorporated county in order to provide broad affordability related to land costs and construction, within the "Community Center" areas of rural communities such as: Paterson, Whitstran, Plymouth, and Finley, densities of up to three (3) dwelling units (DU's) per acre may occur,

including duplexes. Densities of one DU/acre are designated in specific areas close to UGA's and with adequate road capacity. These designations are considered limited areas of more intensive rural development enabled by RCW36.70A.070 (5)(d). The density of one DU per 5 acres is the predominate rural density, however these are average densities, not minimum lot sizes. Therefore densities can be clustered on small lots to reduce land costs.

Affordable Housing Types

Factory Assembled Structures (FAS's) and mobile homes offer housing

alternatives suitable to low-income and moderate-income groups as well as the senior citizen. Factory assembled structures are designed, made off-site and assembled on-site. This process helps to reduce building material and construction costs. Quality FAS's can be placed on a parcel for approximately 70 percent of the cost of a comparable sized site built structure. As technology improves, factory assembled structures can be designed to closely resemble site-built homes. FAS's offer reduced building and construction costs, and when placed in mobile home parks or subdivisions, reduced land and infrastructure costs. FAS's are a major source of affordable housing in Benton County. They meet Housing and Urban Development (HUD) standards, which make it possible for buyers to get loans to purchase with little or no down payment. This is a very attractive option for those with little savings to buy site built homes.

Accessory Dwelling Units

Accessory dwelling units help meet the needs of the disabled, infirm, or elderly in need of assisted care, by opening up surplus space in single family homes. The secondary purpose is to provide accessory unit housing in a single family dwelling for a person related to the occupant. Income received from accessory units may help homeowners with limited income pay for their housing expenses. Accessory units are currently allowed by ordinance in all Residential Zones

and the agricultural zoning district of Benton County.

Farm Labor Housing

Provisions for farm worker housing is provided in the GMA Agricultural District. Housing for farm laborers may include apartments, cabins, factory assembled structures, bunkhouses, tents, or recreational vehicles maintained or temporarily located in connection with farm work, providing for the annual or seasonal housing of farm employees.

Clustering

One technique available for reducing housing development costs is clustering. By clustering units together in Planned Developments (PD's), instead of dispersing them throughout the site reduces costs for roads, water, sewer, and building. Clustering is also used to preserve open space, protect sensitive and natural resource areas.

Planned Development

Planned Developments (PD's) offer developers flexibility in project design and site planning, which can allow for a higher quality development and improved affordability. PDs are generally characterized by flexible site requirements, which focus on overall project design rather than lot by lot design, efficiency in the provision of utilities, and common open space.

Multiple Detached Dwellings

Under the current Benton County Code, the Planning Director may approve up to four detached

dwellings on an individual lot provided the proposed use complies with all applicable county health district, Department of Health and Social Services and Department of Ecology requirements, and conditions of the ordinance, such as setbacks, etc. The multiple dwellings provision allows for supervision of elderly or infirmed family members, farm worker housing, and other essential living arrangements.

Temporary Dwellings

Temporary dwelling permits are permitted in all residential and agricultural districts and are approved with or without conditions by the Planning Director. They may be approved in cases of personal hardship and to suit the needs of the agricultural community on a temporary basis. Because such hardships or needs are personal and generally transitory, it is determined that the approval of temporary dwellings do not constitute a long-term land use commitment that would conflict with the County's Comprehensive Plan.

Development Review Process

In addition to land use policies, the development review process conducted by the County will be streamlined to minimize unnecessary time delays and procedural requirements. The timeliness of the permit process represents a cost to the homebuilder, and eventually to the homeowner. These may include a reduction in the time needed to receive final approval from the

County, and thereby adding certainty to the development review process. Minimizing discretionary, conditional and administrative processes, such as additional hearings, can save time in the development process and in turn cut costs. A streamlined review process will help reduce housing costs and may also encourage developers to use the policy and regulatory features of the Comprehensive Plan designed to encourage affordable housing.

Environmental Analysis

CHAPTER 12

INTRODUCTION

PURPOSE AND INTENT OF THIS CHAPTER

This Chapter is intended to satisfy the requirements of the State Environmental Policy Act (SEPA) for the 1997 Benton County Comprehensive Plan, except for the Hanford Sub-Area Plan, which will undergo "joint" environmental review under the combined provisions of the National Environmental Policy Act (NEPA) and SEPA. At the conclusion of the "joint" NEPA/SEPA review the Hanford Subarea Plan will be amended into the Benton County Comprehensive Plan.

SEPA Requirements

The State Environmental Policy Act or SEPA (RCW 43.21C) requires government officials to consider the environmental consequences of actions they are about to take, and seek better or less damaging ways to accomplish those proposed actions. Officials must consider whether the proposed action will have a significant, adverse environmental impact on the following elements of the natural and built environment: earth, air, water, plants and animals, energy and natural resources, environmental health, land and shoreline use, transportation, and public services and utilities.

SEPA empowers local government to protect environmental quality, and it requires state and local officials to

make decisions consistent with the policy set forth in the act. When necessary, SEPA can be used to supplement agencies' authority to address gaps in laws affecting environmental quality. Under SEPA, policies, plans and regulations adopted per GMA are considered "non-project" actions subject to SEPA review.

DESCRIPTION OF THE ACTION PROPOSED An Addenda To A Previous EIS

Per the State Environmental Policy Act (WACs 197-11-625 and 706), this Chapter is an Addenda to the Final Environmental Impact Statement (FEIS) dated March 1981, for the 1985 Benton County Comprehensive Plan. The FEIS is incorporated by reference in the Appendix, Item 12-0.

The substance of the analysis herein adds to the Final EIS for the 1985 Benton County Comprehensive Plan. It does this in part by identifying provisions of the proposed Plan that respond directly to, and implement mitigations identified in the Final EIS as appropriate to mitigate the impacts of the 1985 Plan.

Table 12.1 shows how the proposed plan addresses the impacts and accomplishes the mitigations identified in the Final EIS for the 1985 Plan. Not all the impacts/mitigations identified in the Final EIS are addressed by the proposed plan.

Where they are not addressed, a brief indication of the reasons is included in the Table.

Proposal For Which This Addenda is Written

This Addendum is for the draft Comprehensive Plan (1997), proposed for compliance with the requirements of RCW 36.70A (aka the Growth Management Act, or GMA).

The proposal was developed with extended public participation including citizen advisory committees for Critical Resources, and Agriculture and Minerals, and a Rural Citizen Planning Advisory Committee for each of the county's five Rural Planning Areas.

INTEGRATION OF PROCESSES:

AN ITERATIVE DIALOGUE OVER ISSUES , DATA, GOALS, AND MAPS

Integration of SEPA and GMA in The Benton County Planning Process

Preparation of the Comprehensive Plan requires compliance with both SEPA and GMA requirements. Since they are similar in many ways, integration of SEPA with GMA eliminates duplication of effort and assures consistency between them. The procedural and substantive requirements of SEPA and GMA have been integrated at several points in the County's planning process:

Public Participation Both SEPA and GMA recognize public participation and agency coordination as fundamental to the planning process.

The public participation process for the County's Plan began in 1992, extending to 1997 where this Chapter containing the SEPA analysis for the draft is an integral part of the public draft of the Plan Document; the initial SEPA scoping meeting for the Plan was held in July, 1994; as a continuation of scoping, the Rural Citizen's Planning Committees drafted Alternative Land Use Maps directed at achieving identified visions and goals, and compared the gross impacts of each map prior to selecting the Preferred Alternative analyzed here-in.

Visioning and Scoping Visioning (for the Plan) and scoping (for the EIS) are the fundamental beginning points of each process. Visioning and scoping have been combined over an extended period in the Benton County process. The County initiated the formal EIS scoping process for the GMA Comprehensive Plan preparation beginning in July 1994. Prior to that, the 1992 Rural Survey, followed during 1993 by a "visioning" and planning process with citizen planning committees in each of the rural planning areas of the county identified the land use issues of concern for county rural residents. Visions and scoping issues have been combined in the planning process and translated by each rural planning committee into text and land use maps. This chapter describes how each of the Alternative Maps addresses the planning issues raised by the committees.

Existing Conditions Both SEPA and GMA require collection and analysis of information regarding existing conditions. The draft plan document contains a description of existing conditions for the various planning issues/resources.

Goals and Policies Goals and policies play an important role in the development of the GMA comprehensive plan, and the SEPA evaluation of plan alternatives. The policies and goals in the 1985 County Plan, as minimally amended to reflect GMA requirements for critical areas, urban growth areas, rural lands, transportation and capital facilities, are drivers for the draft plan, along with the general goals of GMA, and the Countywide Goals adopted by the cities and the county.

Impact Analysis GMA requires collection and analysis of data for natural resource lands, critical areas, the mandatory plan elements (i.e., land use, rural, housing, transportation, utilities, capital facilities elements), urban growth areas, and the siting of essential public facilities. SEPA requires the analysis of the Plan's significant adverse impacts on elements of the natural and built environment. The county draft plan contains the data inventories and descriptions of resources to which the required SEPA analysis is applied in this chapter.

Mitigation GMA requires plan and ordinance provisions to reduce the

impacts of growth on the natural and built environment (e.g., designate and protect by regulation critical areas, and protect water quality). Accordingly, the Plan map, text, goals and policies along with its implementation mechanisms naturally incorporate SEPA required mitigation.

Documents Both SEPA and GMA require preparation of documents for the public participation and decision-making processes, but each has specific guidelines on the information and analysis that must or should be included. This chapter contains the requirements of SEPA; this chapter is an integrated portion of the draft Plan document, which has been prepared to satisfy GMA requirements. After certification of the EIS and adoption of the Plan, this chapter (Chapter 12) could be separated from the Plan to become a stand-alone document.

INTEGRATION OF PRODUCT:

PLANS, ENVIRONMENTAL ANALYSIS, AND PLAN IMPLEMENTATION

Making Projects "Plan Actions"

A fundamental objective of the state legislature is to make more efficient and timely the process of project review. This could be accomplished by integrating comprehensive planning and environmental review so that review and approval of individual development projects becomes, to the extent practical, simply a logical next step in the implementation of the Plan; projects would become in effect "plan actions."

Recent expressions of this legislative objective is ESHB 1724 (RCW36.70C) enacted in 1995, and ESB6094, enacted as amended by the Governor in 1997. These are intended to help implement the recommendations of the governor's Task Force on Regulatory Reform through the integration of growth management and environmental review. A principal motivation for the legislative actions is to streamline land use regulatory processes in order to reduce long delay times (years in some cases) for project review and approval in western Washington counties and cities. Such delays are extremely cost inefficient and impede effective management and accommodation of growth pressures.

In relative terms, project delays are not currently a problem in Benton County where project review and action is generally expeditious. However the current expeditiousness is in large part due to circumstances of low overall densities and lack of full utilization of the land base. Simply put, the myriad of land users and interests currently on the landscape in the county enjoy spacious rural "comfort zones" between them. These comfort zones serve to separate and buffer competing land use interests. However, these comfort zones will inevitably disappear as population growth and full utilization of the land base absorbs the available space and resources capacity. As this occurs, competing economic considerations and quality of life

impacts associated with land use intensification will be more difficult, more litigation prone, and take longer to resolve during project review and permitting.

For planning jurisdictions fortunate enough to not yet have the problems of western Washington, planning in response to the recent legislation is a proactive mechanism to minimize such problems in the future by getting out ahead of them, i.e., address or avoid them during the planning phase of land use, rather than being confronted by them at the project phase.

Ideally the adoption process for a plan should include environmental review of its land use designations and provisions in sufficient detail and rigor that questions relating to the specific adequacy of, and impacts to essential services, air quality, natural systems etc., are answered upon plan adoption. When this is done, only site specific issues need be addressed for individual project proposals. The principal intended benefit of such a refined process is to make any specific development proposal that is consistent with the adopted Plan, and within the "bounds" of the Plan's environmental analysis, merely an action to implement the Plan, (rather than a challenge to the Plan).

Limitations Of This EIS Analysis

The degree of "bounding" that an EIS on a Comprehensive Plan accomplishes is a function of the

breadth and rigor of its analysis, which is a function of dollars committed to the effort.

Unfortunately, the legislature has not provided funds to accomplish the ideal (i.e., to make project approvals simply actions to implement the plan), at the local level. For the county, at this point in time, the desire to achieve the ideal is constrained by the lack of funding. Therefore, the environmental analysis herein is not expansively bounding: it accomplishes only the conventional objectives of a non-project EIS, i.e., it undertakes a comparative analysis of Alternative Plan Maps and provisions in order to:

- i) address the issues raised by the public during "scoping"
- ii) identify the least environmentally damaging alternative;
- iii) meet the requirements of state planning law and SEPA;
- iv) forward the county's planning purposes, e.g., economic growth, and quality of life objectives;

However, this Chapter does attempt to reach beyond its funding limitations by identifying specific geographic areas where "bounding" analyses would be useful as future addendum. These geographic areas are described below.

Locations Suitable For Additional "Area-specific" EIS Analysis To Enable Project Approvals As "Plan Actions"

Once the county plan is adopted,

future supplements and addendums of the EIS with information rigorous enough to make projects "planned actions" should be pursued if the objective is to aggressively facilitate plan implementation in order to accomplish economic or other objectives. This effort should be focused on specific geographic areas that in the near and medium term will experience development pressure as either a matter of Plan policy, or obvious trend. Such areas include:

- The industrial designations in the Finley Rural Planning Area;
- The Plymouth Rural Planning Area relative to water and sewer service needs and the emerging interest in commercial land uses associated with the I82 and S.R. 14 travel corridors;
- The industrial designation at the I82 Badger Rd. interchange in the Richland/West Richland Rural Planning Area;
- The Southern Plain, and the Vernita Terrace Planning Areas of the Hanford Region;

**ALTERNATIVE LAND USE PLANS ANALYZED
Selecting Alternative Land Use Maps
For this Analysis**

As part of this planning process, each Rural Citizen Planning Committee initially reviewed five (5) Alternative land use maps for its Rural Planning Area. The maps were as follows:

- the adopted 1985 Comprehensive Plan Map;
- the 1985 Plan Map with lower Rural Residential densities adopted in 1994 by the Board of County

Commissioners along with Interim Urban Growth Areas per RCW 36.70A.110.

- three new maps (for each rural Planning Area) drafted by the Rural Planning Committees over a series of meetings. These maps were entirely new, i.e., they were not derived from any existing map(s);

Each Rural Planning Committee then selected just one of its three new maps for further review, thus discarding two of its map creations. The map selected by each committee became its "preferred" map.

The Rural Committees then reviewed the gross demand numbers for housing, school, and parks resulting from population build out of the three (3) remaining Alternative maps. Each committee reviewed the alternatives for consistency with the "vision" goals and objectives earlier identified for its rural community. Each committee then undertook a final round of review, analysis, and changes to its preferred map.

The basis of the Alternative Maps analyzed herein are described briefly below:

Alternative #1 in this analysis is the proposed Land Use Map. It is the aggregate of the new "preferred" land use maps prepared by the Rural Planning Committees for each of the Rural Planning Areas, along with the interim Agricultural lands and Urban

Growth Areas designations adopted in 1994 by the County.

Alternative #1 represents the Rural Committees' modifications and refinements to Alternative 2 i.e., it alters both the land use designations and the densities approved by the County as "Interim" actions (per GMA) in 1994.

Alternative #2 in this analysis is the "Interim Rural" map. This map has the rural densities adopted by the Board of Commissioners, along with the Agricultural lands designation and the Interim Urban Growth Areas adopted in 1994. It is one of the Alternative Maps reviewed by the Rural Planning Committees.

Alternative #3 in this analysis is the "No Action" alternative. It is the adopted 1985 Plan map. It was reviewed as an Alternative by the Rural Committees.

SUMMARY OF LEVEL OF IMPACT OF ALTERNATIVE PLANS

Similarities and Differences Between The Alternative Land Use Maps

Land Use Designations

Agricultural and Rural Residential Lands Relative to the configuration and size of land use designations, the Alternative maps are more similar than different. Only minor differences occur in the overall acreage for *Rural Residential* and *Agricultural* designations, which are the largest designations in terms of acreage.

Industrial and Commercial Lands The differences are more pronounced for

the Commercial and Industrial designations.

Alternative 1 (the proposed Plan) has 907 more acres of Industrial designated lands than the other Alternatives; this represents a 25 percent increase in this land use category over Alternative 3 (the 1985 Plan).

Alternative 1 has approximately 200 acres less of Commercially designated lands than the 1985 Plan. The loss is mainly within and around the UGAs of Richland, West Richland and Kennewick; the proposed plan increases commercially designated land in the Plymouth and Prosser areas.

Change in the amount of acreage designated to commercial and industrial uses are not a direct response to GMA, but rather to an update of the map to accommodate emerging local and regional trends which favor Industrial uses and focus development interest in commercial areas near Prosser in west county, and Plymouth in south county.

The significant differences in the Alternatives for the Commercial and industrial designations is not found on the maps, rather it is the way proposed Plan policy and the new Economic Element work proactively to facilitate development of these designations, and the way in which the Plan integrates recreational uses with commercial e.g., the Taptel

Greenway with Columbia Point and Benton City commercial areas.

Build-out of the Industrial designations within the proposed plan will have potential adverse impacts to the natural and built environment, and demands on services and infrastructure greater than either of the other Alternatives. These impacts will be addressed in project specific SEPA analysis, or in "area specific" analysis as described above on page 12-5.

Rural Densities

The significant differences between the Alternatives relate to rural residential densities. Alternative 3 (the 1985 Plan Map) has overall densities approaching urban or suburban over much of the unincorporated county. These densities are several magnitudes higher than either of the other Alternatives. Alternative 2, (the "Interim" Action) adopted by the County in 1994, has the lowest densities. Alternative 1, (the proposed plan) is in between Alternatives 2 and 3, with densities similar to Alternative 3 in specific geographic areas, but most like Alternative 2 overall.

The residential densities within the Agricultural Designations of Alternatives 1 and 2 are twice those allowed in Alternative 3.

The reductions in rural residential densities in Alternatives 1 and 2 are in response to GMA requirements directly. However a parallel and

current influence is the need to update the 1985 Plan in response to:

- i) rural residents' desire for lower "rural" densities and protection from urban encroachment; and
- ii) recognition of the likely inability of the county to cost effectively provide services to, and manage the resource issues resulting from the higher densities allowed in Alternative 3 (the 1985 Plan).

A good example of the latter is the Finley area where the 1985 Plan has densities enabling a population of 48,000 persons. This would essentially be an "urban" concentration with a population eight hundred percent larger than currently resides in the area. Such density ignores significant land use constraints in the Finley area related to hydrology, water and sewer service, road capacity, and rail and trucking activity associated with a growing heavy industrial complex centered upon potentially hazardous agricultural chemicals.

Levels of Impact

Generally, the more intense the land use designation and the higher the residential densities allowed, the more adverse the impacts to all systems, i.e., water resources, air shed, capital facilities and infrastructure, public services, indigenous biology, ecology, residential living environments etc.

Table 12.0 shows the relative level of potential impacts for the Alternatives based upon each Alternative's total acreages of high intensity uses (i.e.,

Commercial and Industrial Designations) and its Rural Residential densities. The impacts would occur generally, i.e., across the spectrum of natural and man made resources.

Table 12.0 Relative Level of Impact of Alternatives Countywide

<u>Alternative</u>	<u>Level of Impact</u>
Alt #1 (Proposed Plan)	Medium
Alt #2 (" Interim" Actions)	Low
Alt #3 (1985 Plan)	High

Charts showing the number of acres designated for specific land uses within the Preferred Land Use Map for each Rural Planning Area, as well as the residential densities and population build-outs and demands on some essential services, e.g., schools, fire, are shown as item 12-2 in the Appendix.

Additionally the charts used by each of the Rural Committees to compare the land uses and build-out implications of all the Alternative Maps initially considered are included as Appendix 12-3.

ISSUES IDENTIFIED

The "scoping" issues addressed in the planning process are listed below. They are the very "local" planning issues identified by the participants in the planning process.

Locally Identified Issues

- UGAs, Rural Character and Density:
- Control urbanization and urban encroachment
- Concentrate new development in

defined growth areas
Maintain low rural densities (1 du/2.5 to 5 acres)
Ability to keep livestock and animals
Protect property rights and freedom
Preserve farmlands
Maintain open space and farming

Public Services

Adequate road capacity
Available Water and sewer systems
clean up trash and enforce related ordinances

Protection of Natural Environment:
Protection of the natural environment, specifically fish and wildlife habitat with an emphasis on riverine and wetland habitats

Table 12.2 provides a comparative summary of how the Alternative plans analyzed herein respond to the above scoping issues. The Proposed Plan (Alternative 1) responds most directly and fully.

SIGNIFICANT CHANGES OR IMPACTS PER EACH ALTERNATIVE
Proposed Plan Provisions Which Constitute Significant Changes To the 1985 Plan

At a fundamental level, changes to comprehensive plans required by GMA fall into two categories:

1. changed land use determinants (land use, density, and other map designations with relevant text policy);
2. new or changed operational or implementation requirements (transportation and capital facilities elements with "Level of Service", monitoring, and "concurrency

requirements) and ordinances.

Of the two, the first have the principal and direct effect to lands and resources. To the extent that the second category of changes is impactful, it is because it serves the first.

The substantive changes to the 1985 Plan were primarily the "Interim" land use actions already taken by the Board of Commissioners in 1994 after public hearings per the requirements of RCW36.70A (see Table 12.3).

"Interim" actions are components of the Plan that GMA requires to be adopted early in the planning process and revisited for "finalization" when the full Plan is adopted. The re-visitation is to assure that the interim action, upon finalization, is consistent with the full Plan as it has been developed through the public process.

Within this Chapter, the "interim" actions affecting land use designations and density are as follows:

Urban Growth Areas And Rural Densities

The Interim UGAs with the concomitant designation of rural densities outside of them (adopted in 1994).

Designation of Critical Resources

The critical areas data base maps referenced in the adopted interim critical areas protection ordinance

(adopted in 1994);

Designation and Conservation of Natural Resources Lands (Agricultural and Mineral lands)

The agricultural lands designation and its interim implementation ordinance (adopted in 1995).

Each of the alternative plans received herein incorporates the above "interim" action as follows:

Alternative 1 the Proposed Plan, incorporates the "Interim" actions, but with modifications made to the interim land use designations and densities by each Rural Committee, and subsequently by the Board of Commissioners, for each Planning Area.

Alternative 2 incorporates the "Interim" actions as enacted by the Board of Commissioners i.e., these "interim" actions have not been modified by the Rural Committees.

Alternative 3 is the Plan Map which is part of the adopted 1985 Comprehensive Plan, it does not incorporate "Interim" actions or modifications by the Rural Committees.

Proposed Amendments To The 1985 Plan Which Have Potential Significant Impacts

Table 12.3 contains a description of the adverse and beneficial impacts of the proposed Plan Amendments which represent substantive change

to the current (1985) Plan. Note that not all the changes shown in the table are "Map" changes, specifically, the Rural Element is shown, and the Economic Element. The table shows the following:

- 1) Whether the change is already in effect i.e., as an "interim" action already taken per GMA;
- 2) Whether SEPA review has occurred for the action or issue either as part of this planning process, or for the adoption of the 1985 Plan;
- 3) Whether the "interim" actions in the proposed Plan (in combination with citizen planning input and text revisions) changes the 1985 Plan significantly enough to result in the potential for significant impacts, either adverse or beneficial;
- 4) Mitigations for adverse impacts where they are identified.

The information in Table 12.3 indicates that the significant changes of the proposed plan to the 1985 plan are primarily beneficial. There are some mitigable adverse impacts.

Table 12.1 PROPOSED COMPREHENSIVE PLAN PROVISIONS WHICH ADDRESS IMPACTS Identified in the Final EIS for the 1985 Comprehensive Plan

<p>Impacts of 1985 Plan Identified in its Final EIS (taken from pages 18-19, Draft EIS, 1980)</p>	<p>Measures Identified In The Final EIS To Mitigate The Adverse Impacts of Growth from 1985 Plan (taken from pages 20-21, Draft EIS, 1980)</p>	<p>Provisions In The Proposed Plan (map, policy, action and ordinance provisions) That Respond to and Apply Mitigation Identified in the FEIS for the 1985 Plan</p>
<p>Reduced ground-water supplies from over-withdrawal and deep aquifer mining</p>	<p>1. Identify & map aquifers and recharge areas to determine extent of use, draw-down and expected life</p>	<p><u>Partial Mitigation:</u> lower rural densities will reduce demand closer to supply <u>Partial Mitigation:</u> known upper level aquifers protected, direction to characterize groundwater resources, integration of Yakima Valley Watershed Management Plan</p>
<p>Loss of agricultural lands to development</p>	<p>2. Develop guidelines for the physical development of aquifer recharge areas; 3. Develop a Farmland Protection Program whereby important farmlands would be identified and guidelines for the development of such areas would be adopted.</p>	<p><u>Partial Mitigation:</u> by Critical Resources provisions where the resource is known <u>Mitigated:</u> Agricultural lands designated, uses generally limited to agriculture, with the exception that major recreational or ag-industry uses can occur, limited non-farm residential in clusters "site planned" to avoid liabilities to agriculture</p>
<p>From physical developments: slipping, sliding and slumping</p>	<p>4. Develop and adopt an ordinance that would specify building and landscape design standards for the purpose of preventing hillside disasters.</p>	<p><u>Mitigated:</u> plan policy and critical resources ord. provisions require design and engineering to site conditions. Design Manual to be prepared.</p>
<p>Increased dust, noise, smoke, nuisances and traffic in industrial areas</p>	<p>5. Develop and adopt performance standards for development to control air quality, odor, noise, light and glare, hazards, smoke, gases, traffic and other potential nuisances</p>	<p><u>Partial Mitigation:</u> air quality issues are the province of the Air Quality Maintenance District, odor controlled by the Health District. The plan does address traffic and site planning issues.</p>
<p>People relocating as a result of unhappiness with new development</p>	<p>6. Establish agreements with each city to coordinate land use planning and decision-making within urban growth boundaries</p>	<p><u>Mitigated:</u> generally, the county Plan adopts city land use designations within UGAs, state law now requires cities and counties adopt "joint development" standards within UGAs.</p>
<p>Potential contamination of groundwater supplies from surface activities</p>	<p>7. Designate important aquifer recharge areas as environmentally sensitive</p>	<p><u>Partial Mitigation:</u> done to the limits of current knowledge, plan direction to complete an inventory and characterization of groundwater resources</p>

Table 12.1 PROPOSED COMPREHENSIVE PLAN PROVISIONS WHICH ADDRESS IMPACTS Identified in the Final EIS For the 1985 Comprehensive Plan

Impacts of 1985 Plan Identified in its Final EIS (taken from pages 18-19, Draft EIS, 1980)	Measures Identified In The Final EIS To Mitigate The Adverse Impacts of Growth from 1985 Plan (taken from pages 20-21, Draft EIS, 1980)	Provisions In The Proposed Plan (map, policy, action and ordinance provisions) That Respond to and Apply Mitigation Identified in the FEIS for the 1985 Plan
From physical development: slipping, sliding, slumping and soil erosion	8. Identify and map areas subject to subbing, and designate such areas as environmentally sensitive	<u>Mitigated:</u> areas of high groundwater and subbing addressed by plan policy and critical resources ord. "subbing" in Benton County can be a "transient" condition, "overlay" map addresses the condition wherever it occurs.
Destruction of habitat and creation of barriers to wildlife movement	9. Identify and map critical fish and wildlife habitat, and designate such areas as environmentally sensitive	<u>Partial Mitigation:</u> Plan policy, data base and ordinance protect such resources from new development activities, except for agriculture on historically farmed lands.
Irreversible losses of natural resources, loss of agricultural soils to development	10. Develop and adopt zoning and other legislative controls in such a manner that conversion of agricultural land takes place in conjunction with <u>orderly</u> contiguous expansion of urban and rural residential activities	<u>Mitigated:</u> As required by planning law, "Urban, Rural Residential, and Agricultural" land uses are separate designations on the plan map, with plan procedures and policy directing the expansion of urban and residential use.
Impacts to wildlife, endangerment or extinction of unique species	11. Identify and map locations of unique plant and animal species threatened with endangerment or extinction of their populations and designate such areas as environmentally sensitive.	<u>Partial Mitigation:</u> rivers and creeks, wetlands and their buffers, and other primary habitats such as basalt formations are identified and protected from the impacts of new developments, except for agriculture on historically farmed lands. "Primary habitats" of Individual "listed" faunal species are protected where such species are identified within the context of a development proposal; floral species receive less emphasis with public landholders being left principally responsible.
Traffic congestion in industrial and commercial areas	12. Develop and adopt parking standards for commercial, residential, industrial, and public areas	<u>Not Directly Applicable:</u> to plan provisions, these are ordinance issues currently addressed.
Loss of agricultural lands and soils to development	13. Limit the amount of productive agricultural lands encompassed within rural areas designations	<u>Mitigated:</u> see #s 3&10 above

Table 12.1 PROPOSED COMPREHENSIVE PLAN PROVISIONS WHICH ADDRESS IMPACTS Identified in the Final EIS For the 1985 Comprehensive Plan

<p>Impacts of 1985 Plan Identified in its Final EIS (taken from pages 18-19, Draft EIS, 1980)</p>	<p>Measures Identified In The Final EIS To Mitigate The Adverse Impacts of Growth from 1985 Plan (taken from pages 20-21, Draft EIS, 1980)</p>	<p>Provisions In The Proposed Plan (map, policy, action and ordinance provisions) That Respond to and Apply Mitigation Identified in the FEIS for the 1985 Plan</p>
<p>Over withdrawal of groundwater</p>	<p>14. Identify and map areas of short groundwater supply</p>	<p><u>Not Mitigated:</u> County has neither the expertise of the funds. Plan policy directs working with the state as part of the Yakima Watershed Management Plan to characterize groundwater resources. Groundwater withdrawals are the province of the State.</p>
<p>Irreversible loss of natural resources, agricultural soils, neighborhood character,</p>	<p>15. Make provision for the location of planned unit developments in both urban and rural areas.</p>	<p><u>Mitigated:</u> Under GMA, "urban" areas are the province of the cities. Outside of UGAs, county plan policy and ordinance provisions encourage clustering as a means to conserve rural open space and agriculture.</p>
<p>(cannot find a stated impact in the EIS)</p>	<p>16. Develop and adopt an ordinance wherein procedures and standards for both urban and rural planned units would be specified</p>	<p><u>Mitigated:</u> see # 15 above</p>
<p>Depletion of aggregate supplies from mining</p>	<p>17. Define in appropriate county ordinances the length of time that non-conforming uses can be discontinued before they will be permitted.</p>	<p><u>Not Directly Applicable:</u> Not a Plan issue, county presently has code provisions re: this issue</p>
<p>Increased congestion (on rural roads)</p>	<p>18. Undertake a study to determine quantities, qualities and locations of aggregate resources.</p>	<p><u>Not Directly Applicable:</u> County position is that this is a private sector role, or a task which the State Department of Natural Resources should pursue.</p>
<p>Decreased availability of energy due to growth</p>	<p>19. Designate important aggregate deposits on plan maps.</p>	<p><u>Partial Mitigation:</u> In so far as they are known, they are designated.</p>
<p>Degradation of the beautiful aspect of the county</p>	<p>20. Establish formulas whereby the number of access points allowed on major, secondary and collector arterials could be determined and implement such.</p>	<p><u>Mitigated:</u> to limit access points and maintain LOS, Plan policy calls for use of frontage roads on major arterials.</p>
<p>Over withdrawal of groundwater</p>	<p>21. Encourage innovative techniques in building design to maximize energy conservation and to incorporate new technologies of energy generation as they may evolve</p>	<p><u>Not Directly Applicable:</u> Plan does not discourage innovation, building codes will accommodate it, State U.B.C. is the major player here.</p>
<p>Increased congestion (on rural roads)</p>	<p>22. Develop and adopt landscape standards</p>	<p><u>Not Mitigated:</u> But Plan policy encourages natural landscape materials as a means of water conservation.</p>
<p>Decreased availability of energy due to growth</p>	<p>23. Develop and adopt a nuisance ordinance to prevent the proliferation of weed patches, junked auto bodies, etc.</p>	<p><u>Mitigated:</u> Plan calls enforcement of current county code, and consideration of additional waste disposal sites or transfer stations to make disposal easier.</p>

Table 12.1 PROPOSED COMPREHENSIVE PLAN PROVISIONS WHICH ADDRESS IMPACTS Identified in the Final EIS For the 1985 Comprehensive Plan

Impacts of 1985 Plan Identified in its Final EIS (taken from pages 18-19, Draft EIS, 1980)	Measures Identified In The Final EIS To Mitigate The Adverse Impacts of Growth from 1985 Plan (taken from pages 20-21, Draft EIS, 1980)	Provisions In The Proposed Plan (map, policy, action and ordinance provisions) That Respond to and Apply Mitigation Identified in the FEIS for the 1985 Plan
(cannot find a stated impact in the EIS)	24. Develop and adopt an ordinance for the dedication of parkland and fees in lieu of land.	<u>Not Directly Applicable:</u> Plan approach is to develop publicly owned sites as parks. Current PUD ordinance requires open space in Planned Unit Developments; preference is for private associations to maintain such space.
(cannot find a stated impact in the EIS)	25. Provide an adequate level of funding for the policing and maintenance of regional park system.	<u>Partial Mitigation:</u> Plan policy and actions direct the development of county park lands for use, subject to the county's annual allocation of capital funds, and the availability of other funds e.g., grants, loans, donations in kind services etc.

Alternative	Identified Issues	Does the Alternative Address The Issues	Issue Outcome and Residual Concerns
Alternative 3, "No Action" (1985 Plan)	UGAs, Rural Character and Density -Control urbanization & urban encroachment -Concentrate new development in defined growth areas - Maintain low rural densities (1du/2.5 to 5 acres) - Ability to keep livestock and animals - Maintain open space and farming - Protect property rights and freedom Public Services - Adequate road capacity Available Water and sewer systems -Clean up trash and enforce Agriculture - Preserve farmlands and farming	<p><u>Not Addressed:</u> No formal distinction is made between the urban and rural areas and development. Urban densities and uses can be placed anywhere within rural areas. No concentration of development. Freedom to keep livestock and farm diminishes with the urban encroachment and smaller parcel sizes.</p> <p><u>Not Addressed:</u> Prevalent density outside of the Agri. designation is 1Du/ac., approximating large lot urban/suburban use. Areas built out to these densities will exceed designated Levels of Service for roads, demand would exceed existing road capacity. "Adequate road capacity" (in the rural sense) would not be achievable.</p> <p><u>Not Addressed:</u> sources of water and sewer supply/capacity to serve density allowed is unknown, "Availability" means adequate supply achievable at low or reasonable cost. Areas built-out to 1 acre densities would place demands in excess of supply on groundwater and septic waste disposal capabilities. This would necessitate more sophisticated and costly waste disposal systems and deeper potable wells. "Availability" would diminish.</p> <p><u>Not Addressed:</u> No discussion of this issue, no policy direction</p> <p><u>Issue addressed:</u> Density in Agri. District limited to 1Du/20 acre, all uses ag. related.</p>	<p><u>Adverse Outcome:</u> Continued random urban sprawl and encroachment into rural areas at the expense of agriculture, open space, rural quality and character, economic and quality of life impacts;</p> <p>Property rights to "keep large animals, have piece and quiet," conduct farming operations etc. are fundamentally a function of lot size & density, i.e. as densities increase, these rights decrease;</p> <p><u>Adverse Outcome:</u> "urban" not "rural" roads, traffic volumes, and operating and maintenance costs would occur;</p> <p><u>Adverse Outcome:</u> demand, and potential liability to the County for public water, sewer systems;</p> <p><u>Adverse Outcome:</u> proliferation of wells in shallower aquifers, leading to restrictions on wells and deeper wells in order to reduce aquifer impacts</p> <p><u>Adverse Outcome:</u> higher design standards and costs for individual waste disposal systems.</p> <p><u>Adverse Outcome:</u> continued degradation of visual quality, health hazards, illegal dumping.</p> <p><u>Beneficial Outcome:</u> provides a high level of ag. protection than all other Alternatives.</p>

Chapter Twelve-Addendum to 1981 E.I.S.
Table 12.2 Comparison of the Alternative Plans' Response To Issues Raised (i.e., Scoping Issues)

Alternative	Identified Issues	Does the Alternative Address The Issues	Issue Outcome and Residual Concerns
Alt#3 (cont)	Wildlife -Protection of fish and Wildlife and habitat	<u>Issue not addressed:</u> Map designations and policy to protect fish and wildlife but without identifying what specifically is to be protected	<u>Adverse outcome:</u> ability to protect not equal to Plan Policy intent or requirement, resulting in loss of resources and potential liabilities re enforcement with vague requirements.
Alternative 2 "Interim" Action	UGAs, Rural Character and Density <ul style="list-style-type: none"> - Control urbanization & urban encroachment - Concentrate new development in defined growth areas - Maintain low rural densities (1du/2.5 to 5 acres) - Ability to keep livestock and animals - Maintain open space and farming 	<u>Issue Addressed:</u> UGAs makes distinction between Urban and rural development, densities of 1 Du/2.5 and 5 acres in rural areas provides rural densities. Concentration of new development in defined areas accomplished. Larger acreages provide freedom to keep large animals and practice rural lifestyle. Open space and farming continue.	<u>Beneficial Outcome:</u> Issues addressed, GMA and citizen objectives met, except for: <u>Residual Concern:</u> Unlike Alt. 3, this Map does not incorporate the refinements made to densities by the Rural Advisory Committees for their specific Planning Areas. The Committees altered densities created by the BOCC's interim action re: area characteristics, constraints and opportunities e.g., lower densities (1Du/5ac) in floodplains, steep sloping terrain, and irrigated agriculture, higher 1Du/2.5ac.) out of floodplains and on more level terrain, higher still (1Du/ac.) on terrain absent constraints, with urban areas and services close by, and adequate service capacity.
	Public Services - Adequate road capacity	<u>Issue Addressed:</u> lower densities enable realization of designated rural Levels of Service, adequate farm & non-farm road capacity;	<u>Mitigation of Residual:</u> Alt #1 rural densities <u>Beneficial Outcome:</u> rural densities translate to lower traffic volumes, higher levels of service, lower O & M costs ;
	- Available Water and sewer systems	<u>Issue Addressed :</u> "Availability" is a function of the supply of potable groundwater and soil/groundwater capacity (for waste) relative to the demand on those resources. Availability is higher at lower rural densities. Higher availability translates into lower costs i.e., less expensive and less sophisticated water and sewer systems with less regulatory oversight.	<u>Beneficial Outcome:</u> lower densities translate to less demand on natural systems meaning a manageable relationship between supply and demand, lower system construction/design costs, improved water quality, less regulation for the property owner, less regulatory costs for government.
	- Clean up trash and enforce	<u>Issue Not Addressed</u> no discussion of this issue, no policy direction	<u>Adverse Outcome:</u> continued degradation of visual quality, health hazards, illegal dumping.

Chapter Twelve-Addendum to 1981 E.I.S.
Table 12.2 Comparison of the Alternative Plans' Response To Issues Raised (i.e., Scoping Issues)

Alternative	Identified Issues	Does the Alternative Address The Issues	Issue Outcome and Residual Concerns
Alt#2(cont)	<p>Agriculture</p> <ul style="list-style-type: none"> -Preserve farmlands and farming 	<p>Issue <u>partially addressed</u> with an agricultural designation requiring a 20 acre minimum parcel size and land uses within designation limited to uses that are dependent, related, ancillary to or not incompatible with farming operations., A residential Density 11 DU/10 acre is allowed where the units are clustered on 10 % of the acreage.</p>	<p><u>Beneficial Outcome:</u> Issues addressed, GMA and citizen objectives met;</p> <p><u>Residual Concern:</u> more incompatible with comm. Agriculture that Alt #1 which requires lower non-farm residential densities.</p> <p><u>Mitigation of Residual</u> require densities greater than 1du/20 acre to be clustered on small acreages with adequate buffers from agriculture.</p>
	Wildlife Protection of fish and Wildlife and habitat	Same as Alternative # 1	Same as Alternative # 3
Alternative 1 Proposed Plan	<p>UGAs, Rural Character and Density</p> <ul style="list-style-type: none"> -Control urbanization & urban encroachment - Concentrate new development in defined growth areas - Maintain low rural densities (1du/2.5 to 5 acres) - Ability to keep livestock and animals - Maintain open space and farming - Protect property rights and freedom 	<p><u>Issue Addressed</u> UGAs distinguish Urban from Rural areas. Rural densities of 1 Du/2.5 & 5 acre predominate with clusters of 1Du/acre adjacent to UGAs where natural and physical constraints are few , and where adjacency of the MPO enables security, and daily services, available road access/capacity</p> <ul style="list-style-type: none"> -Concentration of new development in defined areas accomplished. Larger acreages enable freedom to have large animals and ranchettes. -Open space and farming continue. 	<p><u>Beneficial:</u> Issues addressed, GMA and citizen objectives met.</p> <p><u>Residual Concern:</u> Areas of 1Du/acre density will constrain and eliminate adjacent agriculture, and some large animal uses carried out in the 2.5 and 5 acre designations. One acre lots are not tolerant of the rural characteristics listed and identified in column 1.</p> <p><u>Mitigation of Residual:</u> locate one acre densities next to UGAs, in areas of urban level road capacity and existing smaller lots, off of floodplains etc.</p>
	Public Services - Adequate road capacity	<p><u>Issue Addressed:</u> lower densities enable the maintenance of designated rural Levels of Service; road capacity is adequate for both farm and non-farm demands;</p>	<p><u>Beneficial:</u> rural densities result in lower traffic volume, higher levels of service, lower O&M costs.</p> <p><u>Residual Concerns:</u> roads serving 1Du/a c. areas will have lower service, higher capital/O&M costs.</p> <p><u>Mitigation of Residual:</u> Areas designated for higher densities are limited in extent and located adjacent to UGAs where road capacities are augmented by adjacent urban service levels as well as transit and non-motorized transportation options.</p>

Chapter Twelve-Addendum to 1981 E.I.S.
Table 12.2 Comparison of the Alternative Plans' Response To Issues Raised (i.e., Scoping Issues)

Alternative	Identified Issues	Does the Alternative Address The Issues	Issue Outcome and Residual Concerns
Alt #1 (cont) Proposed Plan	<ul style="list-style-type: none"> - Available Water and sewer systems 	<p><u>Issue Addressed</u>-"Availability" is a function of the supply of potable groundwater and soil/groundwater capacity (for waste) relative to demands on those resources. Availability is higher at lower rural densities. Higher availability means lower costs i.e., less expensive and less sophisticated water and sewer systems with less regulatory oversight. However, availability of water and waste disposal capacity in designated 1Du/acre areas presents the same capacity issues identified in Alternative #1 above.</p> <p><u>Issue partially Addressed</u>: Policy language in plan directs that the issue be looked at for solution, Transfer stations in rural areas are suggested. "Enforcement" of Code is not a Plan issue</p>	<p><u>Beneficial</u>: lower densities mean less demand on natural systems, means a manageable relationship between supply and demand, lower individual system construction/design costs, improved water quality, less regulation of property, less regulatory costs for government.</p> <p><u>Residual Concern</u> : Adequate potable water and waste disposal capacity is questionable in areas of 1Du/ac. <u>Potential public health/liability problems.</u></p> <p><u>Mitigation of Residual</u>: Limits extent of areas designated for higher densities. Locates them next to UGAs where municipal water and sewer can be extended upon annexation in emergency.</p> <p><u>Beneficial</u>: Pending findings to the contrary, provision of transfer stations in rural areas should decrease illegal dumping on public and private property, thereby reducing the public cost associated with cleaning public lands and nuisance costs to farmers and property owners.</p>
Agriculture - Preserve farmlands and farming		<p><u>Issue Addressed</u>: With exceptions, Agri. design-nation requires a 20 acre min. parcel size, land uses limited to those dependent, related, ancillary to or not incompatible with farming. A residential Density 1Du/10 ac. is allowed when clustered on 10% of the acreage.</p>	<p><u>Beneficial</u>: Issues addressed, objectives met; <u>Residual Concern</u>: Higher non-farm residential densities than Alt #1 will create greater incompatibility problems. <u>Mitigation of Residual</u>: Require densities >than 1Du/20 acre be clustered on small acreages with buffers from agriculture.</p>
Wildlife -Protection of fish and Wildlife and habitat		<p><u>Issue Partially Addressed</u>: Fish and Wildlife map designations of Alt # 3 same are those in Alts 1 & 2 but augmented by plan policy and text discussion defining "functions and values" of resources. Identification of functions and values defines "what is essential to protect" and enables rational and effective application of protection measures.</p>	<p><u>Beneficial</u>: Issues addressed, GMA and citizen's objectives met. Resources protected. <u>Residual Concern</u>: Because of its intensity and coverage, Agri. production significantly impacts critical resources, but for previously unfarmed uplands (i.e. shrub steppe outside of Hanford) local protection measures await state and federal initiative. <u>Mitigation of Residual</u>: pending implementation of actions per Policy B, under Goal 33.</p>

TABLE 12.3 IMPACTS OF PROPOSED PLAN'S CHANGES TO THE ADOPTED 1985 PLAN

Map & Policy Req. of GMA	Prior SEPA	Interim Action	Change to 85 Map /	Significant Impact
Countywide Planning Policies	(1993)	No	No	No ¹
Designate Critical Resources	(1985 & 93)	Yes	No	Yes ²
Designate Agricultural Lands	(1985 & 94)	Yes	No	Yes ²
Designate Mineral Resources Lands	(1985 & 94)	Yes	No	No ³
Designate Interim UGA with concomitant reduction of densities in unincorporated areas.	(1994)	Yes	No	Yes ³
Rural Element	No	No	Yes	Yes ⁴
Other (Non-GMA)				
Economic Element	No	No	Yes	Yes ⁵

1. Beneficial Impact: The map designations on the proposed plan are substantively the same as the adopted 85 Plan. There are changes to the specificity of Plan Policy e.g., proposed Plan policy generally exempts historically farmed land from protection requirements, whereas the 85 Plan is silent on the issue; proposed Plan policy focuses on the protection of the "functions and values" of resources while the 85 Plan requires protection of the resources but does not identify functions and values thereby leaving what is to be protected and why uncertain. The significant change is that the proposed plan's policy and identification of functions and values, and the adopted Critical Areas Ord. combine to provide a minimum level of protection, whereas the 85 Plan does not. Even with the plan policy generally exempting historically farmed from protective provisions this is a beneficial impact on the environment.

2. Adverse Impact: The map designation for agricultural lands in both the 85 Plan and the proposed plan are substantively the same. Policies in both plans protect agriculture from the encroachment of incompatible uses. Non-farm residential densities in the proposed plan are higher than those allowed in the 1985 Plan, giving rise to the potential for land use incompatibility problems and additional constraints on agricultural practices. Therefore, the proposed plan is less protective of agriculture than the 1985 Plan. This is a significant change and adverse impact, which should be mitigable through standards in the Subdivision and Planned Unit Development Ordinance which enable clustering and setback measures designed to minimize constraints and liabilities to agriculture from the placement of non-farm residential uses within its operational areas.

3. Beneficial Impact: UGAs in the proposed plan are marginally smaller than the 85 Plan, but unlike the 85 Plan, are based upon quantitative data, and must be observed, i.e., annexations and extension of municipal infrastructure outside of them is not allowed. There is more than sufficient vacant land for growth within the UGAs, with the exception of Benton City and Prosser, all are greatly in excess of what is projected as the 20 year need. Because UGAs are a regulatory device in the proposed plan, as opposed to the meaningless line on a map in the 85 plan, the proposed plan will enable local governments, special districts, service providers and the private sector to plan, acquire land and easements, arrange financing and capitalize infrastructure improvements with greater certainty and cost effectiveness. For rural residents and agricultural interests it will provide a higher level of order and predictability to the process of urban expansion and encroachment, thereby enabling some enlightened decision making on their part. These are significant beneficial impacts.

4. Beneficial Impact: Rural densities prevail on the proposed map, in contrast to urban and suburban density being prevalent in the Rural designations on the 85 Plan map. Densities in the 85 Plan map did not reflect either natural or infrastructure constraints, or the preferences of rural residents for lower densities overall. Policy in both of the Plans is similar in intent, though in the proposed plan the map densities are consistent with the policy as well as with identified objectives of citizen planning committees. The change to rural densities in rural areas is significant, its effect is to reduce cumulative demands on resources and essential services to a level in closer alignment with available supplies and the service capabilities of the county as a regional provider. The requirement for a Rural Element in the plan also gives rural resident's land use preferences and issues, as they may appear in the proposed plan, a standing equal to other mandatory planning considerations such as transportation, capital facilities and urban expansion, this standing did not previously exist. These are beneficial impacts.

5. Beneficial Impact: The Economic Element in the 1985 Plan consisted mainly of a recognition of the importance of agriculture as the "second leg" of the local economy, and pages and tables of quantitative information "intended to provide background information ..." The Economic Element in the proposed plan has more specific development oriented policies and identifies actions which the county should take in specific geographic areas of the county with the intent to capitalize on those areas' potential for economic development. In some instances these actions appear again as projects in the Capital Facilities Plan. This represents an important change between the two plans. The impact on the local economy and employment base should be beneficial, potential adverse impacts on the localized areas targeted for action will have to be mitigated per SEPA review.

APPENDIX CHAPTER ONE

ITEM 1-1

SIGNIFICANT AMENDMENTS TO THE 1985 COMPREHENSIVE PLAN AS A RESULT OF CHANGES IN STATE PLANNING LAW

GMA Requirement	Pre-GMA Req.	1985 Plan & Ordinance	1997 GMA Plan
Comprehensive Plan With Mandatory Elements Is The Standard For Land Use			
<p>All jurisdictions, whether planning under GMA or not must adopt implementing ordinances which are consistent with and carry out the provisions of their Comprehensive Plans. This makes the Plan the controlling authority relative to land use decisions.</p> <p>Each Plan must be internally consistent, i.e., mandatory plan Elements must function as a whole</p>	<p>Comprehensive Plans were merely a general guide for land use actions. No requirement that ordinances be consistent with and carry out the Plan.</p> <p>No requirement that Plans be internally consistent</p>	<p>1985 Plan did not have adopted implementing ordinances, accordingly, the Plan could not be a factor in land use decisions. The zoning code in use predated the 1985 Plan; its principal permitting mechanism was by Special Use permit with no plan guidance.</p> <p>Plan Elements were discrete, little or no integration as a functional whole</p>	<p>The Land Use Map, policies, goals and actions of the Plan will be implemented by ordinance prepared and adopted to carry out the Plan provisions.</p> <p>The 1997 Plan Elements are integrated and internally consistent, e.g., the Capital Facilities Plan carries out issues addressed in the land use Element.</p>
Coordination With Other Plans			
<p>Each County and its cities must adopt "Countywide Planning Policies" to assure coordination, integration, and avoid planning at cross purposes.</p>	<p>No requirement that Plans among cities and county be consistent.</p>	<p>No integration between the county's 1985 Plan and City Plans, integration attempted on a project by project basis</p>	<p>Adopted Countywide Policies apply to all Plans within Benton Co.</p>
Locating New Development: Urban Growth Areas (UGAs) Based Upon Population Projections			
<p>Designate city UGAs based on OFM pop. projections. No annexations or city services outside of UGAs</p>	<p>No requirement to have UGAs, or to base them on any rational criteria.</p>	<p>1985 Comp Plan had UGAs but without identifiable basis. Plan had no authority, UGAs meant little or nothing</p>	<p>Interim UGAs adopted in 1994. City of Prosser's made Final in 1987. This Plan finalizes UGAs</p>

GMA Requirement	Pre-GMA Req.	1985 Plan & Ordinance	1997 GMA Plan
Joint Development Standards for UGAs			
Cities and County to develop "joint" development standards for within UGAs	No requirements for city-county coordination on development inside UGAs	The Plan did not have adopted development standards	This Plan requires that joint standards be prepared as part of implementation.
Designate and Protect (Mineral Lands) and Conserve (Agricultural Lands) By Regulation			
Counties and cities must designate and adopt regulations to assure the conservation of agricultural and forest lands, and the protection of mineral resource lands.	This requirement did not exist	Lands in or suitable for commercial agriculture were designated Ag. in the adopted 1985 Plan Map; min. parcel size was 20 and 10 acres. No ordinance provisions existed to carry out the designation. Known mineral resources sites were mapped, but not protected by policy or reg.	With minor changes, the area designated as Ag. in the 1985 Plan Map is so designated Ag. by ordinance (1994). With notable exceptions, the GMA Ag. Ordinance restricts uses to those which are related, supportive or not incompatible w/ ag. Mineral resources are mapped, and protected by ordinance.
Rural Element Required For County Plans			
Counties are regional service providers responsible for rural areas. Cities provide municipal services for urban development to accommodate population growth. Counties must include a Rural Element with rural densities and land uses on lands outside of Urban Growth Areas and Agricultural Lands designations in their Comp. Plan	No distinctions made between rural and urban or city and county roles. No requirement for a Plan component that reflects rural residents interests re: land use and community.	No Rural Element. No real land use or density distinctions between county and city lands existed. All rural lands open for urbanization and annexation	Urban Growth Areas based upon population projections direct where annexations can/cannot occur. Rural Element in this Plan has been developed with citizens planning committees in each of the county's Rural Planning Areas. Outside of UGAs preferred densities are primarily 1Du/2.5 and 1Du/5 acres.
Protect Critical Resources (Aquifer Recharge Areas, Frequently Flooded Areas, Fish and Wildlife Conservation Areas, Geologically Hazardous Areas)			
All jurisdictions, whether planning	No requirement to protect these	Excellent mapping and designation of such	1997 Plan uses maps and data from the 1985

GMA Requirement	Pre-GMA Req.	1985 Plan & Ordinance	1997 GMA Plan
under GMA or not must designate and protect by ordinance "Critical Resources" by 1993.	resources.	resources, no regulations for biological and aquifer resources, some regulations in BC Code re; flood and geologic hazard areas.	Plan augmented by areal photos and new data to designate; "functions and values" of critical resources identified in this plan and protected by ordinance adopted in 1994.
Availability of Transportation System Capacity For New Development			
That jurisdictions identify and maintain a Level of Service (LOS) for transportation system components e.g., roads, transit, etc. A requirement that LOS stay "concurrent" with new transportation demands from new development ,i.e., that deficits in LOS not be allowed.	No requirement for LOSs or "concurrency"	No designated LOS, no system for maintaining concurrency.	LOS of C designated for "major county collectors"; LOS to be monitored and maintained within the Six Year Road Program.
State Compliance			
State agency projects and actions must comply with Local Comprehensive Plans	No requirement for State Agency compliance.	No recognition of need for state compliance	State agencies must comply with the 1997 Comp. Plan once it is certified by the State

ITEM 1-2

AMENDMENT PROCEDURES FOR COMPREHENSIVE PLAN

Procedures to be among those included in an Ordinance enabling Amendments to the Comprehensive Plan.

PLAN AMENDMENT CYCLE

Frequency of Amendments

The conclusion of an amendment cycle shall occur annually unless no amendments are proposed; amendments denied can be resubmitted no sooner than in the third year from the date of denial. Amendments to Final Urban Growth Areas will be cycled only once every 5 years. Amendments do not constitute emergencies (i.e., *an immediate threat to life or property for which action must be taken to alleviate the threat*).

Amendments As Legislative Actions

Proposed amendments must be those proposals which fall clearly under "legislative" rather than "quasi-judicial" actions directly or indirectly. Quasi-judicial actions are for development proposals and are governed under the new and specific requirements of HB 1724 (regulatory reform bill). Legislative actions are not project related.

Linking To Budget

The conclusion of a Plan Amendment Cycle should be concurrent with the development of the county's annual budget, and capital facilities deliberations, so that the adoption of Plan amendments precedes budget adoption by no less than 30 days. The Amendment cycle should end with Board of Commissioners action by September 1 of each year, which means the Board must receive the amendment package for review by July.

Timing Of The Cycle

Once amendments in a cycle are "initiated" by the Planning Director (i.e., SEPA notice issued in preparation of preparing a staff report) the noticing requirements, SEPA review, planning analysis and public hearings procedures for Plan Amendments may take from 6 to 9 months to complete. Accordingly, Amendments must be "initiated" by January 1, which means they must be submitted for "docketing" a minimum of 30 days before that (December 1).

Steps of the Cycle

Docketing of Suggested Amendments

- Planning Dept. keeps list of amendment suggestions/requests with names and addresses of sponsors.
- Amendments can be proposed "in-house" by the Planning Commission, Economic Development Coordinator, Board of Commissioners, and Planning Director, or any

owner of property in unincorporated Benton County for his/her property, or any resident of unincorporated Benton County supported by 10 signatures of unincorporated Benton county residents, or any general or special purpose government or district.

- In September of each year, the Planning Dept. places legal notice in local print media of the approaching deadline for the submittal of amendment requests.
- In January of each year, the Planning Director initiates review by noticing the proposal and SEPA review.
- For each proposed amendment the Planning Department integrates SEPA/EIS and Staff Report with Recommendation to the Planning Commission.
- Planning Commission conducts at least one public hearing and forwards a Recommendation to the Board of County Commissioners.
- Board of County Commissioners conducts at least one hearing to consider and act upon the Planning Commission recommendation.
- Implementation

Applications For Amendments

Applications must be submitted in writing and include the following:

- 1) a fee (as set by the Board of Commissioners)
- 2) Responses to the following:
 - a. Description of the requested Plan Amendment;
 - b. An explanation of why the amendment is being proposed including specific areas needing changes;
 - c. If appropriate, the proposed amendment should include amendatory language; and
 - d. An explanation of how the criteria in 3 (below) are met by the proposal:
- 3) Criteria against which the proposed amendment must be evaluated and found to be in substantial compliance for approval:
 - a. An amendment is necessary to resolve inconsistencies within the County Comprehensive Plan, or with other city plans or ordinances with which the county has no objection;
 - b. Conditions have so changed since the adoption of the county plan or ordinances that the existing adopted provision is inappropriate;
 - c. The proposed amendment is consistent with the overall intent of the goals, map, and Rural Element of the county plan;
 - d. The proposed amendment is consistent with Chapter 36.70A RCW, the County-wide Planning Policies, and Plan policies;
 - e. For an amendment to the Comprehensive Plan Map, the proposed designation is adjacent to property having a similar and compatible designation, or the subject property is of sufficient size, or other conditions are present, to locate development or otherwise mitigate potential incompatibilities to insignificant levels;
 - f. Environmental impacts have been disclosed and measures imposed to either avoid or mitigate said impacts;

- g. Potential ramifications of the proposed amendment to other Comprehensive Plan Elements and supporting documents have been considered and addressed;
- h. As appropriate, where an amendment of the Comprehensive Plan is approved by the Board of Commissioners, and a subsequent rezone or amendment to development regulations is required, the planning commission may consider them and make recommendations to the Board for consideration concurrent with the final approval of the comprehensive plan amendment.

ITEM 1-3**CHRONOLOGY OF PLANNING AND PUBLIC PARTICIPATION PROCESS IN BENTON COUNTY****PRE-PLAN**

- 1935 - Washington's first planning enabling statute, "The Planning Commission Act", passed.
- 1938 - Benton County Planning Commission established.
- 1946 - First Benton County Zoning Ordinance adopted.
- 1959 - Planning Enabling Act passed by State Legislature.
- 1961- Benton Regional Planning Commission established.
- 1965- Comprehensive Plans for the Urbanizing Areas of Benton County, Washington prepared by the Benton Regional Planning Commission.
- 1966- Benton-Franklin Governmental Conference established.

1967 PLAN

- 1967- Benton County Board of Adjustment established. County Comprehensive Plan adopted.
- 1976- Decision made to update 1967 Comprehensive Plan.

1985 PLAN

- 1977- Planning staff hired to prepare Comprehensive Plan. County divided into six citizen advisory committee planning areas. Citizen steering committees established in each area. Over 50 citizen involvement meetings held with these groups to formulate the Plan framework including goals and policies.
- 1978 - Complete resource inventory and mapping of the County conducted.
- 1979 - Citizen advisory committees reactivated. Over 40 citizen workshops held to evaluate the results of the resource inventory. Over 1500 citizen attitude surveys mailed out to strengthen the Draft Plan's responsiveness to citizen concerns. Meetings held with cities and other public and semi-public agencies to ensure Plan coordination. County Planning Commission meetings held throughout the year to provide framework and guidelines for Plan development process.
- 1980 - Preliminary Draft Comprehensive Plan completed and printed. Public hearings held in each of the six citizen advisory committee planning areas on the Draft Plan. Planning Commission workshop sessions held to evaluate public hearing results. Draft Environmental Impact Statement on Draft Plan completed and distributed. Public hearing held on Draft E.I.S.
- 1981- Final E.I.S. on Draft Plan completed and distributed. Draft Plan background elements revised.
- 1982- Final series of public hearings on the Draft Plan held by Planning Commission. Final revisions made in preparation for approval of Draft Plan and recommendation to the Board of County Commissioners for adoption.
- 1983 - Board of County Commissioners public hearings on the draft plan held. Revisions made to the draft plan and then transmitted back to the Planning Commission for final consideration.

Citizen Involvement 1985 Plan

Citizen involvement was the keystone of Benton County's plan development process. In 1977 citizen steering committees were established to develop goals and policies, a second series of more than forty (40) meetings was held with six citizen advisory committees representing seven different planning areas to evaluate the results of the staff resource inventory in 1979, and continued through the Countywide public hearing process that has accompanied the more formal adoption stages of

the process. Over 1500 citizen attitude surveys were completed in 1979. Over the course of 50 meetings the citizen committees developed the Plan framework including goals and policies. Over 700 copies of the Preliminary Draft Comprehensive Plan were distributed.

Meetings and communications with affected agencies such as the cities within the county were conducted in order to coordinate Plan provisions with the plans and policies of other agencies to the extent feasible.

The preliminary Draft Comprehensive Plan was completed and printed in March, 1980. Public hearings on the document were held in each of the six citizen advisory committee planning areas. County Planning Commission workshops were held to evaluate the results of the public hearings and to identify needed refinements.

In August 1980, a Draft Environmental Impact Statement on the Preliminary Draft Plan was completed and distributed. In September of that year, a public hearing was held on the Draft E.I.S., and in March 1981, the Final E.I.S. was completed and distributed. During 1981 the Draft Plan was revised to incorporate changes that evolved out of the public hearings and workshops and to include background elements (Housing, Population, Public Facilities and Services, etc.). The resulting revised Draft Plan was reviewed by the Planning Commission in a series of workshop sessions. Following these review sessions, the Planning Commission held additional public hearings on the revised draft.

The Planning Commission held final review workshops, approved the Draft Plan and forwarded it to the Board of County Commissioners with a recommendation the Board adopt the Plan as a Final. The Plan was adopted by the Benton County Board of Commissioners in 1985.

In 1987 changing economic conditions within the county and a new Board of Commissioners resulted in a decision not to adopt implementing ordinances for the adopted 1985 Comprehensive Plan. Upon the advice of County Counsel, the Plan was afforded the status of an informational item and land uses decisions within the county were controlled by the 1967 Zoning Code, which was markedly different and inconsistent with the 1985 Plan.

THE 1997 PLAN

Summary of Chronology

The Washington State Legislature passed the Growth Management Act in 1990. Under the Act it was mandatory for counties of a certain population size or growth rate (10% over the last 10 years) and their cities to prepare Comprehensive Plans per its provisions. Counties that did not meet these criteria were not required to plan, but could "opt in" in order to receive planning grant monies from the state.

Benton County was not required to plan, as its population size and growth rate did not meet the criteria in 1990. However, at the suggestion of some of its cities the Board of County Commissioners polled the mayors and city councils of all five cities (Prosser, Benton City, West Richland, Richland, Kennewick). The response was unanimous that the county should opt in to the GMA planning program, which it did in October of 1991 (in 1993 the county's growth rate exceed 10% for the decade and would have been mandated into the program were it not already in).

In 1991, the county initiated the formation of a Growth Management Act Committee (GMAC) comprised of representatives from the County, all cities within the County and the Regional Council. The committee was to coordinate the initiation of the GMA planning program locally. The County would coordinate the actions of the GMAC.

Assessment of Local Comprehensive Plans

The GMAC's first order of business was to prepare requests for proposal (RFP's) to select a consultant to do an assessment of local plans and identify what needed to be accomplished in each jurisdiction to meet the requirements of GMA. The County administered the contract and performed liaison between GMAC and the consultant. The consultant was hired, performed its contract and was released in 1992. All local plans were found to be deficient relative to the requirements of GMA. Each of the jurisdictions then began preparing its plan with direction from the consultant's analysis.

The county assisted the small cities of Prosser, Benton City and W. Richland in the hiring and management of a small cities "circuit rider" planner to do their comprehensive plans; the cities of Richland, Kennewick and the county proceeded to plan with "in-house" capabilities.

Amendment to GMA (1992)

In 1991 REHSB 1025 was passed by the legislature to amend the GMA. Significant additional planning requirements within 1025 were that: the cities and counties had to prepare and adopt "Countywide Planning Policies" by a date certain per a "collaborative structure" outlined in a Memorandum of Understanding (MOU) signed by all parties; that "joint development standards for inside UGAs had to be adopted by cities and counties; that "interim" Urban Growth Areas had to be adopted by a date certain, that the legislative date by which Critical Resources and Natural Resource Lands had to be designated and protected by regulation was extended to a date certain, and that all cities and counties had to accomplish this whether or not they were planning under GMA.

Countywide Planning Policies (1993)

RESHB 1025 required that the county and cities prepare and adopt countywide planning policies which would provide a legitimate policy framework within which each planning jurisdiction could proceed with its own plan, yet for essentially cross-jurisdictional planning issues (e.g., road networks and standards, transit and other public services), do so "in synch" with and complementary to adjacent jurisdictions.

In 1992-93, the GMAC acted as staff to a Countywide Planning Policy Committee (BCPC) consisting of elected officials from each of the cities and the county. Over the course of approximately 1 year, at 24 public meetings the BCPC drafted and approved for submittal to the legislative bodies of each jurisdiction, a package of 21 Countywide Planning Policies. By February 1993, the Benton Countywide Policies were approved by all the jurisdictions, and as required, submitted to the state. The Countywide Planning Policies are included in Appendix 4-1 of this document. Their principle use is to guide land use related decisions and actions requiring coordination and integration of cross-jurisdictional and multi-jurisdictional issues.

Critical Resources and Natural Resources Lands 1993-95)

For the process of designating, and protecting by regulation Critical Resources and Natural Resource lands, an Agricultural Advisory Committee and a Critical Resources Advisory Committee were formed. To designate these resources (i.e., identify by map) the adopted designations in the 1985

plan were used as the principal data base, with minor modifications they were verified and approved by the advisory committees (the research and mapping for the 1985 plan was excellent, there was no advantage to repeating the effort for the 1997 plan). Each of the committees worked with county staff over the course of a year in public workshops to prepare draft ordinances for public review, then hearings and action by the Planning Commission and Board of County Commissioners.

Urban Growth Areas (UGAs) 1994

GMA requires each city to propose an urban Growth Area to the county, and for the county to approve an Urban Growth Area for each city after consultation with the city. Lands within Urban Growth Areas are committed to urban development and eventual annexation and regulation by the city, cities prepare and finance their capital facilities and transportation plans based upon the lands within their UGAs. The county adopted an Interim Urban Growth Area (IUGAs) for each city in 1994.

Because the cities themselves did not conduct public meetings for their proposed inclusion of unincorporated lands within their Urban Growth Areas, the county held a series of public meetings and public hearings for each city's proposed IUGA. To the extent practical, public meetings and hearings on a UGAs were held within the community at issue. Testimony and dialogue at these meetings was intensive and prolonged. By July of 1994 after 19 meetings and hearings, the county had approved by ordinance an IUGA for each city, and in the process had reduced the densities outside the IUGAs to "rural" (i.e., either 1 unit per 2.5 acres or 1 unit per 5 acres), rather than the previously allowable "urban" densities. The UGAs for each city, and the rural densities outside of UGAs is shown on maps 4-1 thru 4-5, Chapter 4.

Rural Element

As with the development of the 1985 Comprehensive Plan, full public participation and involvement was a corner stone of the new planning process. In 1991, 3600 rural surveys were sent to rural residents countywide in 1992; over 800 were returned, from which the responses were tabulated and circulated in report form. Rural Citizen Planning Committees were formed in each of five rural planning areas; an outside consultant was contracted to do "visioning" goals, objectives and plan mapping with each of the committees; the results of the aforementioned rural survey were presented to each committee for verification. Planning staff worked with each committee at open public workshops held in the community from late 1992 to mid-1996 assisting each committee in the formulation of its community plan, plan map, and supporting text. The Rural Element (Chapter 6) of the document represents the work and consensus of each of these committees over a 4 year period extending from 1992 to 1996.

The chronology of the current Benton County's planning process is outlined below. As the planning process moved forward, new requirements per amendments of GMA as well as the need for the county to begin coordinating with USDOE-Richland on Hanford Comprehensive Planning issues who interjected themselves into the process, these events appear in the chronology.

Events and Milestones In The Chronology Of The 1997 Plan

- With consensus of the cities, opt in to the GMA planning process 10/91
- Obtain consultant for assess current city and county plans for consistency with GMA
 - Review Consultant proposals GMAC 3/8/91
 - Select for Interview GMAC 3/15/91

- Interview	GMAC	3/27/91
- Select Consultant	GMAC	3/26/91
- Enter contract for service	Co.	4/8/91
- Meet with consultant	GMAC	4/16/91
• Administer Contract	Co.	4/8/91
- In-house data collection for consultant		
- Meetings and coordination with consultant		
- Review first report/meet with consultant and GMC		
- Review second report/meet with consultant and GMC		6/10/91
- Review third and final report (Draft)		6/28/91
- Coordinate presentation by consultant to each jurisdiction		7/12/91
- Contract services completed		8/91
• Products Completed and/or adopted after Consulant Report		
- Draft modifications of existing Comp. Plan Policies (GMA sec 6.)		8/15/91
- Detailed Work Program for the Comprehensive Plan Program (for county and small cities)		12/91
- "Collaborative Structure" and MOU per RESHB 1025 (joint adoption, sent to DCD on 11/18/91)		11/18/91
- Interlocal Agreement for Circuit Rider Planner (joint adoption)		1/21/92
- Advertised for and hired Circuit Rider Planner for 3 small cities		2/92
- Multi Year Regional Strategy (joint adoption)		1/21/92
- Prepare Hanford Remedial Action EIS Comprehensive Plan Strategy		12/91
- Draft Agricultural Ordinances and Preliminary Maps		12/91
- Critical Areas Overlay Map (draft)		11/91
- Critical Areas "in-house" draft ready for Advisory Comm. work		4/92
- Re-advertise for and rehire Circuit Rider Planner		7/92
- Mineral Resources Ordinance (draft)- Definitions for Ordinances		1/91
- Draft Policies from the BCPC re: RESHB 1025		3/92
- Establish Agricultural Advisory Committee to review Draft Ag. Ord.		12/92
- Received 20 yr. pop. projection from OFM (have BCPC policy re: allocation of projections among jurisdictions within county)		2/19/91
- GMC meets and agrees on allocation formula for OFM pop. projections (based upon Countywide Policy drafted in early 92)		2/92
- Draft Countywide Policies completed by BCPC		4/92
- P. Comm. completes wrkshps on Draft Agri. & Min. Res. Ords		10/20/92
- Countywide Policies adopted by Brd of Co. Commissioners		9/28/92
- OFM 20 yr. pop. projections allocated per County-wide Pol.		06/92
- Schools, Public Facilities inventories/data collection		06/92
- Land use inventory, per assessors records		9/92
- Draft Crit Areas Ord. completed by CADV and sent to public		11/92
- Public meeting on draft Crit Ord.s commence		11/92

- 3600 GMA Rural Surveys sent out to rural residents	10/92
- 800+ completed surveys returned	11/92
- Temporary help hired to enter survey data on data pgrm	12/92
- Hanford Future Uses Work Group completes Report	12/92
- Per capita land use needs calculated for Prosser, Benton city W. Richland and Kenn. per County-wide Policy formula	10/92
- Kenn., Prosser, W. Richland reviewing draft UGA's	12/92
• Hanford Site	
- Overflight of County and Hanford	3/19/91
- Meet with WHC and DOE Representative and Tour Hanford	3/21/91
- Update meeting with DOE	9/17/91
- Prepare HRA/EIS Comprehensive Plan Program Strategy	10/15/91
- Meet with DOE facilitator, Martha Bean	11/12/91
- Meet with DOE facilitator, Martha Bean	1/06/92
- Participate in Hanford Future Uses Study to	12/92
• GMA Public Meetings and Presentations	
- County Planner at Benton County Planning Commission	4/16/91
- County Planner, GMC at Kennewick City Hall	4/18/91
- County Planner at Prosser Riverview School	4/25/91
- County Planner at Prosser Economic Development Assoc.	5/13/91
- County Planner at Benton City Council	6/18/91
- GMC at Kennewick City Hall (Critical Areas Mapping)	6/27/91
- County Planner, GMC Canal Annex	7/8/91
- County Planner, Benton City Council (survey assist)	7/10/91
- County Planner, meet w/B.C. P.C. re: land use inventory	7/26/91
- County Planner, GMC Kenn. City Hall (consultant)	7/11/91
- County Planner, Prosser Planning Commission	7/16/91
- County Planners meet w/Kenn. Planners	7/29/91
- County Planner, GMC at Canal Annex	8/6/91
- County Planner, consultant Prosser City Council	8/6/91
- County Planner, GMC meet w/OFM	8/7/91
- County Planner, consultant @ Benton City Council	8/12/91
- County Planner, consultant @ BOCC	8/13/91
- County Planner, BOCC	8/19/91
- County Planner, Benton County P.C.	8/20/91
- County Planner, @ W. Richland P.C.	8/29/91
- County Planner, Regional Growth Mgmt Comm.	9/9/91
- County Planner, Benton City Work Shop	9/10/91
- County Planner, Kenn. C.C. on 1025	9/17/91
- County Planner, Benton City C.C. on 1025	9/17/91

- County Planner, W. Richland Chamber of Commerce on GMA	9/18/91
- Planning Staff, Benton City Council, Adopt Collabor. Structure	10/01/91
- Planning Staff, Kennewick City Council, Adopt Coll. Structure	10/01/91
- Planning Staff, Richland City Council, adopt Coll. Structure	10/07/91
- Planning Staff, W. Richland City Council, adopt Coll. Structure	10/07/91
- County Planner, County Planning Commission update	10/08/91
- County Planner, GMC at Benton City	10/08/91
- Planning Staff, BFRC Utility Committee mtg re: GMA	10/16/91
- County Planners, meet with Port Districts	10/17/91
- Planning Staff, Benton City Community Visioning/GMA	10/22/91
- County Planner, Tridec, presentation to tech adv. comm.	10/30/91
- Planning Staff, GMC at Benton City	11/01/91
- Planning Staff, at Benton City re: "Circuit Rider"	11/07/91
- Planning Staff, BCPC Countywide Planning Policies mtg.	11/22/91
- Planning Staff, GMC at Benton City 1st meeting re: BCPC	12/03/91
- Planning Staff, 1st meeting of BCPC at Canal Annex	12/10/91
- Planning Staff, GMC Canal Annex	01/09/92
- County Planner, Prosser City Council re: Interlocal Agrmnt	01/14/92
- Planning Staff, BCPC at Canal Annex	01/21/92
- Planning Staff, Agriculture Committee Mtg.	01/29/92
- County Planner, W. Richland C.C. re: "Circuit Rdr & Reg. Strategy	01/21/92
- Planning Staff, Benton City C.C. re: Regional Strategy	01/21/92
- County Planner, update Benton County Planning Comm.	01/21/92
- County Planner, presentation at W. Richland Revitalization Comm.	02/04/92
- Planning Staff, Benton County Countywide Policy Plng. Comm.	02/11/92
- Planning Staff, Ag. Advisory Committee Meetings	02/13/92
- Planning Staff, GMC, Prosser	02/21/92
- County Planner, presentation to Prosser Chamber of Commerce	02/25/92
- Planning Staff, Ag. Advisory Comm., Prosser	02/26/92
- Planning Staff, GMC, Benton City	02/28/92
- Planning Staff, Ag. Advisory Comm. meeting, Kenn.	03/04/92
- Planning Staff, Countywide Policy Planning Comm.	03/10/92
- Planning Staff, Critical Areas Committee Mtg.	3/12/92
- County Planner, Benton City reviews CW Policies	3/17/92
- County Planner, B.C. Planning Commission, CW Policies update	03/17/92
- Planning Staff, Ag. Advisory Committee, Prosser	03/18/92
- County Planner, Prosser City Council reviews CW Policies	03/24/92
- County Planner, presentation to Env. Info. Net, Richland Library	03/26/92
- Planning Staff, Critical Areas Adv. Comm., Prosser	03/26/92
- County Planner, Kennewick P.C. review CW Policies	03/31/92
- County Planner, Workshop with Board of Comm.	04/01/92
- Planning Staff, Richland Planning Comm. Countywide Policies	04/01/92

- County Planner, Kenn. Planning Comm. Countywide Policies	04/06/92
- County Planner, W. Rich. Planning Comm. Countywide Policies	04/06/92
- County Planner, Local Gov't Summit, presentation of GMA	04/08/92
- Planning Staff, Critical Areas Adv. Comm., Prosser	04/09/92
- Planning Staff, Richland Planning Comm. Countywide Policies	04/15/92
- Planning Staff, Critical Areas Advisory Comm.	04/23/92
- County Planner, Hanfrd/GMA & County-wide Policies BOCC.	04/27/92
- County Planner, County Treas. and Asses. GMA	04/28/92
- County Planner, Kennewick Council, County-wide Policies	04/29/92
- Planning Staff, County-wide Policy Committee	05/12/92
- Planning Staff, Critical Areas Advisory Committee	05/14/92
- County Planner, Richland City Council approves County-wide Pol.	05/18/92
- Planning Staff, B.C. Plng. Commission wshp, Ag/min ords.	05/19/92
- Planning Staff, Benton Co. Plng Comm. wkshp, Co.-wide Pol /ag	06/02/92
- Planning Staff, Meet with Fire Chiefs on GMA	06/04/92
- Planning Staff, Kennewick City Council re: County-wide Pol.	06/04/92
- Planning Staff, County-wide Policy Comm.	06/09/92
- Planning Staff, Critical Areas Advisory Committee	06/11/92
- Planning Staff, Planning Commission Workshop, GMA Agri. Ord.	06/16/92
- Planning Staff, GMA meeting with Farm Bureau @ " The Barn"	06/17/92
- Planning Staff, Critical Areas Advisory Committee	06/23/92
- Planning Staff, BCPC last hearing on County-wide, in Kenn.	06/29/92
- Planning Staff, Benton Co. Plng Comm. workshop on Agri Ord.	07/07/92
- Planning Staff, last BCPC public meeting on County-wide Pol.	07/14/92
- Planning Staff, Benton Co. P. Comm. wrkshp, GMA Agri. & Min	07/21/92
- Planning Staff, Critical Areas Advisory Comm.	07/23/92
- Planning Staff, Kennewick C. Council approve CW Policies	08/04/92
- Planning Staff, Critical Areas Advisory Comm.	08/11/92
- Planning Staff, GMA Management Committee, Benton City	08/12/92
- County Planner, Meet with all cities and all School Districts GMA	08/13/92
- Planning Staff, Benton Co. Commissioners, County-wide Pol.	08/17/92
- County Planner, Benton City approves CW Policies	08/18/92
- Planning Staff, B.C. Planning Commission Ag. Wshp.	08/18/92
- County Planner, meet with TRIDEC on GMA	08/19/92
- County Planner, B.O.C.C wrkshp on Co.-wide & Hanford	09/08/92
- Planning Staff, Plng. Comm. wrkshp on Agri & Min Ords.	09/08/92
- Planning Staff, W.Rich City Council approves CW Policies	09/21/92
- Planning Staff, B.C. Planning Commission Ag. Wshp.	09/22/92
- Planning Staff, Brd of Co. Comm. approves County-wide Policies	09/28/92
- County Planner, at League of Women Voters re: GMA	09/30/92
- County Planner, GMA update to Brd. of Comm.	10/05/92
- County Planner, GMA Hanford update to BO.C.C.	10/12/92

- Planning Staff, Critical Areas Advisory Comm. wrkshp.	10/29/92
- Planning Staff, GMA Management Committee	11/06/92
- Planning Staff, 1st Public Mtg. on Crit./Min. Ord Draft @ Paterson	11/16/92
- Planning Staff, 2nd Public Mtg. on Crit./Min. Ord Draft @ Prosser	11/22/92
- Planning Staff, Critical Areas Advisory Committee Mtg.	12/03/92
- County Planner, B.C. Plng. Commission Wshp. Min/Ag. ord.	12/15/92
- Planning Staff, Critical Areas Advisory Committee Mtg.	12/15/92
- Planning Staff, Critical Areas Advisory Committee Mtg.	1/06/93
- Planning Staff, 3rd Pub. Mtg. Critical Ord./Min. Draft @Kennewick	1/11/93
- Planning Staff, 4th Pub. Mtg. Critical Ord./Min. Draft @ Benton City	1/25/93
- Planning Staff, B.C. Plng. Commission Wshp. Critical Areas Ord.	2/02/93
- Planning Staff, B.C. Plng. Commission Wshp. Critical Areas Ord.	4/13/93
- Planning Staff, Consultant, "Orientation" Mtg. Rural Planning Committee Prosser/Whitstran, Benton City/Kiona, Richland/W. Richland areas	5/11/93
- Planning Staff, Consultant, "orientation" Mtg. Kennewick/Finley Area	5/12/93
- Planning Staff, Consultant, "Visioning Workshop I" Prosser/Whitstran	5/24/93
- Planning Staff, Consultant, "Visioning Workshop I" Kennewick/Finley	5/25/93
- Planning Staff, Consultant, "Visioning Workshop I" Paterson/Plymouth	5/26/93
- Planning Staff, Consultant, "Visioning Workshop I" BC/Kio,Rich/W.Rich	5/27/93
- Planning Staff, Pros/Wht. Rural Plng. Area Comm. Mtg.	6/14/93
- Planning Staff, Consultant, "Visioning Workshop II" Pros/Wht	6/21/93
- Planning Staff, Consultant, "Visioning Workshop II" Kenn/Finley	6/22/93
- Planning Staff, Consultant, "Visioning Workshop II" Pat/Plymouth	6/23/93
- Planning Staff, Consultant, "Visioning Workshop II" Ben/Kio, WR/Rich	6/24/93
- Planning Staff, B.C. Plng. Comm.Hearing Crit. Areas Ord. (Prosser)	6/29/93
- Planning Staff,B.C. Plng. Commission Hrg. Critical Areas Ord.(Kenn)	7/01/93
- Planning Staff, Pros/Wht. Rural Plng. Area Comm. Mtg.	7/12/93
- Planning Staff, Pat./Plymouth Rural Plng. Area Comm. Mtg.	7/14/93
- Planning Staff, W.Rich/Richland Rural Plng. Area Comm. Mtg.	7/21/93
- Planning Staff, B.City/Kiona. Rural Plng. Area Comm. Mtg.	7/22/93
- Planning Staff, Kenn/Finely Rural Plng. Area Comm. Mtg.	7/27/93
- Planning Staff, Board of County Comm. Wshp. Critical Areas Ord.	10/20/93
- Planning Staff, Agriculture Committee mtg.	10/28/93
- Planning Staff, Agriculture Committee mtg.	11/18/93
- Planning Staff, IUGA Public Meeting (Benton City)	12/09/93
- Planning Staff, IUGA Public Meeting (West Richland)	12/14/93
- Planning Staff, IUGA Public Meeting (Prosser)	12/16/93
- Planning Staff, B.C. Plg. Commission Wshp. IUGA's	1/18/94
- Planning Staff, B.County Plng. Comm. IUGA hrgs. (B City/WRich/Pro)	1/25/94
- Planning Staff, IUGA Public Meeting (Richland)	2/09/94
- Planning Staff, BCounty Plng. Comm. IUGA hrgs. (B City/WRich/Pro)	2/15/94
- Planning Staff, IUGA Public Meeting (Kennewick)	2/17/94

- Planning Staff, BCounty Plng. Comm. IUGA hrgs. (Rich/Kenn)	3/08/94
- Planning Staff, BCounty Plng. Comm. IUGA hrgs. (Rich/Kenn)	3/15/94
- Planning Staff, BCounty Plng. Comm. IUGA hrgs. (Rich/Kenn)	4/19/94
- Planning Staff, BOCC Hearings IUGA's (Pross/BCity/W.Rich)	4/14/94
- Planning Staff, B.C. Planning Commission Wshp. Ag Ord.	5/15/94
- Planning Staff, BOCC Hearing (Pross/BCity/W.Rich)	5/18/94
- Planning Staff, BOCC Adopt IUGA's for PR/WR/BC & Interim Densities	6/06/94
- Planning Staff, BOCC Hearing, Critical Areas Ordinance	6/08/94
- Planning Staff, BOCC Hearing, Critical Areas Ordinance	6/13/94
- Planning Staff, B.C. Planning Commission Wshp. Ag Ord.	6/21/94
- Planning Staff, BOCC Hearings IUGA's (Kenn/Rich)	6/22/94
- Planning Staff, Planning Commission Public Mtg. Mineral Res. Ord.	6/28/94
- Planning Staff, BOCC Adopt IUGA's for Kenn/Richland	7/01/94
- Planning Staff, BOCC Adopt Critical Areas Ordinance	7/01/94
- Planning Staff, Planning Commission Hrg Ag/Min. Res. Ordinance	7/19/94
- Planning Staff, Planning Commission Hrg Min. Res. Ordinance	7/27/94
- Planning Staff, Draft EIS Scoping Hearing Comprehensive Plan	8/03/94
- Planning Staff, Stakeholders Mtg. EIS Scoping Comprehensive Plan	8/04/94
- Planning Staff, Planning Commission Hrg Ag. Ordinance	8/16/94
- Planning Staff, BOCC wrkshp. Mineral Res. Ord.	8/17/94
- Planning Staff, BOCC Hearing Mineral Res. Ord.	8/30/94
- Planning Staff, BOCC Adopt Mineral Res. Ord.	9/12/94
- Planning Staff, Planning Commission Hrg. Ag. Ordinance	9/13/94
- Planning Staff, IUGA Public Meeting (Grandview)	9/27/94
- Planning Staff, B.County Plng. Commission IUGA hrg. (Grandview)	10/18/94
- Planning Staff, BOCC Hearings IUGA's (Grandview)	11/07/94
- Planning Staff, BOCC Hearing Agriculture Ord.	11/29/94
- Planning Staff, BOCC Hearing Agriculture Ord.	12/13/94
- Planning Staff, BOCC Hearing Agriculture Ord.	12/19/94
- Planning Staff, BOCC Hearing Agriculture Ord.	2/22/95
- Planning Staff, BOCC Hearing Agriculture Ord.	2/27/95
- Planning Staff, Kenn/Finley Rural Plng. Area Comm. Mtg.	3/28/95
- Planning Staff, BOCC wrkshp. AG Ord.	3/29/95
- Planning Staff, Kenn/Finley Rural Plng. Area Comm. Mtg.	4/10/95
- Planning Staff, BOCC wrkshp. AG Ord.	4/25/95
- Planning Staff, Kenn/Finely Rural Plng. Area Comm. Mtg.	4/25/95
- Planning Staff, BOCC wrkshp. AG Ord.	5/01/95
- Planning Staff, Kenn/Finely Rural Plng. Area Comm. Mtg.	5/17/95
- Planning Staff, BOCC wrkshp. AG Ord.	5/22/95
- Planning Staff, BOCC wrkshp. AG Ord.	6/05/95
- Planning Staff, BOCC wrkshp. AG Ord.	7/10/95
- Planning Staff, BOCC Hearing Agriculture Ord.	7/11/95

- Planning Staff, BOCC Hearing Agriculture Ord. Adopted	7/26/95
- Planning Staff, Paterson/Plymouth Rural Plng. Area Comm. Mtg.	4/11/96
- Planning Staff, Prosser/Whitstran Rural Plng. Area Comm. Mtg.	4/18/96
- Planning Staff, BentonCity/Kiona Rural Plng. Area Comm. Mtg.	4/23/96
- Planning Staff, Rich/West Rich. Rural Plng. Area Comm. Mtg.	4/25/96
- Planning Staff, Prosser/Whitstran Rural Plng. Area Comm. Mtg.	5/16/96
- Planning Staff, Prosser/Whitstran Rural Plng. Area Comm. Mtg.	7/16/96
- Planning Staff, Paterson/Plymouth Rural Plng. Area Comm. Mtg.	5/14/96
- Planning Staff, BentonCity/Kiona Rural Plng. Area Comm. Mtg.	5/21/96
- Planning Staff, Rich/West Rich. Rural Plng. Area Comm. Mtg.	5/23/96
-Planning Staff, BC Plng. Comm. Rural Element Wshps.	8/20/96
-Planning Staff, BC Plng. Comm. Goals & Pol. Wshp.	9/17/96
-Planning Staff, BC Plng. Comm.Land Use Elem. Wshp.	10/03/96
-Planning Staff, BC Plng. Comm. Rural Element Wshps.	10/15/96
-Planning Staff, BC Plng. Comm. Trans. Element Wshp.	1/19/96
-Planning Staff, BC Plng. Comm. Trans. Element Wshp.	12/17/96
-Planning Staff, BC Plng. Comm.Capital Facilities Element Wshp.	1/21/97
-Planning Staff, BC Plng. Comm.Capital Facilities Element Wshp.	2/18/97
-Planning Staff, BC Plng. Comm. Housing Element Wshp.	3/18/97
-Planning Staff, BC Plng. Comm. Economic Element Wshp.	4/15/97
-Planning Staff, BC Plng. Commission Draft Comp Plan Wshp.	5/20/97
-Planning Staff, BC Plng. Commission Draft Comp Plan Wshp.	7/15/97
-Public Hearing, BC Plng. Comm. Sept.1997 Draft Comp Plan, Rich/W.Rhd	10/08/97
-Public Hearing, BC Plng. Comm. Sept. 97 Draft Comp Plan, Benton City/Kio.	10/09/97
-Public Hearing, BC Plng. Comm. Sept.1997 Draft Comp Plan, Pat/Plym.	10/14/97
-Public Hearing, BC Plng. Comm. Sept.1997 Draft Comp Plan, Kenn./Finley	10/16/97
-Public Hearing, BC Plng. Comm. Sept.1997 Draft Comp Plan, Prosser/Whit.	10/21/97
-Con't Public Hrg, BC Plng. Comm. Sept.1997 Draft Comp Plan, Prosser	11/04/97
-Con't Public Hrg, BC Plng. Comm. Sept.1997 Draft Comp Plan, Prosser	11/18/97
-Con't Public Hrg, BC Plng. Comm. Recomm.December1997 to BOCC, Prosser	12/16/97
-Public Hrg, BOCC, December 1997 Draft Comp Plan, Prosser	2/19/98
-Public Hrg, BOCC, December 1997 Draft Comp Plan, Paterson/Plymouth	2/23/98
-Public Hrg, BOCC, December 1997 Draft Comp Plan, Richland/W. Richland	2/24/98
-Public Hrg, BOCC, December 1997 Draft Comp Plan, Kennewick/Finley	2/25/98
-Public Hrg, BOCC, December 1997 Draft Comp Plan, Benton City/Kiona	2/26/98
-Public Workshop, BOCC, December 1997 Draft Comp Plan, Prosser	4/21/98
-Public Workshop, BOCC, December 1997 Draft Comp Plan, Prosser	4/28/98
-Public Workshop, BOCC, December 1997 Draft Comp Plan, Prosser	4/30/98
-Public Hrg, BOCC, Dec. 1997 Draft Comp Plan & Errata, Prosser	6/02/98
-Public Hrg, BOCC, Dec. 1997 Draft Comp Plan & Errata, Kennewick	6/03/98
-Public Hrg Con't, BOCC, Dec. 1997 Draft Comp Plan & Errata, Prosser	6/15/98
-Public Hrg Con't, BOCC, Adoption of Benton County Comprehensive Plan	6/22/98

CHAPTER TWO

ITEM 2-1

PRIMARY SOIL ASSOCIATIONS

Following are eight Primary Soil Associations Within Benton County (refer to Map 2-2, Chapter 2).

NOTE: the following descriptions are extracted from the 1971 Soil Survey, conducted by the U.S. Soil Conservation Service (now known as the Natural Resources Conservation Service or NRCS). The Survey is dated, and needs to be redone with current scientific and computer mapping technology. The descriptions of farm uses on certain soils described below are not entirely accurate today, as changes in markets, crops, and irrigation technologies have expanded the range of crops grown on most irrigated soil types.

1.) Ritzville-Willis Association: Gently sloping soils that are silt loam throughout and very deep to shallow over basalt bedrock; formed in loess; precipitation zone 9 to 12 inches.

This association occurs mainly in the higher parts of the Horse Heaven Hills and midway up the slopes in the Rattlesnake Hills. The topography is generally smooth and gently sloping, but steeper areas along the larger drainage ways are included. The mean annual temperature is approximately 48 degrees F., and the frost-free season is about 140 days. Elevations range from 1,200 to 2,500 feet.

This association is used mainly for wheat, barley and rye in a summer fallow system. Soils that are shallow, stony, or steep are used for grazing. The vegetation in uncultivated areas is grass or sagebrush.

2.) Warden-Shano Association: gently sloping soils with silt loam throughout and very deep to moderately deep over basalt bedrock; formed in lacustrine material and loess; precipitation zone 6 to 9 inches.

This association occurs mainly mid-way up the slopes of Horse Heaven Hills, in the lower Rattlesnake Hills, and in the vicinity of Kiona. The topography is generally smooth and gently sloping, but is steeper along the larger drainage ways. The mean annual temperature is approximately 50 degrees F., and the frost-free season is about 150 days. Elevations range from 550' to 1,200'.

This association is used mainly for wheat, barley, and rye in a summer fallow system. Approximately 18 percent of it is within irrigation districts. The Warden-Shano soils are highly productive, and many crops are suitable. Soils that are shallow, stony, or too steep for cultivation are used for grazing. The vegetation in uncultivated areas is grass and sagebrush.

3.) Walla Walla Lickskillet Association: Gently sloping soils that are silt loam through-out and very deep to shallow over basalt bedrock; formed in loess, precipitation zone 11 to 15 inches.

This association occurs mainly in the higher parts of the Rattlesnake hills. The topography is generally smooth and gently sloping, but steeper areas along the larger drainage ways are included. The mean annual temperature is approximately 47^o F., and the frost-free season is about 130 days. Elevation range from 2,200 to 3,500'.

This association is used mainly for wheat, barley, and rye in a summer fallow system. Soils that are

shallow, stony, or too steep for cultivation are used for grazing. The vegetation in uncultivated areas is grass and sagebrush.

4.) Starbuck-Scootenev Association: Gently sloping soils that are silt loam throughout, and shallow to very deep over gravel or basalt bedrock; formed in old alluvium and loess; precipitation zone 6 to 9 inches.

This association occurs mainly along the Yakima River. The topography is generally smooth and gently sloping but some basalt escarpments are included. The mean annual temperature is 50° F., and the frost free season is about 155 days. Elevations range from 500 to 1,000'.

Except for areas that are too stony or steep, most of this association is irrigated. Starbuck and Wamba soils are used mainly for hay and pasture. Scootenev soils are used mainly for tree fruits and grapes as well as for hay and pasture. The vegetation in uncultivated areas is grass and sagebrush.

5.) Kiona-Ritzville Association: Steep soils that are silt loam throughout and very deep to shallow over basalt rubble or bedrock; formed in loess and residuum; precipitation zone 6 to 12 inches.

This association occupies bluffs that extend from Horse Heaven Hills to the Columbia River and areas along the Yakima River. The topography is rough and steep rock outcrops and escarpments are common. The mean annual temperature is approximately 49° F., and the frost-free season is about 147 days. Elevations range from 800 to 2,500 feet. This association is used for grazing and for wildlife habitat. The vegetation in uncultivated areas is mainly grass and sagebrush.

6.) Hezel-Quincy-Burbank Association: Gently sloping soils that have a loamy sand surface layer and are very deep to shallow over gravel, lacustrine material, or basalt bedrock; formed in windblown sand, lacustrine material, or alluvium precipitation zone 6 to 9 inches.

This association occurs in two main areas: One area is in the southern part of Benton County along the Columbia River, and the other is northwest of Kennewick and south of the Horn and the Yakima Rivers. The topography is smooth and gently sloping. The mean annual temperature is approximately 51° F., and the frost-free season is about 170 days. Elevations range from 300 to 900 feet.

Most of this association is used as rangeland. The natural vegetation is mainly grass and sagebrush.

7.) Scootenev-Kennewick Association: Gently sloping, very deep soils that are silt loam throughout; formed in old alluvium and lacustrine material; precipitation zone 6 to 9 inches.

This association, which includes the City of Kennewick, occurs in the southeastern part of the County. The topography is mainly smooth and gently sloping. The mean annual temperature is approximately 50° F., and the frost-free season is about 150 days. Elevations range from 550 to 800 feet.

This association is used for many kinds of irrigated crops. The vegetation in uncultivated areas is mainly grass and sagebrush.

8.) Finley-Burbank-Quincy Association: Nearly level soils that are loamy sand to very fine sand throughout formed in old alluvium and windblown sandy precipitation zone 6 to 9 inches.

This association occurs in the southeastern part of the County, along the Columbia River. It is generally east of Kennewick. The topography is mainly smooth and nearly level. The mean annual temperature is approximately 51° F and the frost-free season is about 160 days. Elevations range from 350 to 450 feet. Most of this association is irrigated and used for hay and pasture. A few areas are used for grapes, mint, asparagus, and other crops. The vegetation in uncultivated areas is grass and sagebrush.

ITEM 2-2

SCALE OF EARTHQUAKE INTENSITIES AND MAGNITUDES¹

Mercalli Intensity	Description of Effects	Equivalent Richter Magnitude
I	Not felt except by a very few under especially favorable circumstances.	3.5
II	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.	to
III	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.	4.2
IV	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building; standing motor cars rock noticeably.	4.3 to
V	Felt by nearly everyone; many awakened. Some dishes, windows broken. A few instances of cracked plaster; unstable objects overturned. Some disturbance of trees, poles, and other tall objects noticed. Pendulum clocks may stop.	4.8
VI	Felt by all; many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.	4.9 - 5.4
VII	Everyone runs outdoors. Damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary structures, considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	5.5 - 6.1
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fa-11 of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.	6.2 to

¹ Jackson County Comprehensive Plan; Medford, Oregon, 1980

IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	6.9
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river bank and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.	7.0 - 7.3
XI	Few if any (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	7.4 - 8.1
XII	Damage total. Waves seen on ground surfaces. Lines sight and level distorted. Objects thrown upward into the air.	Max. Recorded 8.9

ITEM 2-3

BIBLIOGRAPHY

Ecologically Sensitive Areas of Benton County, March 1982, prepared by the Lower Columbia Basin Audubon Society: Thomas Anderson, Conservation Chairman. Kennewick, Washington.

ITEM 2-4

SPECIES OF CONCERN FOUND ON, OR POTENTIALLY OCCURRING ON THE HANFORD SITE AND ELSEWHERE IN BENTON COUNTY

The following tables relate the listings used by both United States and Washington State agencies in designating floral and faunal "species of concern". Although there are some rough equivalents among the various state and federal designations, they are different both in content and management. Both the federal and state criteria change periodically and may be outdated here. Moreover, the specific designations of the species on the lists are also in flux and may also be out of date relative to what appears here.

The majority of the data appears courtesy of the Pacific Northwest National Laboratory (PNNL), and is therefore geared toward the Hanford Site rather than Benton County proper. Application this list to off-Site areas of Benton County may result in specific omissions, inaccuracies, or unaccountability; although these exceptions should be few.

The tables contain the following information on both floral and faunal species:

Scientific Name:	<i>Alphabetically listed by scientific name.</i>
Common Name:	<i>The name regionally associated with the species.</i>
Federal Status:	<i>Although several agencies, namely the US Fish & Wildlife Service, are involved in the identification and nomination of species, only the Secretary of the Interior can have a species "listed". Species in these tables listed as "Threatened" or "Endangered" are highlighted.</i>
State Status:	<i>In Washington, the Wildlife Commission lists species per the recommendations of the Department of Fish & Wildlife. As with the federal listings, "threatened" and "endangered" species are highlighted.</i>
Habitat (Association)	<i>Where available; from PNNL. Notes the primary habitat association of the species.</i>
(Hanford) Abundance:	<i>Where available; from draft Biological Resources Management Plan (PNNL [J.A. Hall]). Notes the abundance of the species on the Hanford Site.</i>

FEDERAL CRITERIA FOR ENDANGERED SPECIES LISTING	
ABBREVIATION	DEFINITION
C1	Candidate 1. Taxa for which there is enough substantial information on biological vulnerability to support listing as threatened or endangered.
C2	Candidate 2. Taxa for which current information indicates that proposing listing is possibly appropriate; conclusive data, however are not available.
C3	Candidate 3. Taxa that once were considered for listing (C1,C2), but are no longer.
C3a	Candidate 3a. Taxa for which there persuasive evidence of extinction; the taxa or the habitats have been lost.
C3b	Candidate 3b. Taxa that, based on current taxonomic understanding, do not meet distinct definition of "species". Can be reevaluated later.
C3c	Candidate 3c. Taxa that have been proven to be more abundant than first thought. Can be reevaluated later.
M	Migratory.
T	Threatened-
E	Endangered-
	A species that is likely to become endangered within the foreseeable future.
	A species in imminent danger of extinction throughout all or a significant portion of its range.

Source: Pacific Northwest National Laboratory

WASHINGTON STATE CRITERIA FOR ENDANGERED SPECIES LISTING	
ABBREVIATION	DEFINITION
M	Monitor. Wildlife species native to Washington that are of special interest because: 1) they were at one time classified as sensitive, threatened, or endangered; 2) they require habitat that has limited availability during some portion of their lifecycle; 3) they are indicators of environmental quality; 4) further investigation is required to determine population status; 5) there are unresolved taxonomic problems of consequence; 6) they are competing with and/or impacting other species of concern; 7) they have significant popular appeal.
M1	Monitor Group 1. Taxa for which there is insufficient data to support listing as sensitive, threatened, or endangered.
M2	Monitor Group 2. Taxa with unresolved taxonomic questions.
M3	Monitor Group 3. Taxa that are more abundant and/or less threatened than previously assumed.
P	Protected.
G	Game.
C	Candidate. Species native to the State of Washington that the Department of fish & Wildlife will review for possible listing as Sensitive, Threatened, or Endangered.
S	Sensitive. Species that are vulnerable or declining, and could become threatened or endangered without active management or removal of threats.
T	Threatened. Species that are likely to become endangered within the near future if factors contributing to their population decline or habitat degradation continue.
E	Endangered. Species that are in danger of becoming extinct within the near future if factors contributing to their decline continue.

Source: Pacific Northwest National Laboratory

PLANT "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Allium robinsonii</i>	Robinson's Onion		M3	Shrub-Steppe		
<i>Allium scilliodes</i>	Squill Onion		M3	Shrub-Steppe		
<i>Arenaria franklinii thompsonii</i>	Thompson's Sandwort		M2	Sand/Shrub-Steppe	Uncommon	
<i>Artemisia campestris wormskioldii</i>	Northern Wormwood		E	Rocky Riparian	Undocumented	
<i>Artemisia lindleyana</i>	Columbia River Mugwort		M3	Riparian		
<i>Astragalus arrectus</i>	Palouse Milkvetch		S	Shrub-Steppe	Not recently documented	
<i>Astragalus columbianus</i>	Columbia Milkvetch		T	Sand/Shrub-Steppe	Rare	
<i>Astragalus geyeri</i>	Geyer's Milkvetch		S	White Bluffs	Rare	
<i>Astragalus sclerocarpus</i>	Stalked-pod Milkvetch		M3	Sand/Shrub-Steppe		
<i>Astragalus speirocarpus</i>	Medick Milkvetch		M3	Drainages/Shrub-Steppe		
<i>Astragalus succumbens</i>	Crouching Milkvetch		M3	Shrub-Steppe		
<i>Balsamorhiza rosea</i>	Rosy Balsamroot		M3	Rattlesnake Ridge		
<i>Camissonia</i> (' <i>Eriogonum</i>) <i>pygmaea</i>	Dwarf evening-primrose		T	Sand/Shrub-Steppe	Rare	
<i>Carex densa</i>	Dense Sedge		S	Riparian	Undocumented	
<i>Cirsium brevifolium</i>	Palouse Thistle		M3	Shrub-Steppe		
<i>Collinsia sparsiflora bruceae</i>	Few-flowered Collinsia		S		Undocumented	
<i>Cryptantha interrupta</i>	Bristly Cryptantha		M2	Bluffs		
<i>Cryptantha leucophaea</i>	Gray Cryptantha		S	Sand	Uncommon	
<i>Cuscuta denticulata</i>	Desert dodder		M1	Shrub-Steppe		

PLANT "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Cyperus bipartitus (rivularis)</i>	Shining Flatsedge		S	Riparian	Uncommon	
<i>Eatonella nivea</i>	White Eatonella		T		Rare	
<i>Erigeron piperianus</i>	Piper's Daisy		S	Sand/Shrub-Steppe	Uncommon	
<i>Hypericum majus</i>	Canadian Saint John's Wort		M1	Riparian		
<i>Lesquerella species novum</i>	unnamed bladderpod	SPECIES NEW TO SCIENCE		White Bluffs	Extremely Rare	
<i>Limosella acaulis</i>	Southern Mudwort		S	Riparian	Uncommon	
<i>Lindernia dubia anagallidea</i>	False Pimpernel		S	Riparian	Uncommon	
<i>Lomatium tuberosum</i>	Hoover's Desert Parsley		T	Talus	Rare	
<i>Mimulus suksdorfii</i>	Suksdoef's Monkey-flower		S		Rare	
<i>Nicotiana attenuata</i>	Coyote Tobacco		S	Gravel Washes	Not recently documented	
<i>Oenothera caespitosa</i>	Desert Evening-primrose		S	Riparian/ Islands/Uplands	Rare	
<i>Pectocarya setosa</i>	Bristly Combseed		S		Rare	
<i>Pellaea glabella simpex</i>	Smooth Cliffbrake		M3	Umtanum Ridge Moist Canyons		
<i>Penstemon eriantherus whitedii</i>	Fuzzy Beardtongue		M3	White Bluffs		
<i>Rorippa columbiae</i>	Columbia Yellowcress		E	Riparian	Common	

TERRESTRIAL INVERTEBRATES "OF CONCERN" OF OR POTENTIALLY OF THE HANFORD SITE

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Bolonia (Clossiana) selene atrocotalis</i>	Silver-bordered Bog Fritillary		C	Wetlands	Undocumented
<i>Callophrys sheridanii neoperplexa</i>	Canyon Green Hairstreak		M	Shrub-Steppe	
<i>Chlosyne palla palla</i>	northern Checkerspot		M	Highlands	
<i>Cicindela columbica</i>	Columbia River Tiger Beetle		C	Riparian	Undocumented
<i>Harknclenus titus immaculosus</i>	Coral Hairstreak		M	Highlands	
<i>Hesperia nevada</i>	Nevada Skipper		M	Highlands	
<i>Lycaena helloides</i>	Purplish Copper		M	Lowlands	
<i>Lycaena rubida perkinsorum</i>	Ruddy Copper			Shrub-Steppe	
<i>Mitoura siva</i>	Juniper Hairstreak		C	Shrub-Steppe	Undocumented
<i>Ochlodes sylvanoides bonnevilla</i>	Bonneville Skipper		M	Shrub-Steppe	

AQUATIC INVERTEBRATES "OF CONCERN" OF OR POTENTIALLY OF THE HANFORD SITE

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Anodonta californiensis</i>	California Floater		C	Columbia River	
<i>Fisherola nuttalli</i>	Shortface Lanx		C	Columbia River	Common
<i>Fulminicola columbianus</i>	Columbia Pebblesnail		C	Columbia River	Rare

ICHTHYIC "SPECIES OF CONCERN" OF OR POTENTIALLY OF THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Catostomas platyrhynchus</i>	Mountain Sucker		M	Columbia River	
<i>Cottus beldingi</i>	Piute Sculpin		M	Columbia River	
<i>Cottus perplexus</i>	Reticulate Sculpin		M	Columbia River	
<i>Lampetra ayresi</i>	River Lamprey			Columbia River	
<i>Oncorhynchus tshawytscha</i>	Chinook Salmon (Snake River: spring/summer/fall)	E		Columbia River	Rare
<i>Percopsis transmontanus</i>	Sandroller		M	Columbia River	
<i>Salvelinus confluentus</i>	Bull (Dolly Varden) Trout	C		Columbia River	Accidental

HERPETILIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OF THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Bufo woodhousii</i>	Woodhouse's Toad		M	Riparian/Shrub-Steppe	
<i>Hypsiglena torquata</i>	Night Snake		M	Shrub-Steppe	
<i>Masticophis taeniatus</i>	Striped Whipsnake		C		
<i>Sceloporus graciosus graciosus</i>	Northern Sagebrush Lizard			Shrub-Steppe	

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Accipiter cooperii</i>	Cooper's Hawk	M			
<i>Accipiter gentilis</i>	Northern Goshawk		C	Shrub-Steppe	Uncommon

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Accipiter striatus</i>	Sharp-shinned Hawk	M				
<i>Actitis macularia</i>	Spotted Sandpiper	M				
<i>Aechmophorus clarkii</i>	Clark's Grebe	M	M	Columbia River		
<i>Aechmophorus occidentalis</i>	Western Grebe	M	M	Columbia River		
<i>Aeronautes saxatalis</i>	White-throated Swift	M				
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	M				
<i>Aix sponsa</i>	Wood Duck	M				
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	M	M	Shrub-Steppe		
<i>Amphispiza belli</i>	Sage Sparrow	M	C		Common	
<i>Amphispiza bilineata</i>	Black-throated Sparrow	M				
<i>Anas acuta</i>	Northern Pintail Duck	M		Columbia River		
<i>Anas americana</i>	American Widgeon Duck	M		Columbia River		
<i>Anas clypeata</i>	Northern Shoveler Duck	M		Columbia River		
<i>Anas crecca</i>	Green-winged Teal Duck	M		Columbia River		
<i>Anas cyanoptera</i>	Cinnamon Teal Duck	M		Columbia River		
<i>Anas discors</i>	Blue-winged Teal Duck	M		Columbia River		
<i>Anas penelope</i>	Eurasian Widgeon Duck	M		Columbia River		
<i>Anas platyrhynchos</i>	Mallard Duck	M		Columbia River		
<i>Anas strepera</i>	Gadwall Duck	M		Columbia River		

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Anser albifrons</i>	Greater White-fronted Goose	M		Columbia River		
<i>Anthus rubescens</i>	American (Water) Pipet	M				
<i>Aquila chrysaetos</i>	Golden Eagle	M	C	Trees/Shrub-Steppe	Uncommon	
<i>Ardea herodias</i>	Great Blue Heron	M	M	Riparian		
<i>Asio flammeus</i>	Short-eared Owl	M				
<i>Asio otus</i>	Long-eared Owl	M				
<i>Athene cunicularia hypugea</i>	Western Burrowing Owl		C	Shrub-Steppe	Abundant	
<i>Aythya affinis</i>	Lesser Scaup Duck	M		Columbia River		
<i>Aythya americana</i>	Redhead Duck	M		Columbia River		
<i>Aythya collaris</i>	Ring-necked Duck	M				
<i>Aythya marila</i>	Lesser Scaup Duck	M				
<i>Aythya valisineria</i>	Canvasback Duck	M				
<i>Bombycilla cedrorum</i>	Cedar Waxwing	M				
<i>Bombycilla garrulus</i>	Bohemian Waxwing	M				
<i>Botaurus lentiginosus</i>	American Bittern	M		Columbia River		
<i>Branta canadensis</i>	Canada Goose	M		Riparian		
<i>Branta canadensis leucopareia</i>	Aleutian Canada Goose	T	E	Riparian	Accidental	
<i>Bubo virginianus</i>	Great Horned Owl	M				
<i>Bucephala albeola</i>	Bufflehead Duck	M				
<i>Bucephala clangula</i>	Common Goldeneye Duck	M				

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Bucephala islandica</i>	Barrow's Goldeneye Duck	M				
<i>Buteo jamaicensis</i>	Red-tailed Hawk	M	P	Trees/Shrub-Steppe		
<i>Buteo lagopus</i>	Rough-legged Hawk	M				
<i>Buteo regalis</i>	Ferruginous Hawk		T	Shrub-Steppe	Uncommon	
<i>Buteo swainsonii</i>	Swainson's Hawk	M	M	Trees/Shrub-Steppe	Common	
<i>Calcarius lapponicus</i>	Lapland Longspur	M				
<i>Calidris alba</i>	Sanderling	M				
<i>Calidris alpina</i>	Dunlin	M				
<i>Calidris bairdi</i>	Baird's Sandpiper	M				
<i>Calidris mauri</i>	Western Sandpiper	M				
<i>Calidris melanotos</i>	Pectoral Sandpiper	M				
<i>Calidris minutilla</i>	Least Sandpiper	M				
<i>Calidris pusilla</i>	Semipalmated Sandpiper	M				
<i>Carduelis pinus</i>	Pine Siskin	M				
<i>Carduelis tristis</i>	American Goldfinch	M				
<i>Carpodacus mexicanus</i>	House Finch	M				
<i>Casmerodius albus</i>	Great Egret	M	M	Riparian		
<i>Catharus guttatus</i>	Hermit Thrush	M				
<i>Catharus ustulatus</i>	Swainson's Thrush	M				

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Cathartes aura</i>	Turkey Vulture	M	M	Riparian/Shrub-Steppe		
<i>Catherpes mexicanus</i>	Canyon Wren	M				
<i>Centrocercus urophasianus phaios</i>	Western Sage Grouse		C	Shrub-Steppe	Rare	
<i>Ceryle alxyon</i>	Belted Kingfisher	M				
<i>Charadrius vociferus</i>	Killdeer	M				
<i>Chen caerulescens</i>	Snow Goose	M				
<i>Chlidonias niger</i>	Black Tern		M	Riparian		
<i>Chondestes grammacus</i>	Lark Sparrow	M				
<i>Chordeiles minor</i>	Common Nighthawk	M				
<i>Circus cyaneus</i>	Northern Harrier	M				
<i>Cistothorus palustris</i>	Marsh Wren	M				
<i>Clangula hyemalis</i>	Oldsquaw Duck	M				
<i>Coccythraustes vespertinus</i>	Evening Grosbeak	M				
<i>Colaptes auratus</i>	Northern Flicker	M				
<i>Contopus borealis</i>	Olive-eyed Flycatcher	M		Riparian		
<i>Contopus sordidulus</i>	Western Wood-pewee	M				
<i>Corvus brachyrhynchos</i>	American Crow	M				
<i>Corvus corax</i>	Common Raven	M				
<i>Cyanocitta stelleri</i>	Steller's Jay	M				
<i>Cygnus columbianus</i>	Tundra Swan	M				

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Dendroica coronata</i>	Yellow-rumped Warbler	M				
<i>Dendroica petechia</i>	Yellow Warbler	M				
<i>Dendroica townsendii</i>	Townsend's Warbler	M				
<i>Egretta thula</i>	Snowy Egret	M				
<i>Empidonax difficilis</i>	Western Flycatcher	M				
<i>Empidonax hammondii</i>	Hammond's Flycatcher	M				
<i>Empidonax oberholseri</i>	Dusky Flycatcher	M				
<i>Empidonax traillii brewsteri</i>	Little Willow Flycatcher			Riparian		
<i>Eremophila alpestris</i>	Horned Lark	M				
<i>Euphagus cyanocephalus</i>	Brewer's Blackbird	M				
<i>Falco columbianus</i>	Merlin	M	C	Riparian/Shrub-Steppe		
<i>Falco mexicanus</i>	Prairie Falcon	M	M	Shrub-Steppe		
<i>Falco peregrinus anatum</i>	American Peregrine Falcon	E	E	Shrub-Steppe	Accidental	
<i>Falco rusticolus</i>	Gyr Falcon	M	M	Riparian/Shrub-Steppe		
<i>Falco sparverius</i>	American Kestrel	M				
<i>Fulica americana</i>	American Coot	M				
<i>Gallinago gallinago</i>	Common Snipe	M				
<i>Gavia immer</i>	Common Loon	M	M	Columbia River	Uncommon	

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Gavia pacifica</i>	Pacific Loon	M		Columbia River		
<i>Geothypis trichas</i>	Common Yellowthroat	M				
<i>Grus canadensis</i>	Sandhill Crane	M	E	Wetlands/Meadows	Uncommon	
<i>Haliaeetus leucocephalus</i>	Bald Eagle	T	T	Riparian	Common	
<i>Himantopus mexicanus</i>	Black-necked Stilt	M	M	Riparian		
<i>Hirundo pyrrhonota</i>	Cliff Swallow	M				
<i>Hirundo rustica</i>	Barn Swallow	M				
<i>Hylocichla mustelina</i>	Wood Thrush	M				
<i>Icteria virens</i>	Yellow-breasted Chat	M				
<i>Icteria galbula</i>	Northern Oriole	M				
<i>Ixoreus naevius</i>	Varied Thrush	M				
<i>Junco hyemalis</i>	Dark-eyed Junco	M				
<i>Lanius excubitor</i>	Northern Shrike	M				
<i>Lanius ludovicianus</i>	Loggerhead Shrike		C	Shrub-Steppe	Common	
<i>Larus argentatus</i>	Herring Gull	M				
<i>Larus californicus</i>	California Gull	M				
<i>Larus delawarensis</i>	Ring-billed Gull	M				
<i>Larus glaucescens</i>	Glaucous-winged Gull	M				
<i>Larus philadelphia</i>	Bonaparte's Gull	M				
<i>Larus pipixcan</i>	Franklin Gull	M				

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Leucosticte arctoa</i>	Rosy Finch	M				
<i>Limenitis archippus lahontani</i>	Nevada Viceroy		M	Canyonlands		
<i>Limnodromus scolopaceus</i>	Long-billed Dowitcher	M				
<i>Lophodytes cucullatus</i>	Hooded Merganser	M				
<i>Melanerpes lewis</i>	Lewis' Woodpecker	M	C	Riparian	Rare	
<i>Melospiza lincolni</i>	Lincoln's Sparrow	M				
<i>Melospiza melodia</i>	Song Sparrow	M				
<i>Mergus merganser</i>	Common Merganser	M				
<i>Mimus polyglottos</i>	Northern Mockingbird	M				
<i>Molothrus ater</i>	Brown-headed Cowbird	M				
<i>Myadestes townsendii</i>	Townsend's Solitaire	M				
<i>Myiarchus cinerascens</i>	Ash-throated Flycatcher	M	M	Riparian		
<i>Myotis ciliolabrum</i>	Small-footed Myotis		M	Buildings/Riparian		
<i>Myotis evotis</i>	Long-eared Myotis		M	Buildings/Riparian		
<i>Myotis thysanodes</i>	Fringed Myotis		M	Buildings/Riparian		
<i>Myotis volans</i>	Long-legged Myotis		M	Buildings/Riparian		
<i>Myotis yumanensis</i>	Yuma Myotis			Buildings/Riparian		
<i>Nucifraga columbiana</i>	Clark's Nutcracker	M				
<i>Numenius americanus</i>	Long-billed Curlew	M	M	Open Shrub-Steppe		

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE						
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE	
<i>Nyctea scandiaca</i>	Snowy Owl	M	M	Riparian/Shrub-Steppe		
<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	M	M	Riparian		
<i>Oporornis tolmiei</i>	MacGillivray's Warbler	M				
<i>Oreoscoptes montanus</i>	Sage Thrasher	M	C	Shrub-Steppe	Rare	
<i>Otus flammeolus</i>	Flammulated Owl	M	C	Shrub-Steppe	Accidental	
<i>Oxyura jamaicensis</i>	Ruddy Duck	M				
<i>Pandion haliaetus</i>	Osprey	M	M	Columbia River		
<i>Parus atricapillus</i>	Balck-capped Chickadee	M				
<i>Passerculus sandwichensis</i>	Savannah Sparrow	M				
<i>Passerella iliaca</i>	Fox Sparrow	M				
<i>Passerina amoena</i>	Lazuli Bunting	M				
<i>Pelecanus erythrorhynchos</i>	American White Pelican	M	E	Riparian	Common	
<i>Phalacrocorax auritus</i>	Double-crested Cormorant	M		Columbia River		
<i>Phalaenoptilus nuttallii</i>	Common Poorwill	M				
<i>Phalaropus lobatus</i>	Red-necked Phalarope	M				
<i>Phalaropus tricolor</i>	Wilson's Phalarope	M				
<i>Pheueticus melanocephalus</i>	Black-headed Grosbeak	M				
<i>Phyciodes Atharos@ pascoensis</i>	Pasco Pearl Crescent		M	Wetlands		
<i>Pica pica</i>	Black-billed Magpie	M				

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Picoides pubescens</i>	Downey Woodpecker	M			
<i>Picoides villosus</i>	Hairy Woodpecker	M			
<i>Pipilo erythrophthalmus</i>	Rufous-sided Towhee	M			
<i>Piranga ludoviciana</i>	Western Tanager	M			
<i>Podiceps auritus</i>	Horned grebe	M	M	Columbia River	
<i>Podiceps grisegena</i>	Bed-necked Grebe	M	M	Columbia River	
<i>Podiceps nigricollis</i>	Eared Grebe	M		Columbia River	
<i>Podilymbus podiceps</i>	Pied-billed Grebe	M		Columbia River	
<i>Poocetes gramineus affinis</i>	Oregon Vesper Sparrow	M	M	Shrub-Steppe	
<i>Porzana carolina</i>	Sora	M			
<i>Rallis limicola</i>	Virginia Rail	M			
<i>Recurvirostra americana</i>	American Avocet	M			
<i>Regulus calendula</i>	Ruby-crowned Kinglet	M			
<i>Regulus satrapa</i>	Golden-crowned kinglet	M			
<i>Riparia riparia</i>	Bank Swallow	M			
<i>Salpinctes obsoletus</i>	Rock Wren	M			
<i>Sayornis saya</i>	Say's Phoebe	M			
<i>Selasphorus rufus</i>	Rufous Hummingbird	M			
<i>Sialia currucoides</i>	Mountain Bluebird	M			

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Sialia mexicana</i>	Western Bluebird	M	M	Riparian/Shrub-Steppe	Rare
<i>Sitta canadensis</i>	Red-breasted Nuthatch	M			
<i>Spizella arborea</i>	American Tree Sparrow	M			
<i>Spizella breweri</i>	Brewer's Sparrow	M			
<i>Spizella passerina</i>	Chipping Sparrow	M			
<i>Stelgidopteryx serripennis</i>	Northern Rough-winged Swallow	M			
<i>Stellula calliope</i>	Calliope Hummingbird	M			
<i>Sterna caspia</i>	Caspian Tern	M	M	Columbia River	
<i>Sterna forsteri</i>	Forster's Tern	M	M	Columbia River	
<i>Sterna hirundo</i>	Common Tern	M			
<i>Sterna paradisaea</i>	Arctic Tern	M	M	Columbia River	
<i>Strix varia</i>	Barred Owl	M	M	Riparian/Shrub-Steppe	
<i>Sturnella neglecta</i>	Western Meadowlark	M			
<i>Tachycineta bicaolor</i>	Tree Swallow	M			
<i>Tachycineta thalassina</i>	Violet-green Swallow	M			
<i>Thryomanes bewickii</i>	Bewick's Wren	M			
<i>Tringa flavipes</i>	Lesser Yellowlegs	M			
<i>Tringa melanoleuca</i>	Greater Yellowlegs	M			

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Tringa solitaria</i>	Solitary Sandpiper	M			
<i>Troglodytes aedon</i>	House Wren	M			
<i>Troglodytes troglodytes</i>	Winter Wren	M			
<i>Turdus migratorius</i>	American Robin	M			
<i>Tyrannus tyrannus</i>	Eastern Kingbird	M			
<i>Tyrannus verticalis</i>	Western Kingbird	M			
<i>Tyto alba</i>	Barn Owl	M			
<i>Verminivora celata</i>	Orange-crowned Warbler	M			
<i>Verminivora ruficapilla</i>	Nashville Warbler	M			
<i>Vireo gilvus</i>	Warbling Vireo	M			
<i>Vireo huttoni</i>	Hutton's Vireo	M			
<i>Vireo olivaceus</i>	Red-eyed Vireo	M			
<i>Vireo solitarius</i>	Solitary Vireo	M			
<i>Wilsonia pusilla</i>	Wilson's Warbler	M			
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed Blackbird	M			
<i>Xema sabini</i>	Sabine's Gull	M			
<i>Zenaida macroura</i>	Mourning Dove	M			
<i>Zonotrichia atricapilla</i>	Golden-crowned Sparrow	M			
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	M			

AVIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Zonotrichia querula</i>	Harris' Sparrow	M			

MAMMALIAN "SPECIES OF CONCERN" OF OR POTENTIALLY OCCURRING ON THE HANFORD SITE					
SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT	ABUNDANCE
<i>Antozous pallidus</i>	Pallid Bat		M	Buildings/Riparian	
<i>Barachylagus idahoensis</i>	Pygmy Rabbit		E	Shrub-Steppe	Extirpated
<i>Dipodomys ordit</i>	Ord's Kangaroo Rat		M	Shrub-Steppe	
<i>Lagurus curtatus</i>	Sagebrush Vole		M	Shrub-Steppe	
<i>Onychomys leucogaster</i>	Northern Grasshopper Mouse		M	Shrub-Steppe	
<i>Plecotus townsendii pallescens</i>	Pale Townsend's Big-eared Bat			Buildings/Riparian	Undocumented
<i>Sorex merriami</i>	Merriam's Shrew		C	Shrub-Steppe	Uncommon
<i>Spermophilus (Citellus) washingtoni</i>	Washington Ground Squirrel		C	Shrub-Steppe	Undocumented

Item 4-1

ESSENTIAL PUBLIC FACILITIES SITING PROCESS - Benton County

USE	PUBLIC UTILITIES		REVIEWING BOARD		Responsible Jurisdiction ¹	BENTON COUNTY PERMITS	SPECIAL SITING CRITERIA
	SEPA	WATER	SEWER	PC/BOCC			
ESSENTIAL STATE-WIDE FACILITY	ZONE						
Airport ³	RL 5, GMA-AG, LI, HI	X	X	A/H Overlay	X	BC-Building	Transportation access public services
State Education	UGAR, RL 5, GMA-AG	X	X		X	BC-Building	Transportation access public services
State & Regional Transportation	ALL ZONES				X	BC-Building Structures only	public services structures only
State Correctional	HI	X	X		X	BC-Building	Transportation access public services
Solid Waste Handling	GMA-AG	X	X		X	BC-Building	Transportation access public services
In-patient Health ⁴	LI, HI, GMA-AG	X	X		X	BC-Building	Transportation access public services
Secure Community Transition ⁶	UGAR, RL 5	X	X		X	BC-Building	transit facility access public services
Others as listed by OFM ⁷	HI	X	X		X	BC-Building	SCTF's- land and cell access, not in close proximity to risk potential activities
	TBD ⁸	TBD	TBD	TBD	TBD	TBD	TBD

¹ DOE-Dept of Ecology, DOH-Dept of Health, RTPO-Regional Transportation Planning Organization, FAA-Federal Aviation Administration, DOT-Dept of Transportation
² Conditional Use Permit
³ Airport/Heliports are subject to the provisions of 11A.86.
⁴ Substance abuse, mental health and group homes
⁵ Depending on size of facility
⁶ SCTF's as required by RCW 36.70A.200 & RCW 71.09 (civilly committed sex offender housing)
⁷ Facilities listed by the Office of Financial Management required or likely to be built within the next six years (RCW36.70A.200).
⁸ To be determined by Benton County Planning Department as projects are identified.

ITEM 4-2**BENTON COUNTY WIDE PLANNING POLICIES**

County wide planning policy is a written policy statement or statements used solely for establishing a county-wide framework from which county and city comprehensive plans are developed and adopted. This framework will insure that city and county comprehensive plans are consistent as required by the Growth Management Act.

POLICIES TO IMPLEMENT RCW 36.70A.110; RESHB 1025 Section 2,(3)a.

Policy #1: The Comprehensive Plans of Benton County and each of the cities therein shall be prepared and adopted with the objective to facilitate economic prosperity by accommodating growth consistent with the following:

1. Urban Growth. Encourage development in urban areas where adequate public facilities exist or can be provided in a cost efficient manner.
2. Avoid sprawl. Avoid the inappropriate conversion of undeveloped land into low density development, lacking adequate services, injurious to ground and surface water quality, destructive to the area's agricultural lands base, and less than cost effective relative to public service costs.
3. Transportation. Encourage efficient multi-modal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.
4. Property rights. Private property rights shall not be taken for public use without just compensation having been made. The property rights of land owners shall be protected from arbitrary and discriminatory actions.
5. Permits. Applications for permits shall be processed in a timely and fair manner to ensure predictability.
6. Natural resource industries. Maintain and enhance natural resource-based industries, including productive agricultural, fisheries and mineral industries. Encourage the conservation of productive agricultural lands and discourage incompatible uses.
7. Open space and recreation. Encourage the retention of open space and the development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.
8. Environment. Protect the environment and enhance the region's high quality of life, including air and water quality, and the availability of water.
9. Citizen participation and coordination. Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.

10. Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards. With the exception of water, sewer, streets and power services, which shall be available at the time of occupancy, the term "adequate" shall be defined as either available at the time of occupancy, or shown on the current C.I.P. as a funded project within six years.

11. Historic preservation. Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.

POLICIES FOR PROMOTION OF CONTIGUOUS AND ORDERLY DEVELOPMENT AND THE PROVISION OF URBAN SERVICES TO SUCH DEVELOPMENT; RESHB 1025 SEC.2, (3)b.

Policy #2: County-wide projected population shall be allocated among jurisdictions through the use of any or all of the following factors applied to each jurisdiction:

- a. Documented historical growth rates over the last decade, the last 2 decades, and the last 2 years.
- b. Current growth rates.
- c. Developing or current planning programs which a jurisdiction has, and which identify quantitative increases in business and industry development, and housing construction activity.
- d. School enrollments over 2 decades, and within the last 2 years.
- e. Pending development proposals (applications) which would add either jobs or new housing units.
- f. Intangibles.

Policy #3: The locating of urban growth areas within the county shall be accomplished through the use of accepted planning practices which provide sufficient land and service capacity to meet projected populations at urban densities and service standards within the cities, and urban densities for those portions of the county located within the urban growth areas. Such planning practices include those on **ATTACHMENT A (attached)**.

Policy #4: That Urban Growth Areas of each city shall be based upon official and accepted population projections for minimum 20 year periods. The gross undeveloped and underdeveloped acreage within the city limits and the Urban Growth Area shall be sufficient to meet all the land requirements, including community and essential public facilities, of the population projection, including the need to prevent inflation of land cost due to a too limited land supply.

- a. The jurisdictions within the county shall use a uniform formula for identifying the land area necessary per capita for each community. Each jurisdiction's population projection shall be multiplied by its gross per capita land area requirement, which in the aggregate will define total land needs within the Urban Growth Area (UGA).

The uniform formula is as follows:

Policy #11: The County and cities within, along with public participation shall develop a cooperative regional process to site essential public facilities of regional and statewide importance. The objective of the process shall be to ensure that such facilities are located so as to protect environmental quality, optimize access and usefulness to all jurisdictions, and equitably distribute economic benefits/burdens through out the region or county.

At the County-wide and multi-county level, the following actions should be accomplished:

- a. Develop a uniform siting procedure which enables selection of optimum project sites and appropriate size and scale relative to intended benefit area.

Policy #12: Support the existing solid waste program that promotes and maintains a high level of public health and safety, protects the natural and human environment of Benton County and encourages public involvement by securing representation of the public in the planning process.

Policy #13: Encourage and expand coordination and communication among all jurisdictions and solid waste agencies/firms in Benton and Franklin Counties in order to develop consistent and cost-effective programs that avoid duplication of effort and gaps in program activities.

- a. Utilize the existing Benton-Franklin Solid Waste Advisory Committee.

POLICIES FOR COUNTY-WIDE TRANSPORTATION FACILITIES AND STRATEGIES; RESHB 1025 SEC.2,(3)d.

Policy #14: Maintain active county-city participation in the Regional Transportation Policy Organization in order to facilitate city, county, and state coordination in planning regional transportation facilities and infrastructure improvements to serve essential public facilities including Port District facilities and properties.

POLICIES THAT CONSIDER THE NEED FOR AFFORDABLE HOUSING, SUCH AS HOUSING FOR ALL ECONOMIC SEGMENTS OF THE POPULATION AND PARAMETERS FOR ITS DISTRIBUTION; RESHB 1025 SEC.2,(3) e.

Policy #15: New housing within urban growth areas shall be compatible in character and standards with that of the adjacent city area.

Policy #16: That site constructed, modular and manufactured housing shall be recognized as needed and functional housing types.

Policy #17: The County and cities within shall work together to provide housing for all economic segments of the population. All jurisdictions shall seek to create the conditions necessary for the construction of affordable housing, at the appropriate densities within the cities and County. The following actions should be accomplished:

- a. Jointly quantify and project total county-wide housing needs by income level and housing type (i.e. rental, ownership, senior, farm worker housing, group housing.)

$A + B + C + D + E + F + G + H + I + J + K = \text{acreage/per capita (or acreage per dwelling unit if per capita is divided by average household size) where:}$

- A = residential land per capita; (or DU)
- B = parks and recreational area per capita;
- C = area required for public facilities (fire stations, jails, etc.,) per capita;
- D= area required for schools per capita;
- E = commercial area per capita, or per employee;
- F = industrial/manufacturing area per capita;
- G = open space (golf courses, etc.) per capita;
- H = public service lands required for transportation network, easements and R.O.W.s per DU;
- I* = use 70% build-out for all residential lands;
- J = add 25% to the total of A Through I for land supply/demand balance;
- K = land credit for undevelopable lands i.e. Critical Areas including steep slopes, wetlands, habitat, etc. within the UGA.

* The same factor should be used for all jurisdictions.

Policy #5 : That within the urban growth area urban uses shall be concentrated in and adjacent to existing urban services or where they are shown on a Capital Improvement Plan to be available within 6 years.

Policy #6: That cities limit the extension of service district boundaries and water and sewer infrastructure to areas within each jurisdiction's urban growth area of its adopted Comprehensive Plan.

Policy #7: Within each Comprehensive Plan, the Land Use Plan for urban growth areas shall designate urban densities and indicate the general locations of greenbelt and open space areas. To the extent made practical by the natural features of the land form, open spaces and greenbelt shall be contiguous across jurisdictional lines, so as to enable their use as linked and contiguous recreational resources including parks, and bike and riding paths.

Policy #8: Wherever possible, given consideration of all other variables, such as existing unused service infrastructure, the placement of an urban growth line into an area of existing or potential intensive commercial agriculture shall be avoided, unless an adequate open space buffer within the urban growth area is provided.

Policy #9: The appropriate directions for the expansion of urban growth areas are those which are unincorporated lands substantially engrossed by urban development; areas with existing service infrastructure; lands adjacent to corporate limits and confined on the other side by major features such as highways; and existing rural residential development characterized by compromised agricultural productivity; average lot sizes less than 10 acres; and existing streets and utility services.

Policy #10: All policies within each jurisdiction's Comprehensive Plans, required by ESHB 2929, shall be modified to be consistent with and implement adopted County-wide Policies.

POLICIES FOR SITING PUBLIC FACILITIES OF A COUNTY-WIDE OR STATE-WIDE NATURE; RESHB 1025 SEC.2,(3)c.

8. Storm Drainage facilities, quantity, quality and discharge locations;
9. Street lights, conduit, fixtures, locations;
10. Sewer, septic regulations, private sewer, dry sewer facilities;
11. Water, pipe sizes, locations, construction standards;
12. Fire protection, station locations, fire flows, uniform codes;
13. All building requirements;
14. Subdivision and platting requirements (in accord with chapter RCW 58.17) including parks and open space;
15. Mobile home and manufactured home regulations;
16. Zoning Ordinances: permitted uses in Urban Growth Areas, setbacks; building heights, lot coverage etc.

c. As either an alternative, or adjunct to a) above, a city and the County may choose to enter into an interlocal agreement whereby the application of development standards, and the authorities and functions of permit review, inspection and enforcement are assigned.

POLICIES FOR COUNTY-WIDE ECONOMIC DEVELOPMENT AND EMPLOYMENT; RESHB 1025 SEC.2,(3)g.

Policy #20: Consistent with the protection of public health, safety, and welfare, and the use of natural resources on a long-term sustainable basis, the ability of service capacity to accommodate demands, and the expressed desires of each community, Comprehensive Plans shall jointly and individually support the county and region's economic prosperity in order to promote employment and economic opportunity for all citizens.

AN ANALYSIS OF THE FISCAL IMPACT. RESHB 1025 2,(3)h.

Policy #21: Where Capital Improvement Plans and Land Use Plans, involve land areas within, or tributary to land within the urban growth areas, the County and Cities, individually and jointly, shall routinely conduct fiscal analyses which identify and refine the most cost effective provision of regional and local public services and infrastructure over the long term. This should be accomplished through actions including the following:

- a. City's six year C.I.P.s for streets, water, and sewer should show infrastructure sized to accommodate build-out of service areas within the 20 year urban growth area, at a minimum.
- b. Construction design and placement standards for roads, intersections and streets (with provisions for storm water conveyance), and sewer, water and lighting infrastructure, should be determined based upon an analysis which identifies the lowest public expenditure over extended periods of time. Utilities should be incorporated into such analyses.
- c. Build out scenarios should be factored into school, fire and police service demand projections.

ATTACHMENT A

LOCATE URBAN GROWTH AREAS

Population Projections

- b. Establish a mechanism whereby the housing efforts/programs of each jurisdiction address the projected county-wide need.
- c. Address the affordable housing needs of very low, low and moderate income households, and special needs individuals through the Comprehensive Housing affordability Strategy (CHAS).
- d. Develop design standards for implementation within the Comprehensive Plan with special attention to be given to the residential needs of low to moderate income families.

POLICIES FOR JOINT COUNTY AND CITY PLANNING WITHIN URBAN GROWTH AREAS; RESHB 1025 SEC.2, (3)f.

Policy #18: Urban growth areas may include territory located outside of a city only if such territory already is characterized by urban growth or is adjacent to territory already characterized by urban growth. Within urban growth areas, only urban development may occur. For the purposes of locating urban growth areas, and permitting new development within them, "Urban" is defined as:

- a. having dedicated and improved (surfaced) streets, with dimension, design and construction standards for new development determined by "joint city/county standards" and;
- b. For new development, road, street and intersection right-of way widths located and sized to accommodate projected local and regional average daily traffic (ADT) as determined by the Land Use Plans Transportation Elements and, where relevant, projections of the BFRC Regional System and;
- c. having either public sewer or water service, with additional service requirements (e.g. standards of Policy #19), for new development consistent with "joint/city county standards."

Policy #19: To encourage logical expansions of corporate boundaries into urban growth areas, and to enable the most cost efficient expenditure of public funds for the provision of urban services into newly annexed areas; the County and each city shall jointly develop and implement development, land division and building standards, and coordinated permit procedures for the review and permitting of new subdivisions within Urban Growth Areas.

- a. The joint standards developed, but never adopted, by the County and the cities of Richland and Kennewick in 1985 shall be used as the basis for the new standards.
- b. Standards for the following shall be developed and adopted:
 1. Street Locations, both major and secondary;
 2. Street R.O.W. widths;
 3. Street widths;
 4. Curbs and gutters;
 5. Sidewalks for secondary streets only;
 6. Road construction standards ;
 7. Cul De Sacs, location and dimensions;

hospital communications

7. Confer with BFRC to establish current level transportation data re: inventory
 - each jurisdiction to build on BFRC transportation data; define local street conditions, capacities, programmed and needed improvements.
8. Inventory housing stock - identify existing supply/demand ratio by housing.
9. Using Population Projections per jurisdiction, accomplish the following:
 - project new housing mix/type and occupancy rates;
 - identify projected gross new demands for services identified in item #5, above;
 - equate existing services infrastructure capabilities and C.I. P.s with gross new demands;
 - identify new C.I.s, (supplies of water, sewer, school, rec. fac. etc.,)necessary to meet gross new demands;
 - survey options to meet gross new service with cost effectiveness on essential services (i.e., water and sewer, road maintenance as a priority) and; type, identify present need (use Census);
 - with the cost effectiveness of meeting other services demands as a consideration.
10. Contact each utility purveyor. Solicit participation on LUE advisory committees on relevant issues.
11. Inventory facilities/capacities of existing utility services, identify current plans for new facilities and capacities including but not limited to electric, telecommunications, natural gas. Rely on BFRC data.
12. lands such as: utility and transportation corridors, land fills, sewage treatment facilities, recreation, schools etc.,
 - integrate existing information from comp. plans, needs assessments, pop. projections, into one joint list of needed public lands;
 - county must work with state and cities to identify areas of shared need and shall prepare a prioritized list with estimated acquisition dates;
 - capital acquisition budget for each jurisdiction with jointly agreed upon priorities and schedule. *
13. Identify Open Space Corridors within and between Urban Growth Areas, including:
 - lands used or designated as recreational, wildlife habitat, trails, and "critical areas" as defined in sec .3
 - optional: develop a mechanism to purchase fee simple or lesser interests in these open spaces using funds authorized by RCW 84.34.230 *
 - develop an acquisitions list for those lands with critical resources imposing extreme constraints on development *
14. Draft a procedure, including siting criteria, for locating/approving essential public facilities.
 - review list of essential facilities provided by OFM with the objective to identify those suitable for location in urban vs rural areas.

1. Review and comment on preliminary OFM population projections due in Dec. 91.
2. Legislative bodies of each jurisdiction to review OFM population projections.
3. Update the existing land use inventory to reflect current conditions (use county GIS when available in 3-92, to provide county-wide land use inventory).
4. GMC derives formula for allocation of OFM population projections -sends formula to individual jurisdictions via the BCPPC.
 - BCPPC sends to indiv. jurisdictions legislative bodies for review
 - BOCC takes action on pop. allocation

Land Use Element Map

1. Identify accepted uniform planning criteria used for locating Urban Growth Areas:
 - natural physical barriers and roads
 - existing service capacity (supply/deficit)
 - projected service capacity (new supply)
 - planning objectives (GMA req.) and;
2. Uniform criteria for insuring adequate land supply within Urban Growth Areas:
 - enable growth without creating excess demand for services, congestion etc.,
 - discourage sprawl without grossly inflating land costs;
3. Identify uniform, established candidates for the supply of developable land within the Urban Growth areas:
 - vacant, under utilized, partially utilized
4. Identify uniform, established candidates for lands to be excluded from development, such as lands:
 - needed for R.O.W.
 - hazardous, critical, open space etc.,
 - too costly to provide services
 - to be zoned agricultural with Transfers of Density Rights (TDRs)
5. Map existing public, private and semi-public service district boundaries and;
6. Inventory all existing capital facilities for public, private and semi-public service providers, and transportation network, identify existing capacity:

water	sewer
fire	police
schools	ports
parks	libraries

15. Consistent with the revised Policies in the Comp. Plan Texts, integrate population projections, land use and capital facilities inventory data, lands necessary for new capital facilities, and total land requirements to support population projections (including sec. 15 lands, lands for essential facilities RESHB sec 1), densities, open space and critical/natural areas (set asides) into **new 20 year Urban Growth Areas.**
16. Review of Urban Growth Areas by each jurisdiction's legislative body.
17. BOCC adopts Urban Growth Areas, then;

PREPARE DRAFT LAND USE MAP

Map Designations

1. Prepare Draft Land Use Map with general distribution, location and extent of land uses, and:
 - Urban Growth Areas and Rural Lands;
 - Open Space;
 - Public Facilities and lands;
 - population densities;
 - building intensities;
 - est. future pop. densities (multiply av. bldg. densities X pers/household re: page 57 of 1985 Comp. Plan.(update with 1990 census)

* not necessary for locating urban growth boundaries

Item 4-1

ESSENTIAL PUBLIC FACILITIES SITING PROCESS - Benton County

USE	PUBLIC UTILITIES		REVIEWING BOARD		Responsible Jurisdiction ¹		SPECIAL SITING CRITERIA
	SEPA	WATER	SEWER	PC/BOCC	BOA ²	LOCAL/ FED/STATE	
ESSENTIAL STATE-WIDE FACILITY Airport ³	YES	X	X	A/H Overlay	X	RTPO/FAA/DOT/DOE	BC-Building Transportation access public services
State Education	YES	X	X		X	DOE/DOH	BC-Building Transportation access public services
State & Regional Transportation	YES				X	DOE/DOT/RTPO	BC-Building Structures only public services structures only
State Correctional	YES	X	X		X	DOE/DOH	BC-Building Transportation access public services
Solid Waste Handling	YES	X			X	DOE	BC-Building Transportation access public services
In-patient Health ⁴	DOS ⁵	X	X		X	DOE/DOH/DSHS	BC-Building transit facility access public services
Secure Community Transition ⁶	DOS	X	X		X	DOE/DOH/DSHS	BC-Building SCTF's- land and cell access, not in close proximity to risk potential activities
Others as listed by OFM ⁷	TBD ⁸	TBD	TBD	TBD	TBD	TBD	TBD

¹ DOE-Dept of Ecology, DOH-Dept of Health, RTPO-Regional Transportation Planning Organization, FAA-Federal Aviation Administration, DOT-Dept of Transportation

² Conditional Use Permit

³ Airport/Heliports are subject to the provisions of 11A.86.

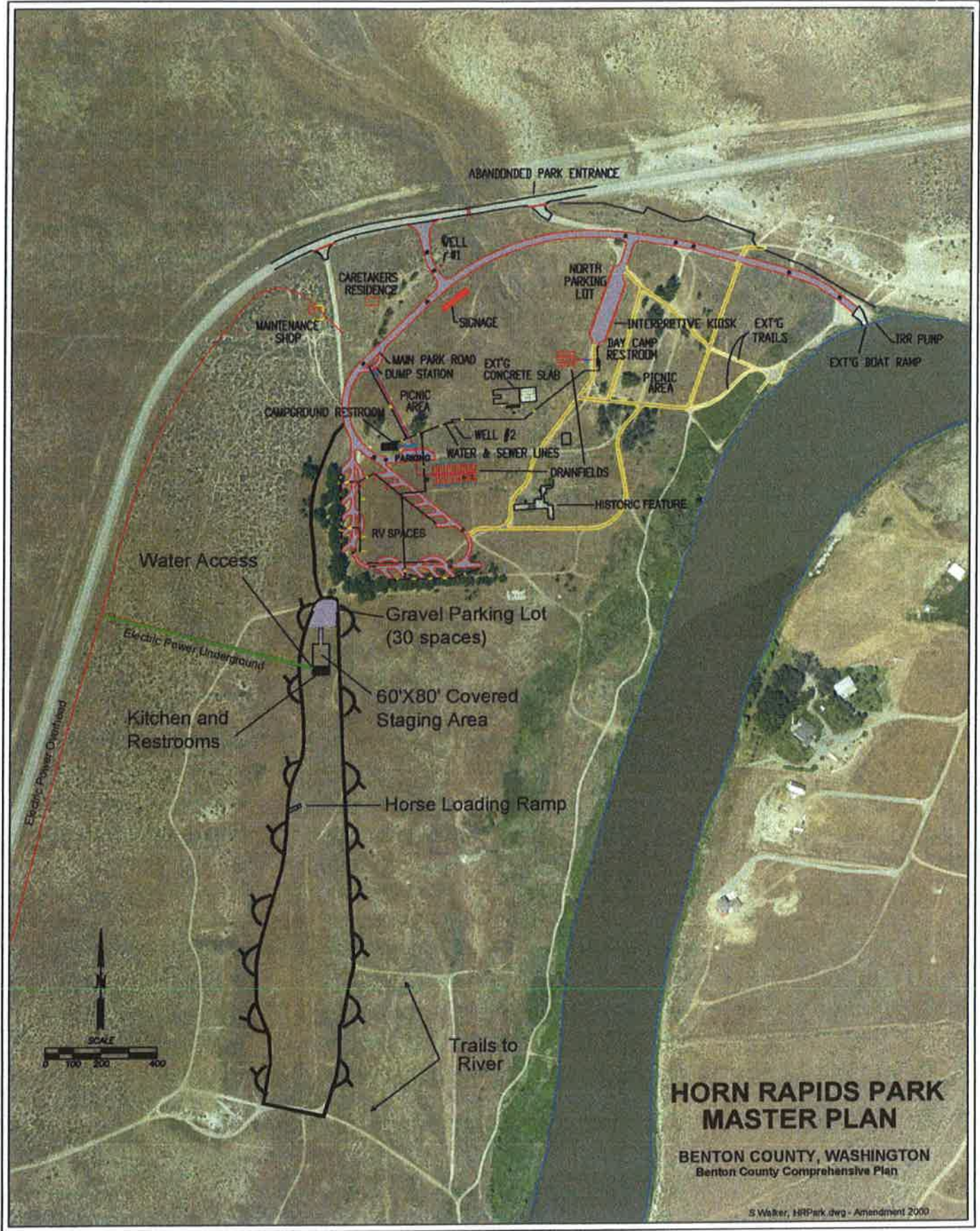
⁴ Substance abuse, mental health and group homes

⁵ Depending on size of facility

⁶ SCTF's as required by RCW 36.70A.200 & RCW 71.09 (civilly committed sex offender housing)

⁷ Facilities listed by the Office of Financial Management required or likely to be built within the next six years (RCW36.70A.200).

⁸ To be determined by Benton County Planning Department as projects are identified.



**HORN RAPIDS PARK
MASTER PLAN**
BENTON COUNTY, WASHINGTON
Benton County Comprehensive Plan

S Walker, HRPark.dwg - Amendment 2000

RECREATION NEEDS SURVEY -

On Monday, September 19, 1994, six thousand Benton County residents who subscribe to the Tri-City Herald received a postage paid Recreation Needs Survey form to help determine what the County should be doing to meet the leisure time needs and demands of Benton County residents. The manner of distribution by the Tri-City Herald insured that residents in all sections and geographic locations had an opportunity to participate. Of the 6,000 forms distributed, 497 were **filled** out and returned.

1. **WHICH POPULATION AREA BEST DESCRIBES YOUR LOCATION WITHIN THE COUNTY?** Richland, 39; Kennewick, 190; Prosser, 81; Benton City, 75; West Richland, 30; Finley, 68; Patterson/Plymouth, 0.
2. **WHICH COUNTY PARKS DO YOU USE?** Horn Rapids Park, 78; Horse Heaven Vista, 21; Pioneer Vista, 5; Vista Park, 9; Two Rivers Park, 160; Rattlesnake Mt. Shooting Facility, 30; Wallula Gap Overlook, 9; Hover Park, 45; None, 247.
3. **HOW FAR DO YOU USUALLY TRAVEL TO PARTICIPATE IN YOUR DAILY RECREATIONAL ACTIVITIES? (ONE WAY):** Stay at home, 13 1; Up to 1 1/2 miles, 38; Up to 5 miles, 69; Up to 10 miles, 10; Up to 25 miles, 103. **HOW FAR DO YOU USUALLY TRAVEL TO PARTICIPATE IN RECREATIONAL ACTIVITIES?** Stay at home, 43; Up to 10 miles, 86; Up to 100 miles, 66; Up to 200 miles, 105; Over 200 miles, 85.
4. **DO YOU BELIEVE THAT THE COUNTY PROVIDES ADEQUATE PARK FACILITIES IN YOUR AREA?** Yes, 223; No, 240. **If no, what types of facilities would you like to see developed? (NUMBER IN ORDER OF IMPORTANCE TO YOU)** (*Answers to this question were tabulated on a basis of 10 for first priority, 9 for second priority, 8 for third, etc.*) Athletic play fields, 1074; Waterfront parks, 1509; Bicycle & Equestrian trails, 1740; Overnight camping, 1072; Passive Parks, 890; Others, 440.
5. **SHOULD THE COUNTY PROVIDE RECREATION PROGRAMS?** Yes, 156; No, 264.
6. **DO YOU BELIEVE THE COUNTY SHOULD REQUIRE PORTIONS OF LAND IN NEW RESIDENTIAL DEVELOPMENTS TO BE RESERVED FOR FUTURE PARKS AND RECREATIONAL USE?** Yes, 352; No, 70; Undecided, 71.
7. **WOULD YOU RATHER SEE THE COUNTY CONCENTRATE ITS EFFORTS ON:** Developing and maintaining its existing parks, 154; Acquiring and/or developing new park lands, 29; both, 259.
8. **WHICH OF THE FOLLOWING ARE YOU WILLING TO SUPPORT TO PROVIDE IMPROVED PARK FACILITIES?** Bond issue, 153; Recreation fees, 282; Increased property tax, 5 1.
9. **DO YOU BELIEVE THAT THE COUNTY=S OVERALL SERVICE IN PROVIDING PARK FACILITIES, MAINTENANCE, AND OPERATIONS AT EXISTING FACILITIES IS:** Excellent, 30; Good, 209; Fair, 174; Poor, 42.
11. **EACH OF THE ACTIVITIES LISTED BELOW PLEASE ESTIMATE THE NUMBER OF TIMES DURING AN "IN SEASON@ MONTH THAT YOU WOULD USUALLY PARTICIPATE IN THAT ACTIVITY.** (*This question did not appear to be concise enough, as many just checked an activity and some answers appeared to be on a yearly basis. On activities where only a check mark appeared, it was computed as one time.*) Softball, 585; Baseball, 495; Hiking, 1039; Football, 265; Soccer, 787; Badminton, 141; Scuba Diving, 35; Fishing, 1664; Roller skate, 401; Bird Watching, 470; Camping, 813; Horseback, 672; Archery, 244; Boating, 814; Water Skiing, 395; Swimming, 2068; Volleyball, 390; Canoe/Kayak, 206; Bicycling, 1657; Jogging, 1153, Cross Country Skiing, 33 1; Other, 716.
11. **MALE, 225; FEMALE, 266.**
12. **YEARLY INCOME:** Under \$10,000, 26; \$ 1 0,001 to \$30,000, 123; \$30,001 and over, 310.
13. **HOW LONG HAVE YOU LIVED IN BENTON COUNTY?** Less than one year, 14; One to five years, 61; Over five years, 408. **DO YOU:** Rent your home, 35; Own your home, 440.

Chapter Eight Appendix

**TABLE 8-1 CURRENT AND FUTURE (2016) LOS FOR MAJOR COLLECTORS AND MINOR ARTERIALS
BY PLANNING REGION**

Planning Region/ Co. Road Name	Road Section	LOS@mph (C/XXmph)	ADT 2006	% Incr. ADT/YR	ADT/LOS 2016
RED MTN REGION					
Badger Rd. (Minor Arterial)	Dallas Rd. W. to Webber Canyon Rd and on to Kiona	C/50 mph	700	3.0%	941/C
	Dallas Rd. East to I-82	C/50 mph	570	3.0%	766/C
	I-82 Off-ramp to Kennewick City Limits	C/50 mph	1200	4.4%	1613/C
Kennedy Rd.	Intersection of SR224 East to Urban Growth Boundary	C/50 mph	1197	3.0%	1609/C
RATTLESNAKE REGION					
Bennett Ave,	Richards Rd. to Bennett Ave. (Prosser (UGA))	C/50 mph	839	2.0%	1128/C
Byron Rd.	Richards Rd. to Byron Rd. (Prosser (UGA))	C/50 mph	450	3.0%	605/C
County Rte. 12	Albro west to Yak. Co. Line	C/50 mph	2900	2.0%	3897/C
Gap Rd.	County Rte. 12 to Albro	C/35 mph	2900	2.0%	3897/C
Grant Ave.	NE end of Bridge to Grande Rd. (in UGA)	C/25 mph	3500	4.0%	4704/C
	Prosser City Limits to NE end of bridge (in UGA)	C/25 mph	3500	4.0%	4704/C
Jacobs Rd.	Webber Canyon Rd. to SR225	C/50 mph	800	1.0%	1075/C
Johnson Rd.	County Rte 12 to Albro	C/50 mph	1907	4.0%	2563/C
	Albro to Wamba	C/50 mph	1907	3.0%	2563/C
	Wamba to Hinzerling	C/35 mph	1907	4.0%	2563/C
Hinzerling	O.I.E. Hwy to O.I.E. Hwy	C/50 mph	1700	3.0%	2285/C
Old Inland Empire Highway	Yakima Co. Line east to Prosser City Limits	C/50 mph	1500	3.0%	2016/C
	Grande to Hinzerling	C/40 mph	3500	3.0%	4704/C
	Hinzerling east to Pioneer Rd.	C/50 mph	2485	3.0%	3340/C

Chapter Eight Appendix

**TABLE 8-1 CURRENT AND FUTURE (2016) LOS FOR MAJOR COLLECTORS AND MINOR ARTERIALS
BY PLANNING REGION**

Pioneer east to Pioneer		C/35 mph	2485	3.0%	3340/C
Planning Region/ Co. Road Name	Road Section	LOS@mph (C/XXmph)	ADT 2006	% Incr. ADT/YR	ADT/LOS 2016
	M.P. 9.767 to Kendall Rd.	C/50 mph	2740	3.0%	3682/C
	Kendall Rd. to Benton City UGA/City Limits	C/40 mph	2740	2.0%	3682/C
Webber Canyon Rd.	County Well to Badger Rd.	C/40 mph	353	2.0%	474/C
	Badger Rd. to Jacobs Rd.	C/25 mph	1250	2.0%	1680/C
HORSEHEAVEN REGION					
Christy Rd.	SR14 south and east to SR14	C/50 mph	299	1.0%	402/C
Clodfelter Rd.	Plymouth Rd. east to Bentley Rd.	C/50 mph	183	3.0%	246/C
	Bently Rd. east to I-82 corridor	C/50 mph	1300	3.0%	1747/C
McKinley Springs Rd.	Klickitat Co. Line to Sellards Rd.	C/50 mph	195	3.0%	262/C
Plymouth Rd.	Sellards south to Clodfelter	C/50 mph	286	3.0%	384/C
	Clodfelter south to SR14	C/50 mph	310	3.0%	417/C
	SR 14 south to Christie	C/50 mph	593	1.0%	797/C
Sellards Rd.	Township Rd. east to Ward Gap Rd.	C/50 mph	245	3.0%	329/C
	Ward Gap east to Bert James	C/50 mph	191	3.0%	257/C
	Bert James east to SR221	C/50 mph	78	3.0%	105/C
	SR 221 east to Travis Rd.	C/50 mph	500	3.0%	672/C
	Travis Rd. east to Plymouth Rd.	C/50 mph	500	3.0%	672/C
Travis Rd.	Sellards north to Webber Canyon Rd.	C/50 mph	388	3.0%	521/C
	Badger Rd. south to Travis Rd.	C/50 mph	430	3.0%	578/C
FINLEY REGION	*			3.0%	0

*Currently, the Finley rural area is served principally by S.R.397, which is an arterial. A new road ("Interite" "397") that is under construction, will provide an alternative route into the south Finley area. It will be classified as either a major or minor arterial.

TABLE 8-1a Washington State Highway Inventory within Benton County –2018 AADT Build-out of Comp Plan Land Use Assumptions

SR #	Begin MilePost	End MilePost	Federal Functional Class	HSS?	Number of lanes inc. direction	Number of lanes decr. dir.	Legal Speed	Current AADT	Current Truck %	AADT 2018	Comments
014	152.24	167.25	Rural-Major-Collector		1	1	65	987	58	1243	
014	167.25	176.95	Rural-Minor-Arterial		1	1	65	2009	33	2531	
014	176.95	179.32	Rural-Minor-Arterial		1	1	65	2245	33	583	
014	179.32	180.68	Rural-Minor-Arterial		1	1	55				
014	180.68	180.77	Rural-Minor-Arterial		1	1	55	3240	29	4082	
022	29.76	33.05	Rural-Major-Collector		1	1	60	991		1247	
22	33.05	33.2	Rural-Major-Collector		1	1	55				
022	33.2	33.41	Rural-Major-Collector		1	1	55				Within UGA - Prosser
022	33.41	36.3	Rural-Major-Collector		1	1	55	2663	6	3355	Within UGA - Prosser
022	36.3	36.52	Rural-Major-Collector		1	1	45	4149		5227	
024	30.76	38.71	Rural-Minor-Arterial		1	1	65	2486		3132	
024	38.71	40	Rural-Minor-Arterial		1	1	65	2933	23	3695	
024	40	42.26	Rural-Minor-Arterial		1	1	60				
024	42.26	43.79	Rural-Minor-Arterial		1	1	60	3023		3809	
082	75.37	79.93	Rural-Interstate	Y	2	2	70	13783	22	17366	
082	79.93	82.09	Rural-Interstate	Y	2	2	70	10972		13825	
082	82.09	82.34	Rural-Interstate	Y	2	2	70	10972	32	13825	Within UGA - Prosser
082	82.34	88.55	Rural-Interstate	Y	2	2	70	11208	26	14122	
082	88.55	93.61	Rural-Interstate	Y	2	2	70	11093		13977	
082	93.61	96.61	Rural-Interstate	Y	2	2	70	12145		15302	
082	96.61	102.56	Rural-Interstate	Y	2	2	70	14081		17742	
082	102.56	104.55	Rural-Interstate	Y	2	2	70	5956		7505	
082	104.55	108.93	Rural-Interstate	Y	2	2	70	5628		7091	
082	108.93	113.71	Rural-Interstate	Y	2	2	70	6361	24	8015	
082	113.71	114.41	Rural-Interstate	Y	2	2	70	12634		15919	
082	114.41	122.76	Rural-Interstate	Y	2	2	70	12793		16119	
082	122.76	131.58	Rural-Interstate	Y	2	2	70	12447		15683	

TABLE 8-1a Washington State Highway Inventory within Benton County –2018 AADT Build-out of Comp Plan Land Use Assumptions

082	131.58	132.6	Rural-Interstate	Y	2	2	70	14516	21	18290	
182	0	0.1	Rural-Interstate	Y	1	1	70	6804		8573	
182	0.1	0.43	Rural-Interstate	Y	1	2	70				
182	0.43	0.84	Rural-Interstate	Y	2	2	70	11711		14756	
182	0.84	1.72	Urban-Interstate	Y	2	2	70				Within UGA - Richland
182	1.72	2.93	Urban-Interstate	Y	2	2	70	11711		14756	Within UGA - Richland
182	2.93	4.4	Urban-Interstate	Y	2	2	70	22288		28083	Within UGA - Richland
182	4.4	4.71	Urban-Interstate	Y	3	2	70	34807		43857	Within UGA - Richland
182	4.71	4.88	Urban-Interstate	Y	3	2	70				Within UGA - Richland
182	4.88	5.4	Urban-Interstate	Y	2	2	70				Within UGA - Richland
182	5.4	5.61	Urban-Interstate	Y	2	3	70				Within UGA - Richland
182	5.61	6.04	Urban-Interstate	Y	3	3	70	27903		35158	Within UGA - Richland
221	0	0.34	Rural-Minor-Arterial		1	1	50	1876	27	2364	
221	0.34	1.7	Rural-Minor-Arterial		1	1	60				
221	1.7	7.48	Rural-Minor-Arterial		1	1	65				
221	7.48	22.95	Rural-Minor-Arterial		1	1	65	1588		2001	
221	22.95	25.48	Rural-Minor-Arterial		1	1	55				
221	25.48	26.07	Rural-Minor-Arterial		1	1	55		29		Within UGA - Prosser
224	0	1.44	Rural-Major-Collector		1	1	55	4483		5649	
224	1.44	4.73	Rural-Major-Collector		1	1	55	2276	5	2868	
224	4.73	4.98	Urban-Minor-Arterial		1	1	55				Within UGA - W. Richland
224	4.98	6.63	Urban-Minor-Arterial		1	1	55	3479	7	4384	Within UGA - W. Richland
224	6.63	7.48	Urban-Minor-Arterial		1	1	35	8637		10883	Within UGA - W.

TABLE 8-1a Washington State Highway Inventory within Benton County –2018 AADT Build-out of Comp Plan Land Use Assumptions

224	7.48	7.55	Urban-Minor-Arterial				2	1	35						Richland Within UGA - W. Richland
224	7.55	7.74	Urban-Minor-Arterial				2	2	35						Within UGA - W. Richland
224	7.74	8.07	Urban-Minor-Arterial				2	2	35	11142			14039		Within UGA - W. Richland
224	8.07	8.38	Urban-Minor-Arterial				2	2	30						Within UGA - W. Richland
224	8.38	9.84	Urban-Minor-Arterial				2	2	40						Within UGA - Richland
224	9.84	9.9	Urban-Minor-Arterial				2	2	40	15872			19999		Within UGA - Richland
225	0	0.78	Rural-Major-Collector				1	1	35	6625	N/A		8347		Within UGA - Benton City
225	0.78	1.19	Rural-Major-Collector				1	1	30						Within UGA - Benton City
225	1.19	2.01	Rural-Major-Collector				1	1	25						Within UGA - Benton City
225	2.01	3	Rural-Major-Collector				1	1	35						Within UGA - Benton City
225	3	5	Rural-Major-Collector				1	1	40						
225	5	5.12	Rural-Major-Collector				1	1	40	1292			1628		
225	5.12	11.32	Rural-Major-Collector				1	1	50						
240	0	4.99	Rural-Minor-Arterial				1	1	65	1140	28		1436		
240	4.99	20.25	Rural-Minor-Arterial				1	1	65						
240	20.25	21.43	Rural-Minor-Arterial				1	1	55	2752			3468		
240	21.43	22.36	Urban-Minor-Arterial				1	1	55		9				Within UGA - Richland
240	22.36	28.57	Urban-Minor-Arterial				1	1	55	2199			2771		Within UGA - Richland
240	28.57	30.63	Urban-Minor-Arterial				1	1	55	11162	12		14064		Within UGA - Richland

TABLE 8-1a Washington State Highway Inventory within Benton County –2018 AADT Build-out of Comp Plan Land Use Assumptions

240	30.63	31.43	Urban-Other-Principal-Arterial	Y	2	2	55	9437	11891	Within UGA - Richland	
240	31.43	32.02	Urban-Other-Principal-Arterial	Y	2	2	55	9077	11437	Within UGA - Richland	
240	32.02	32.12	Urban-Other-Principal-Arterial	Y	2	2	55	17016	21440	Within UGA - Richland	
240	32.12	34.31	Urban-Other-Principal-Arterial	Y	2	2	55	11747	14801	Within UGA - Richland	
240	34.31	34.58	Urban-Other-Principal-Arterial	Y	2	3	55	22212	27987	Within UGA - Richland	
240	34.58	34.87	Urban-Other-Principal-Arterial	Y	2	1	55			Within UGA - Richland	
240	36.05	36.52	Urban-Principal-Arterial	Y	2	1	55	27968	4	35240	Within UGA - Richland
240	36.52	37.58	Urban-Principal-Arterial	Y	2	2	55	47138	59394	Within UGA - Richland	
240	37.58	38.58	Urban-Principal-Arterial	Y	2	2	55	34659	43670	Within UGA - Richland	
240	38.58	38.9	Urban-Principal-Arterial	Y	2	2	55	36637	46163	Within UGA - Richland	
240	38.9	39.64	Urban-Principal-Arterial	Y	2	2	55	32496	40945	Within UGA - Richland	
240	39.64	42.81	Urban-Principal-Arterial	Y	2	2	55	26039	32809	Within UGA - Kennewick	
240	42.81	43.16	Urban-Principal-Arterial	Y	1	2	55			Within UGA - Kennewick	
240	43.16	43.17	Urban-Principal-Arterial	Y	2	2	55	15952	20100	Within UGA - Kennewick	
395	13.05	13.18	Rural-Principal-Arterial	Y	1	2	55	5637	7103		
395	13.18	13.4	Urban-Principal-Arterial	Y	1	2	55			Within UGA - Kennewick	
395	13.4	13.5	Urban-Principal-Arterial	Y	2	2	55	10720	13507	Within UGA-Kenne	
395	13.5	14.22	Urban-Principal-Arterial	Y	2	2	55			Within UGA -	

TABLE 8-1a Washington State Highway Inventory within Benton County –2018 AADT Build-out of Comp Plan Land Use Assumptions

395	14.22	15.4	Urban-Principal-Arterial	Y	2	2	55	10504	13235	Kennewick Within UGA - Kennewick
395	15.4	15.56	Urban-Principal-Arterial	Y	2	2	50			Within UGA - Kennewick
395	15.56	16.05	Urban-Principal-Arterial	Y	2	2	50	10118	12749	Within UGA - Kennewick
395	16.05	16.17	Urban-Principal-Arterial	Y	2	2	35			Within UGA - Kennewick
395	16.17	16.92	Urban-Principal-Arterial	Y	2	2	35	12892	16244	Within UGA - Kennewick
395	16.92	17.11	Urban-Principal-Arterial	Y	2	2	35	20095	25320	Within UGA - Kennewick
395	17.11	17.24	Urban-Principal-Arterial	Y	2	2	35	23035	29024	Within UGA - Kennewick
395	17.24	17.25	Urban-Principal-Arterial	Y	2	2	45			Within UGA - Kennewick
395	17.25	17.91	Urban-Principal-Arterial	Y	2	2	45	20393	25695	Within UGA - Kennewick
395	17.91	18	Urban-Principal-Arterial	Y	2	3	45			Within UGA - Kennewick
395	18	18.25	Urban-Principal-Arterial	Y	2	2	45	38393	48375	Within UGA - Kennewick
395	18.25	18.3	Urban-Principal-Arterial	Y	1	2	45			Within UGA - Kennewick
395	18.3	18.54	Urban-Principal-Arterial	Y	1	1	45	28260	35608	Within UGA - Kennewick
395	18.54	18.58	Urban-Principal-Arterial	Y	1	2	55			Within UGA - Kennewick
395	18.58	18.93	Urban-Principal-Arterial	Y	2	2	55	46509	58601	Within UGA - Kennewick
397	0	5.17	Urban-Collector		1	1	50	3137	3953	
397	5.17	5.51	Urban-Collector		1	1	40	5471	6893	

	5.51	5.58	Urban-Collector		1	1	40				Within UGA - Kennewick
397	5.58	5.6	Urban-Other-Principal- Arterial		1	1	40	10402	13107		Within UGA - Kennewick
397	5.6	5.63	Urban-Other-Principal- Arterial		2	1	40				Within UGA - Kennewick
397	5.63	6.15	Urban-Other-Principal- Arterial		2	2	40				Within UGA - Kennewick
397	6.15	6.4	Urban-Other-Principal- Arterial		2	2	35	10154	12794		Within UGA - Kennewick
397	6.4	6.88	Urban-Other-Principal- Arterial		2	2	35	13586	17118		Within UGA - Kennewick
397	6.88	7.24	Urban-Other-Principal- Arterial		2	2	40				Within UGA - Kennewick

ITEM 9-1

EXAMPLE LEVELS OF SERVICE (LOS) COMPARED TO CURRENT BENTON COUNTY LEVELS

CAPITAL FACILITY	TYPE OF PROVIDER	EXAMPLE LOS (Source: Kitsap and Thurston Counties, 1996)	CURRENT BENTON CO.SERVICE (for 1997 populations)
County Buildings: Administrative Offices District Courtrooms Superior Courtrooms	County County County	940 sf./ 1000 population 0.016 courtrooms/1000 pop. 0.032 courtrooms/1000 pop.	116,540 SF. = 869/1000 ¹ 5 courtrooms =.037/1000 ¹ 3 courtrooms =.022/1000 ¹
Law Enforcement: Sheriff Offices Sheriffs Offices Corrections Facility Work Release Facility Juvenile Facility	County County County County County	2 sworn officers/1000 pop* 122 sf./1000 pop. 1.13 beds/1000 pop. 39.9 sf./1000 pop. 0.4 beds/1000 pop.	47 officers =1.360/1000 ² 8364 sf. = 242/1000 ² 151beds = 1.12/1000 ¹ 2812 sf. =21/1000 ¹ 108 beds = 0.6/1000 ³
Parks and Recreation: Regional Parks Community Park Nature trails Boat Ramps	County County County County	10.5 ac./1000 pop. (.0105 ac. per capita)** 3ac./1000 local pop 0.003 ac. per capita)** 1/4 mi./1000 pop. (0.00025 mi. per capita)** .012 ramps/1000 pop.**	782 ac. = 5.814/1000 ¹ 523.5 ac. =15.1/1000 ² 1/4 mi/ 7000 pop. (.000029 per capita) ² 2 ramps =.061/1000 ²

NOTE: Unless otherwise noted in the Table, the source for the LOS standard is the Fiscal Analysis of Capital Facilities Requirements, Kitsap County Comprehensive Plan, 1996. The present populations of Kitsap and Thurston Counties exceeds that of Benton Co. by approximately 80,000 and 60,000 respectively, their range of services is wider than Benton County's, therefore a direct comparison of LOSs is inappropriate.

* Source: 1985 Benton Co. Comprehensive Plan

** Source: Thurston Co. standard, Capital Facilities Plan Preparation Guide DCTED GMA Division, Draft 1992

1. These facilities serve the entire population of Benton County, i.e., 134,100 persons
2. These facilities serve only the unincorporated population of the county, i.e., 34,555 persons
3. These facilities serve the entire population of Benton and Franklin Counties, i.e., 178,000 persons

Chapter Twelve

Item 12-0

BIBLIOGRAPHY

Final Environmental Impact Statement March 1981, Benton County Washington, Preliminary Draft Comprehensive Plan, prepared by the Benton County Planning Department, Prosser, Washington, March 1981.

**PROSSER/WHITSTRAN PLANNING AREA
PREFERRED LAND USE MAP**

Acres of Use

Uses	Acres
Rural Lands Residential	23,989.00
Commercial	181.33 ¹
Industrial	877 ²
Public	
Trails	3
Total	25,047.33

RURAL LANDS RESIDENTIAL BUILD-OUT

	Rural Residential Acres	Households	Population ³	Average Density ⁴
Existing Development	24,975	1,3472	4,026	18.6
Preferred Land Use Map	25,047	8,367 ⁵	25,101	4.06

¹ 39.29 acres interchange commercial/142.04 acres general commercial

² 377 acres light industrial/500.34 acres heavy industrial

³ Population estimated @ 3 persons per household

⁴ Acres(A) per dwelling units (DU)

⁵ (7,237.1A @ 1DU per 5A = 1,447 DU's) + (16,385.9A @ 1 DU per 2.5A = 6,554 DU's) + (366 A @ 1DU per A = 366 DU's) = 8,367 DU's

CAPITAL FACILITIES

	RURAL LANDS AREA		PROSSER SCHOOL DISTRICT Student Increase ¹	ADDITIONAL Schools ²	PUBLIC	FACILITIES
	Population Increase	Additional Dwellings				
Established Level of Service (LOS)				25 students per classroom	Large Urban(LU) ³ Natural(N) ⁴	1.37 Miles per 1,000 Population ⁵
Preferred Land Use Map	+21,075	+7,025	+5,550	+222 Classrooms 9 New Schools	105 Acres LU	29 ⁶

¹ Student Increase using average .79 students per dwelling unit (Morgan, Wollcott and Associates 1/94)
² Average school size 50,000 sq. feet (25 classrooms) @ today's cost \$128.00 per sq. ft. = 6.4 million.
³ Large Urban Park designation requires 5 acres per 1,000 population.
⁴ Natural Park designation requires 2.5 acres per 1,000 population
⁵ 1982 Parks and Recreation Comprehensive Plan.
⁶ 3 miles designated in current plan.

**BENTON CITY/KIONA PLANNING AREA
PREFERRED LAND USE MAP**

Acres of Use

Uses	Acres
Rural Lands Residential	18,415.56
Interchange Commercial	0
Light Industrial	26.08
Trails (miles)	5,183.22 ¹
Total	17.5
	23,579.86

RURAL LANDS RESIDENTIAL BUILD-OUT

	Rural Residential Acres	Households	Population ²	Average Density ³
Existing Development	20,045	974	2,922	20
Preferred Land Use Map	18,415.56	7,087 ⁴	21,261	2.59

¹ Benton County 515.66, Sunnyside Wildlife Recreation Area 4,622.56

² Population estimated @ 3 persons per household

³ Acres(A) per dwelling units (DU)

⁴ (827.88A @ 1DU per A =828 DU's) + (3,876.54A @ 1 DU per 5A = 775 DU's) + (13,711A @ 1DU per 2.5A = 5,484 DU's)=7,087 DU's

CAPITAL FACILITIES

Alternative	RURAL LANDS AREA		BENTON CITY SCHOOL DISTRICT Student Increase ¹	ADDITIONAL Schools ²	PUBLIC	FACILITIES
	Population Increase	Additional Dwellings				
Established Level of Service (LOS)				25 students per classroom	Large Urban(LU) ³ Natural(N) ⁴	1.37 Miles per 1,000 Population ⁵
Preferred Land Use Map	+18,339	+6,113	+4,707	+188 Classrooms 7.5 New Schools	91 Acres LU 46 Natural(N)	25 mi.

¹ Student Increase using average .77 students per dwelling unit (based on G.I.S. calculations 2,139 Dwellings/1,639 students)
² Average school size 50,000 sq. feet (25 classrooms) @ today's cost \$128.00 per sq. ft. = 6.4 million.
³ Large Urban Park designation requires 5 acres per 1,000 population.
⁴ Natural Park designation requires 2.5 acres per 1,000 population
⁵ 1982 Parks and Recreation Comprehensive Plan.

**PATERSON PLANNING AREA
PREFERRED LAND USE MAP**

Acres of Use

Uses	Acres
Rural Lands Residential	485.84
Community Commercial	13.55
Industrial	141.87
Public	3,478.57
Trails (miles)	0
Total	4,117.83

RURAL LANDS RESIDENTIAL BUILD-OUT

	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	441.12	36	108	12.26
Preferred Land Use Map	485.84	347 ³	1,041	1.4

¹ Population estimated @ 3 persons per household

² Acres(A) per dwelling units (DU)

³ 37.69A @ 1-3 (2av.) + 75.38DU's + 154.14A @ 1 DU per 1A = 154.14 DU's + 294.01A @ 1DU per 2.5A = 117 DU's (347 Total)

CAPITAL FACILITIES

	RURAL LANDS AREA		PLYMOUTH SCHOOL DISTRICT ¹	ADDITIONAL	PUBLIC	FACILITIES
	Population Increase	Additional Dwellings				
Alternative			Student Increase ²			
Established Level of Service (LOS)				25 students per classroom	Large Urban(LU) ⁴ Natural(N) ⁵	1.37 Miles per 1,000 Population ⁶
Preferred Land Use Map	+945	+315	+129	+5 Classrooms	5 Acres LU 2.5 Natural(N)	1 mi.

¹ School District populaton (K-5) within the rural residential planning area.

² Student Increase using existing .41 students per dwelling unit

³ Average School size 50,000 sq. ft (25 Classrooms) @ today's cost \$128.00 per sq. ft = 6.4 million

⁴ Large Urban Park designation requires 5 acres per 1,000 population

⁵ Natural Park designation requires 2.5 acres per 1,000 population

⁶ 1982 Parks and Recreation Comprehensive Plan.

**RICHLAND/WEST RICHLAND PLANNING AREA
PREFERRED LAND USE MAP**

Acres of Use

Uses	Acres
Rural Lands Residential	24,864.79
Interchange Commercial	99.07
Light Industrial	427.93
Public	162.13
Trails (miles)	8.8
Total	25,553.92

RURAL LANDS RESIDENTIAL BUILD-OUT

	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	23,959	1,205	3,615	19.89
Preferred Land Use Map	24,865	9,270 ³	27,810	2.69

¹ Population estimated @ 3 persons per household

² Acres(A) per dwelling units (DU)

³ 1,049.93A @ 1DU per 1A = 1,049.93 DU's + 17,282.28 @ 1 DU per 2.5A = 6,912.92 DU's + 6,532.58A @ 1 DU per 5A = 1,307 DU's Total 9,270 DU's

CAPITAL FACILITIES

Alternative	RURAL LANDS AREA		RICHLAND/WEST RICHLAND SCHOOL DISTRICT Student Increase ¹	ADDITIONAL Schools ²	PUBLIC Parks	FACILITIES Trails
	Population Increase	Additional Dwellings				
Established Level of Service (LOS)				25 students per classroom	Large Urban(LU) ³ Natural(N) ⁴	1.37 Miles per 1,000 Population ⁵
Preferred Land Use Map	+24,195	+8,065	+5,323	+213 Classrooms 8.52 New Schools	5 Acres LU 2.5 Natural(N)	1 mi.

¹ 1990 U.S. Census shows 22% of the Richland/West Richland population as school age.

² Average school size 50,000 sq. ft. (25 classrooms) @ todays cost \$128.00 per sq. ft = 6.4 million

³ Large Urban Park designation requires 5 acres per 1,000 population

⁴ Natural Park designation requires 2.5 acres per 1,000 population

⁵ 1982 Parks and Recreation Comprehensive Plan.

**PLYMOUTH PLANNING AREA
PREFERRED LAND USE MAP**

Acres of Use

Uses	Acres
Rural Lands Residential	582.66
Commercial	178.53 ¹
Industrial	1,627.93 ²
Public	575.07
Trails	0
Total	2,964.19

RURAL LANDS RESIDENTIAL BUILD-OUT

	Rural Residential Acres	Households	Population ³	Average Density ⁴
Existing Development	1,411	73	219	19.33
Preferred Land Use Map	582.66	388 ⁵	1,164	1.51

¹ 181.91 acres interchange commercial/6.62 acres community commercial

² 640.11 acres light industrial/987.82 acres heavy industrial

³ Population estimated @ 3 persons per household

⁴ Acres(A) per dwelling units (DU)

⁵ 96.77A @ 1-3 (2 av) DU per Acre = 193.54 + 486.14A @ 2.5 DU's per A = 388 DU's Total

Benton County Comprehensive Plan

CAPITAL FACILITIES

	RURAL LANDS AREA		PLYMOUTH SCHOOL DISTRICT ¹	ADDITIONAL	PUBLIC	FACILITIES
	Population Increase	Additional Dwellings				
Alternative			Student Increase ²	Schools ³	Parks	Trails
Established Level of Service (LOS)				25 students per classroom	Large Urban(LU) ⁴ Natural(N) ⁵	1.37 Miles per 1,000 Population ⁶
Preferred Land Use Map	+945	+315	+129	+5 Classrooms	5 Acres LU 2.5 Natural(N)	1 mi.

¹ School District population (K-5) within the rural residential planning area.

² Student Increase using existing .41 students per dwelling unit

³ Average School size 50,000 sq. ft (25 Classrooms) @ today's cost \$128.00 per sq. ft = 6.4 million

⁴ Large Urban Park designation requires 5 acres per 1,000 population

⁵ Natural Park designation requires 2.5 acres per 1,000 population

⁶ 1982 Parks and Recreation Comprehensive Plan.

**KENNEWICK/FINLEY PLANNING AREA
PREFERRED LAND USE MAP**

Acres of Use

Uses	Acres
Rural Lands Residential	11,732.42
Commercial	51.83
Heavy Industrial	1,380.77
Public	611.47
Trails	26.9
Total	13,779.84

RURAL LANDS RESIDENTIAL BUILD-OUT

	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	11,148	2,291	6,873	4.87
Preferred Land Use Map	11,732.42	5,388 ³	16,164	2.18

¹ Population estimated @ 3 persons per household

² Acres(A) per dwelling units (DU)

³ (190.83A @ 1-3 (ZAVG) DU's per A. = 382 DU's) + (757.14A @ 1 DU per 1A. = 757 DU's) + (10,464.45A @ 1 DU per 2.5 A = A,185DU's) + (320A @ 1 DU per 5 A = 64 DU's) = 5,388 Total DU's

CAPITAL FACILITIES

	RURAL LANDS AREA		KENNEWICK SCHOOL DISTRICT Student Increase ¹	ADDITIONAL Schools ²	PUBLIC Parks	FACILITIES Trails
	Population Increase	Additional Dwellings				
Alternative Established Level of Service (LOS)				25 students per classroom	Large Urban(LU) ³ Natural(N) ⁴	1.37 Miles per 1,000 Population ⁵
Preferred Land Use Map	+9,291	+3,097	+2,323	+93 Classrooms +3.72 New Schools	5 Acres LU 2.5 Natural(N)	1 mi.

¹ Current population shows 25% of the Kennewick/Finley population as school age.
² Average School size 50,000 sq. ft. (25 Classrooms) @ today's cost \$128.00 per sq. ft = 6.4 million
³ Large Urban Park designation requires 5 acres per 1,000 population
⁴ Natural Park designation requires 2.5 acres per 1,000 population
⁵ 1982 Parks and Recreation Comprehensive Plan.

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PLANNING AREA ALTERNATIVES

- CHART 1 EXISTING CONDITIONS**
- CHART 2 ACRES OF USE PER ALTERNATIVE**
- CHART 3 RURAL RESIDENTIAL BUILD-OUT PER ALTERNATIVE**
- CHART 4 CAPITAL FACILITIES PER ALTERNATIVE**

CHART 1
PROSSER/WHITSTRAN PLANNING AREA
EXISTING CONDITIONS

CATEGORY	PROSSER/WHITSTRAN AREA	PROSSER SCHOOL DISTRICT ¹
Population ²	4,026	4,026
Single Family Residences	818	818
Mobile Homes	524	524
Commercial	22	N/A
Industrial	3	N/A

CHART 2
PROSSER/WHITSTRAN PLANNING AREA
ACRES OF USE PER ALTERNATIVE

Uses	Interim Rural ³	85 Comp	Alt 1	Alt 2
Rural Residential	24,468.84	22,460.3	22,511	18,870
Commercial	23	23	680.62	518.78
Industrial	529.2	529.2	648.40	714.55
Public	244	244	333.82	255.38
Open Space	-0-	-0-	316.44	4,029.04
Trails (miles)	2	30	10	13
Totals*	25,265	23,257	24,490	24,388

¹ School population within the Prosser/Whitstran Planning Area

² Population estimated at 3 persons per household

³ Interim zoning adopted by BOCC

**CHART 3
PROSSER/WHITSTRAN PLANNING AREA
RURAL RESIDENTIAL BUILD-OUT**

Alternative	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	24,975	1,342	4,026	18.6
85 Comp. Plan	22,460	8,999	26,997	2.5
Interim Rural ³	24,468	6,504 ⁴	19,513	3.7
Alternative 1	22,511	5,788 ⁵	17,364	3.89
Alternative 2	18,870	2,450 ⁶	7,350	7.70

¹ Population estimated @ 3 persons per household

² Acres (A) per dwelling unit (DU)

³ GMA Interim zoning adopted by the BOCC

⁴ 17,372.2 A @ 1 DU per 5 A. = 3,474.44 DU's + 6,788.64 A @ 1 DU per 2.5 A. = 2,712 DU's + 318 A @ 1 DU per A = 318 DU's

⁵ 16,082.68 A @ 1 DU per 5 A = 3,217 DU's + 6,428 A @ 1 DU per 2.5 A = 2,571

⁶ 5,628.78 A. @ 1 DU per 5 A. = 1,126 DU's + 13,241 A. @ 1 DU per 10 A. = 1,324 DU's

**CHART 4
PROSSER/WHITSTRAN PLANNING AREA
CAPITAL FACILITIES PER ALTERNATIVE**

Alternative	PROSSER PLANNING AREA		PROSSER SCHOOL DISTRICT ¹	PUBLIC FACILITIES		
	Population Per Alt	Dwellings		Schools	Parks	Trails
Established Level of Service (LOS)			Student Increase ²	Schools	Parks	Trails
Current Conditions	4,026	1,342	1,060	25 students per classroom (SPC) Elementary 11/SPC Middle 28/SPC High 25/SPC	Large Urban(LU) ³ Natural(N) ⁴ -0-	1.37 Miles per 1,000 Population ⁵ 2 mi.
85 Comp. Plan	26,997	8,999	6,049,	216 Classrooms 8+ New Schools	135 Acres (LU) 68 Acreqs (N)	30 mi.
Interim Rural	19,513	6,504	4,078	146 Classrooms 5 + New Schools	98 Acres (LU) 68 Acres (N)	27 mi
Alternative 1	17,364	5,788	3,513	126 Classrooms 5 + New Schools	88 Acres (LU) 44 Acres (N)	24 mi.
Alternative 2	7,350	2,450	875	31 Classrooms 1 + New Schools	37 Acres (LU) 19 Acres (N)	10 mi.

¹ School District Population within the rural residential planning area

² Student increase using average .79 students per dwelling unit (Morgan, Wollcott, And Associates 1/94)

³ Large Urban Park designation requires 5 acres per 1,000 population

⁴ Natural Park designation requires 2.5 acres per 1,000 population

⁵ 1982 Parks and Recreation Comprehensive Plan.

CHART 1
 RICHLAND/WEST RICHLAND PLANNING AREA
 EXISTING CONDITIONS

CATEGORY	RICHLAND/WEST RICHLAND RURAL RESIDENTIAL AREA	RICHLAND SCHOOL DISTRICT ¹
Population ²	3,615	795 ³
Single Family Residences	885	N/A
Mobile Homes	319	N/A
Commercial	2	N/A
Industrial	2	N/A

CHART 2
 RICHLAND/WEST RICHLAND PLANNING AREA
 ACRES OF USE PER ALTERNATIVE

Uses	Interim Rural ⁴	85 Comp	Alt 1	Alt 2	Alt 3
Rural Residential	23,958.65	21,400.76	15,404.61	16,264.52	14,487.17
Commercial	74.40	74.40	-0-	1,923.54	-0-
Industrial	240.72	240.72	-0-	-0-	481.08
General Aq.	N/A	2,557.89	N/A	N/A	N/A
Parks/Public	97.82	97.82	221.57	686.78	2,608.76
Open Space	-0-	-0-	8,723.63	5,721.03	6,556.96
Trails (miles)	27 mi.	27 mi.	38.41 mi.	-0-	2 mi.
Totals*	24,371.59	24,371.59	24,349.81	24,595.87	24,493.97

* Within 1% accuracy due to scale.

¹ School population within the Richland/West Richland Planning Area

² Population estimated at 3 persons per household

³ 22% of West Richland population is school age (1990 Federal Census)

⁴ Interim Zoning adopted by the BOCC

**CHART 3
RICHLAND/WEST RICHLAND PLANNING AREA
RURAL RESIDENTIAL BUILD-OUT**

Alternative	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	23,959	1,205	3,615	19.89
85 Comp. Plan	23,959	22,993 ³	68,979	1.05
Interim Rural ⁴	23,959	18,336 ⁵	25,008	1.31
Alternative 1	15,405	4,401 ⁶	13,203	3.5
Alternative 2	16,265	2,450 ⁷	7,350	7.70
Alternative 3	14,847	4,775 ⁸	14,325	3.11

¹ Population estimated @ 3 persons per household

² Acres (A) per dwelling unit (DU)

³ 13,844.91 A. @ 1 DU per A. = (13,845 DU's) + 2,558 A. @ 1 DU per 10 A. = (225 DU's) + 3,680 A. @ 1 DU per 5A. = (736 DU's) + 162 A. @ 3-

DU's per A. = (729 DU's) + 3,714 A @ 1-3 DU's per A. = 7,428 DU's = 22,993 Total DU's

⁴ GMA Interim zoning adopted by the BOCC

⁵ 17,721 A @ 1 DU per 2.5 A. = (7,088 DU's) + 6,238 A @ 1 DU per 5 A. = (1,248 DU's) = 8,236 Total DU's

⁶ 15,404 A @ 1 DU per 2.5 A (3.5 Av) = 4,401 Total DU's

⁷ 10,376 A. @ 1 DU per 5 A = (2,075 DU's) + 4,942 A. @ 1 DU per 2.5 A = (1,977 DU's) + 947 A @ 1 DU per 1 A. = (474 DU's) = 4,526 Total DU's

⁸ 6,154 A. @ 1 DU per 5 A. = (1,231) + 1,100 A. @ 1 DU per 2 A. = (550 DU's) + 437 A. @ 1 DU per 2.5 A = (175 DU's) + 5,855 A. @ 1 DU per 1-5 A. (3 Av.) = (1,952) + 1,301 A. @ 1 DU per 1-2 A., (1.5 Av.) = (867 DU's) = 4,775 Total DU's

**CHART 4
RICHLAND/WEST RICHLAND PLANNING AREA
CAPITAL FACILITIES PER ALTERNATIVE**

Alternative	RICHLAND/WEST RICHLAND PLANNING AREA		RICHLAND SCHOOL DISTRICT ¹	PUBLIC FACILITIES			
	Population Per Alt	Dwellings	Student Increase ²	Schools	Parks	Trails	
Established Level of Service (LOS)				25 students per classroom (SPC)	Large Urban(LU) ³ Natural(N) ⁴	1.37 Miles per 1,000 Population ⁵	
Current Conditions	3,615	1,205	795	Elementary /SPC Middle 28/SPC High 25/SPC	234 (LU) ⁶ 550 (N)	-0- mi.	
85 Comp. Plan	68,979	22,933	14,380,	575 Classrooms 23 New Schools ⁷	335 Acres (LU) 172 Acreqs (N)	94 mi.	
Interim Rural	25,008	18,336	4,707	188 Classrooms 7.5 New Schools	125 Acres (LU) 63 Acres (N)	34 mi	
Alternative 1	13,203	4,401	2,110	84 Classrooms 3.38 New Schools	65 Acres (LU) 33 Acres (N)	18 mi.	
Alternative 2	22,179	7,393	4,084	163 Classrooms 6.5 New Schools	111 Acres (LU) 55 Acres (N)	30 mi.	
Alternatiave 3	14,325	4,775	+2,357	94 Classrooms 3.7 New Schools	+162 Acres (LU) +514 Acres (N)	20 mi.	

¹ The 1990 U.S. Census shows 22% of the R/W/R population as school age.

² School District Population within the rural residential planning area

³ Large Urban Park designation requires 5 acres per 1,000 population

⁴ Natural Park designation requires 2.5 acres per 1,000 population

⁵ 1982 Parks and Recreation Comprehensive Plan.

⁶ Horn Rapids Park

⁷ Average school size 50,000 sq. ft. (25 classrooms) @ today's cost \$128.00 per sq. ft - 6.5 million

CHART 1
BENTON CITY/KIONA PLANNING AREA
EXISTING CONDITIONS

CATEGORY	BENTON CITY/KIONA RURAL RESIDENTIAL AREA	BENTON CITY SCHOOL DISTRICT ¹
Population ²	2,922	6,417 ³
Single Family Residences	409	N/A
Mobile Homes	565	N/A
Commercial	3 ⁴	N/A
Industrial	1	N/A

CHART 2
BENTON CITY/KIONA PLANNING AREA
ACRES OF USE PER ALTERNATIVE

Uses	Interim Rural ⁵	85 Comp	Alt 1	Alt 2
Rural Residential	20,440.99	20,440.99	15,210.16	13,202.39
Commercial	-0-	-0-	17.41	41.21
Industrial	-0-	-0-	-0-	-0-
Public	5,252.7	5,252.7	5,042.85	5,038.39
Parks/Open Space	-0-	-0-	4,280.2	6,455.93
Trails (miles)	-0-	30 mi.	33.24 mi.	15.39
Totals*	24,695.98	25,695.98	24,550.35	24,764.49

* Within 1% accuracy due to scale.

¹ School population within the Benton City/Kiona Rural Residential Planning Area

² Population estimated at 3 persons per household

³ 2,139 dwellings within Benton City School District (G.I.S. calculations)

⁴ Includes Wineries.

⁵ Interim Zoning adopted by the BOCC

**CHART 3
BENTON CITY/KIONA PLANNING AREA
RURAL RESIDENTIAL BUILD-OUT**

Alternative	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	20,045	974	2,922	20
85 Comp. Plan	20,045	14,295 ³	42,885	1.41
Interim Rural ⁴	20,045	7,387 ⁵	21,161	2.72
Alternative 1	15,210	3,299 ⁶	9,897	4.61
Alternative 2	13,202	2,706 ⁷	8,148	4.88

¹ Population estimated @ 3 persons per household

² Acres (A) per dwelling unit (DU)

³ 11,644 A @ 1 DU per A = (11,644 DU'S) + 7,473.32 A @ 1 DU per 5 A = (1,495 DU's) + 784 @ 1 DU per 10 A = (78 DU's) + 539 A @ 1-3 DU's per A = (1,078 DU's) = 14,295 Total DU's

⁴ GMA Interim zoning adopted by the BOCC

⁵ 11,644 A @ 1 DU pr 2.5 A = (4,658 DU's) + 8,257 A @ 1 DU per 5 A = (1,651 DU's) + 539 A @ 1-3 DU's Per A = (1,078 DU's) = 7,387 Total DU's

⁶ 13,928.57 @ 1 DU per 5 A = (2,786 DU's) + 1,282 A @ 1 DU per 2.5 A = (513 DU's) = 3,200 Total DU's

⁷ 12,874 A. @ 1 DU per 5 A = (2,575 DU's) + 328 A. @ 1 DU per 2.5 A = (131 DU's) = 2,706 Total DU's

**CHART 4
BENTON CITY/KIONA PLANNING AREA
CAPITAL FACILITIES PER ALTERNATIVE**

Alternative	BENTON CITY/KIONA PLANNING AREA		BENTON CITY SCHOOL DISTRICT ¹	PUBLIC FACILITIES		
	Population Per Alt	Dwellings	Student Increase ²	Schools	Parks	Trails
Established Level of Service (LOS)				25 students per classroom (SPC)	Large Urban(LU) ³ Natural(N) ⁴	1.37 Miles per 1,000 Population ⁵
Current Conditions	2,922	974	1,639*	Elementary 26/SPC Middle 29/SPC High 20/SPC	234 (LU) ⁶ 550 (N)	-0- mi.
85 Comp. Plan	42,885	14,295	+10,257,	410 Classrooms 16.4New Schools ⁷	214 Acres (LU) 107 Acres (N)	58 mi.
Interim Rural	22,161	7,387	+4,938	198 Classrooms 8 New Schools	111 Acres (LU) 55 Acres (N)	30 mi
Alternative 1	9,897	3,299	+1,790	72 Classrooms 2.9 New School	50 Acres (LU) 25 Acres (N)	13.36mi.
Alternative 2	8,118	2,706	1,334	53 Classrooms 2.1 New Schools	41 Acres (LU) 20 Acres (N)	11.05 mi.

¹ School District population within the rural residential planning area.
² Student increase using existing .77 students per dwelling unit (based on GIS calculations 2,139 Dwellings/1,639 students).
³ Large Urban Park designation requires 5 acres per 1,000 population
⁴ Natural Park designation requires 2.5 acres per 1,000 population
⁵ 1982 Parks and Recreation Comprehensive Plan.
⁶ Horn Rapids Park
⁷ Average school size 50,000 sq. ft. (25 classrooms) @ today's cost \$128.00 per sq. ft - 6.4 million

CHART 1
PATERSON PLANNING AREA
EXISTING CONDITIONS

CATEGORY	PATERSON RURAL RESIDENTIAL AREA	PATERSON SCHOOL DISTRICT
Population ¹	108	284 ²
Single Family Residences	15	N/A
Mobile Homes	21	N/A
Commercial	2	N/A
Industrial	1	N/A

CHART 2
PATERSON PLANNING AREA
ACRES OF USE PER ALTERNATIVE

Uses	Interim Rural ³	85 Comp	Alt 1	Alt 2
Rural Residential	441.12	441.12	536.83	466.81
Commercial	25.49	25.49	8.17	11.56
Industrial	123.51	123.51	62.61	135.33
Public	3,698.22	3,698.22	3,656.04	3,656.04
Parks/Open Space	25.43	24.43	25.43	25.43
Trails (miles)	13	13 mi.	6.53 mi.	-0-
Totals*	4,313.77	4,313	4,289.08	4,295.17

¹ Population estimated at 3 persons per household

² 2,139 dwellings within Paterson School District (G.I.S. calculations)

³ Interim Zoning adopted by the BOCC

**CHART 3
PATERSON PLANNING AREA
RURAL RESIDENTIAL BUILD-OUT**

Alternative	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	441.12	36	108	12.6
85 Comp. Plan	441.12	756 ³	2,268	.59
Interim Rural ⁴	441.12	756 ⁵	2,268	.59
Alternative 1	536.83	773 ⁶	2,319	.70
Alternative 2	466.81	286 ⁷	858	1.64

¹ Population estimated @ 3 persons per household

² Acres (A) per dwelling unit (DU)

³ (289.53 A @ 1 DU Per A = 290 DU's) + (65.16 A @ 3-6 DU's Per A = 293 DU's) + (86.4 A @ 1-3 DU's Per A = 173 DU's) = 756 Total DU's

⁴ GMA Interim zoning adopted by the BOCC

⁵ (289.53 A @ 1 DU Per A = 290 DU's) + (65.16 A @ 3-6 DU's Per A = 293 DU's) + (86.4 A @ 1-3 DU's Per A = 173 DU's) = 756 Total DU's

⁶ (189.4 A @ 1 DU pr 2 A = 95 DU's) + (207.6 A @ 1 DU per A = 208 DU's) + (63.81 A @ 1-3 DU's Per A - 128 DU's) + (76.02 A @ 3-6 DU's per A - 342 DU's) = 773 Total DU's

⁷ (121.26 A @ 1 DU per 2 A = 61 DU's) + (29.68 @ 1 DU per A = 30 DU's) + (61.03 @ 1-3 DU's Per A = 122DU's) + (254.84 A @ 2-5 A (3.5 Avg.) Per DU = 73 DU's) = 286 Total DU's

**CHART 4
PATERSON PLANNING AREA
CAPITAL FACILITIES PER ALTERNATIVE**

Alternative	PATERSON PLANNING AREA		PATERSON SCHOOL DISTRICT ¹	PUBLIC FACILITIES			
	Population Per Alt	Dwellings		Student Increase ²	Schools	Parks	Trails
Established Level of Service (LOS)				25 students per classroom (SPC)	Large Urban(LU) ³ Natural(N) ⁴	1.37 Miles per 1,000 Population ⁵	
Current Conditions	108	36	29*	Elementary 18/SPC	-0-	-0-	
85 Comp. Plan	2,268	756	+273,	11 Classrooms ⁶	11.4 Acres (LU) 5.7 Acres (N)	3 mi.	
Interim Rural	2,268	756	+273	198 Classrooms 8 New Schools	11.4 Acres (LU) 5.7 Acres (N)	3 mi	
Alternative 1	2,319	773	+280	72 Classrooms 2.9 New School	11.6 Acres (LU) 5.8 Acres (N)	2.88 mi.	
Alternative 2	2,208	736	+265	53 Classrooms 2.1 New Schools	11 Acres (LU) 5.5 Acres (N)	2.97 mi.	

¹ Total Paterson School District population 284/88 DU's/73 students.

² Student increase using existing (K-5) average .40 students per dwelling unit.

³ Large Urban Park designation requires 5 acres per 1,000 population

⁴ Natural Park designation requires 2.5 acres per 1,000 population

⁵ 1982 Parks and Recreation Comprehensive Plan.

⁶ Average school size 50,000 sq. ft. (25 classrooms) @ today's cost \$128.00 per sq. ft - 6.4 million

CHART 1
PLYMOUTH PLANNING AREA
EXISTING CONDITIONS

CATEGORY	PLYMOUTH RURAL RESIDENTIAL AREA	PATERSON SCHOOL DISTRICT ¹
Population ²	219	219
Single Family Residences	22	22
Mobile Homes	51	51
Commercial	2	N/A
Industrial	2	N/A

CHART 2
PLYMOUTH PLANNING AREA
ACRES OF USE PER ALTERNATIVE

Uses	Interim Rural ³	85 Comp	Alt 1	Alt 2
Rural Residential	4,411	691.38	1,649.66	1,042.71
Commercial	47.43	47.43	297.58	156.80
Industrial	1,143.05	1,313.93	382.45	1,119.54
Ex. Ag 85		807.92		
Public	280.69	280.69	271.48	305.77
Parks/Open Space			190.98	109.98
Trails (miles)	12	12 mi.	6.11 mi.	2 mi.
Totals*	2,882.17	3,141.35	2,792.15	2,817.80

¹ School population within the Plymouth Rural Residential Planning Area

² Population estimated at 3 persons per household.

³ Interim Zoning adopted by the BOCC

**CHART 3
PLYMOUTH PLANNING AREA
RURAL RESIDENTIAL BUILD-OUT**

Alternative	Rural Residential Acres	Households	Population ¹	Average Density ²
Existing Development	1,411	73	219	19.33
85 Comp. Plan	691	3,109 ³	9,327	.23
Interim Rural ⁴	1,411	3,253 ⁵	9,759	.44
Alternative 1	1,650	2,237 ⁶	6,711	.74
Alternative 2	1,043	3,330 ⁷	9,990	.32

¹ Population estimated @ 3 persons per household

² Acres (A) per dwelling unit (DU)

³ 691 A @ 3-6 DU'S Per A = 3.109

⁴ GMA Interim zoning adopted by the BOCC

⁵ 720 A @ 1 DU Per 5 A = (144 DU's) + 691 A @ 3-6 DU Per A = (3,109 DU's) = 3,253 DU's

⁶ 402 A @ 1 DU Per 2.5 A = (161 DU's) + 727 A @ 1 DU Per 5 A = (145 DU's) + 118 A @ 1 DU per A = (118 DU's) + 403

A @ 3-6 DU's per A. = (1,813 DU's) = 2,237 Total DU's

⁷ 710 A @ 3-6 DU's per A = (3,196 DU's) + 334 A @ 1 DU per 2.5 A = (134 DU's) = 3,330 Total DU's

**CHART 4
PLYMOUTH PLANNING AREA
CAPITAL FACILITIES PER ALTERNATIVE**

Alternative	PLYMOUTH PLANNING AREA		PLYMOUTH SCHOOL DISTRICT ¹		PUBLIC FACILITIES			
	Population Per Alt	Dwellings	Student Increase ²	Schools	Parks	Trails		
Established Level of Service (LOS)				25 students per classroom (SPC) ³	Large Urban(LU) ⁴ Natural(N) ⁵	1.37 Miles per 1,000 Population ⁶		
Current Conditions	219	73	30 current	Elementary 14/SPC Middle 16/SPC	342 Acres Federal Land	-0-		
85 Comp. Plan	9,327	3,109	+1,245,	49 Classrooms 2 New Schools ⁷	47 Acres (LU) 23 Acres (N)	12 mi.		
Interim Rural	9,759	3,253	+1,304	52 Classrooms 2 New Schools	49 Acres (LU) 24 Acres (N)	13.38 mi		
Alternative 1	6,711	2,237	+887	35 Classrooms 1.4 New School	36 Acres (LU) 17 Acres (N)	9.2 mi.		
Alternative 2	9,990	3,330	+1,699	68 Classrooms 2.72 New Schools	50 Acres (LU) 25 Acres (N)	13.69 mi.		

¹ School District population (K-5) within the rural residential planning area.

² Student increase using existing .41 students per dwelling unit.

³ Using permanent classrooms only.

⁴ Large Urban Park designation requires 5 acres per 1,000 population

⁵ Natural Park designation requires 2.5 acres per 1,000 population

⁶ 1982 Parks and Recreation Comprehensive Plan.

⁷ Average school size 50,000 sq. ft (25 classrooms) @ today's cost \$128.00 per sq. ft - 6.4 million

CHART 1
FINLEY PLANNING AREA
EXISTING CONDITIONS

CATEGORY	FINLEY RURAL RESIDENTIAL AREA	FINLEY SCHOOL DISTRICT ¹	SOUTH KENNEWICK AREA
Population	6,843 ²	4,512 ³	30 ⁴
Single Family Residences	878	539	5
Mobile Homes	1,403	965	5
Commercial	22	N/A	
Industrial	7	N/A	

CHART 2
FINLEY PLANNING AREA
ACRES OF USE PER ALTERNATIVE

Uses	Interim Rural ⁵	85 Comp	Alt 1	Alt 2	Alt 3
Rural Residential	10,200	19,424	6,730	6,646	4,379
Commercial	200	245	74	25	355
Industrial	1,208	1,208	652	553	1,389
Adv. Committee Agriculture	0 ⁶	0 ⁶	3,857	3,554	4,820
Public	1,368	1,368	957	2,203	652
Open Space	0	0	684	161	1,194
Trails (miles)	15	19	6.	24	17
Totals*	12,976	22,245	12,954	13,142	12,789

¹ 65% of Finley Planning Area population reside in the Finley School District

² Based on 2,281 households @ 3 persons per household.

³ Based on 1,504 households @ 3 persons per household.

⁴ Based on 10 households @ 3 persons per household

⁵ GMA Interim Zoning adopted by the Board of County Commissioners.

⁶ No Advisory Committee Agriculture designation.

**CHART 3
FINLEY PLANNING AREA
RURAL RESIDENTIAL BUILD-OUT**

Alternative	Acres	Households	Population¹	Density²
Existing Development	10,200	2,281	6,843	4.48
85 Comp. Plan	19,424	16,321³	48,963	1.19
Interim Rural⁴	10,200	4,329⁵	12,987	2.36
Alternative 1	10,587	2,912⁶	8,736	3.64
Alternative 2	10,200	3,369⁷	10,107	3.03
Alternative 3	9,199	2,716⁸	8,148	3.39

¹ Population estimated @ 3 persons per household

² Acres (A) per dwelling unit (DU)

³ 1,920 A @ 3 dwelling units (DU's) per A = 5,818 households (HH's) + 8,752 A @ 1 DU per A = 8,752 HH's + 8,752 @ 1 DU per 5 A = 1,751.

⁴ GMA Interim zoning adopted by the BOCC

⁵ 6,800 A @ 1 DU per 2.5 A = 2,720 HH's + 320 A @ 3 DU per 1 A = 969 HH's + 3,200 A @ 1 DU per 5 A = 640 HH's

⁶ 6,613 A @ 1 DU per 5 A = 1,322 HH's + 3,974 A @ 1 DU per 2.5 A = 1,590 HH's

⁷ 6,646 A @ 2.5 DU's per 2.5 A = 2,658 HH's + 3,554 A @ 5 DU's per A = 711 HH's

⁸ 4,820 acres @ 1 DU per 5 A = 964 HH's + 4,379 A @ 2.5 DU's per A = 1,752 HH's

**CHART 3
SOUTH KENNEWICK PLANNING AREA
RURAL RESIDENTIAL BUILD-OUT**

Alternative	Acres	Households	Population ¹	Density ²
Existing Development	948	10	30	94.8
85 Comp. Plan	3144	11,809 ³	35,472	0.27
Interim Rural ⁴	948	380 ⁵	1,140	2.5
Alternative 1	948	291 ⁶	873	3.26
Alternative 2	948	380 ⁷	1,140	2.5
Alternative 3	948	190 ⁸	570	5

¹ Population estimated @ 3 persons per household

² Acres (A) per dwelling unit (DU)

³ 2,344 A @ 3 DU's per A = 7,104 Households(HH's) + 800 acres @ 6 DU's per acres = 4,706 HH's.

⁴ GMA Interim zoning adopted by the BOCC

⁵ 948 acres @ 1 DU per 2.5 A

⁶ 508 A @ 1 DU per 2.5 A = 204 HH's + 440 A @ 1 DU per 5 A = 4,706 HH's

⁷ 948 A @ 2.5 DU's per A = 380 HH's

⁸ 948 A @ 1 DU per 5 A = 190 HH's

**CHART 4
FINLEY PLANNING AREA
CAPITAL FACILITIES PER ALTERNATIVE**

Alternative	FINLEY PLANNING AREA		PUBLIC FACILITIES			
	Population Per Alt	FINLEY SCHOOL DISTRICT Population Increase	Schools	Parks	Trails	
Established Level of Service (LOS)			22 students per classroom (SPC)	Large Urban(LU) ¹ Natural(N) ²	1.37 Miles per 1,000 Population	
Current Conditions	6,843 Current	4,512 current 1,128 Students	Elementary 23/SPC Middle ³ 40/SPC High 22/SPC	+100 Acres LU +324 acres N	-0-	
85 Comp. Plan	48,963	+6,829 Students	49 Classrooms 2 New Schools ⁴	+110.8 Acres (LU) +219 Acres (N)	19/66 ⁵ mi.	
Interim Rural	12,987	+983 Students	52 Classrooms 2 New Schools	+69.1 Acres (LU) +308.55 Acres (N)	17.5 mi	
Alternative 1	8,736	+292 Students	35 Classrooms 1.4 New School	+99.08 Acres (LU) +319 Acres (N)	12 mi.	
Alternative 2	10-107	+515 Students	68 Classrooms 2.72 New Schools	+183.5 Acres (LU) +315 Acres (N)	14 mi.	
Alternative 3	8,148	+196 Students		+101.44 Acres (LU) + 320.65 Acres (N)	11 mi.	

¹ Large Urban Park designation requires 5 acres per 1,000 population

² Natural Park designation requires 2.5 acres per 1,000 population

³ Based on 8 percent classrooms.

⁴ Average school size 50,000 sq. ft (25 classrooms) @ today's cost \$128.00 per sq. ft - 6.4 million

⁵ 19 designated in 85 Comp Plan/66 mi. to meet per capita requirement.

RESOLUTION

BEFORE THE BOARD OF COMMISSIONERS OF BENTON COUNTY, WASHINGTON

IN THE MATTER OF ADOPTING THE BENTON COUNTY COMPREHENSIVE PLAN/ENVIRONMENTAL IMPACT STATEMENT ADDENDUM (THE PLAN) AND REPEALING THE 1985 BENTON COUNTY COMPREHENSIVE LAND USE PLAN.

WHEREAS, RCW Chapter 36.70A. et seq, the Washington State Growth Management Act (GMA) requires counties and cities to adopt comprehensive plans and implement them through the adoption of development regulations; and,

WHEREAS, Benton County with concurrence of the five incorporated cities opted to plan in conformance with the GMA, on October 20, 1990; and,

WHEREAS, Benton County has taken deliberate steps to meet the requirements of the GMA at a pace that allowed for county-wide visioning and citizen driven development of a comprehensive plan consistent with that vision; and,

WHEREAS, the Benton County Board of Commissioners initiated a multi-faceted, broad based citizen involvement program to develop the Plan as an integrated comprehensive plan and environmental impact statement addendum in compliance with the substantive and procedural requirements of the Growth Management Act and the State Environmental Policy Act; and,

WHEREAS, several rural planning area committees worked extensively on the Plan to deliver a recommended draft for consideration by the Benton County Planning Commission that would comply with state statutes and reflect local preferences; and,

WHEREAS, the Planning Commission, in fulfillment of its responsibilities under RCW 36.70, held 12 public workshops and five widely publicized public hearings to take testimony on the draft Plan, and three public workshop sessions to consider the written and oral testimony received and to deliberate and make changes to the Plan in response to public and agency comments; and,

WHEREAS, the Plan development process has concluded with five public hearings, three deliberation workshops, and two additional public hearings by the Board of County Commissioners on the Plan; and,

WHEREAS, comprehensive plans are intended to direct and prepare for future growth and development; and,

WHEREAS, the Board of Commissioners has concluded that the adoption and implementation of the Plan and its goals, objectives, policies, mapping criteria and land use maps are essential to direct the future growth and development of Benton County, NOW THEREFORE,

BE IT RESOLVED that the documents entitled Benton County Comprehensive Plan/Environmental Impact Statement Addendum dated December 1997; Errata Supplement dated June 2, 1998; and Errata Supplement Addendum dated June 15, 1998, are attached hereto as Exhibits A, B, and C and are hereby adopted as required by RCW 36.70A as the official comprehensive plan for unincorporated Benton County.

BE IT FURTHER RESOLVED that the Benton County Planning Department is directed to prepare a final unified text of the Plan adopted by this resolution to incorporate the errata supplements into the December 1997 draft plan and provide final editing of the Plan to update the summary of chronology of public participation section and edit for format, table headings, punctuation, capitalizations, grammar, etc.

BE IT FURTHER RESOLVED that the findings attached hereto as Exhibit D, in addition to the findings, evaluations and conclusions found within the Plan, are considered to be controlling and are the basis for the adoption of the Plan by the Board of Benton County Commissioners. The findings are based on the record of proceedings of the citizens' committees, Planning Commission and Board.

BE IT FURTHER RESOLVED that requests for amendments to the Plan may be submitted at any time and will be docketed to be reviewed and acted upon collectively once per year as provided by RCW 36.70A.130 and in Chapter One page 1-9 and Chapter One Appendix, page 3 - Items 1-2 of the Plan. Proposed amendments shall be considered concurrently to ascertain the cumulative effect of the various proposals. Initial adoption of neighborhood or subarea plans, watershed plans and the adoption or amendment of the shoreline master program are not subject to the docketing requirement and may be considered independently of the annual amendments process. Amendments to the Plan may also be considered whenever an emergency exists, or to resolve an appeal of the Plan filed with the Eastern Washington Growth Management Hearings Board, following appropriate public participation.

BE IT FURTHER RESOLVED that proposed amendments to the Plan shall be submitted to the Benton County Planning Department, along with the required application fee for review by the Benton County Planning Commission. The Commission shall hold at least one public hearing to receive public testimony on proposed amendments, and shall forward its recommendation regarding proposed amendments to the Board of Benton County Commissioners. The Board may amend the Plan or reject any proposed amendments. A majority vote of the Board shall constitute final action on the proposed amendment.

BE IT FURTHER RESOLVED that the 1985 Benton County Comprehensive Land Use Plan is hereby repealed.

BE IT FURTHER RESOLVED that the Plan shall be effective upon the date of adoption and signing of this resolution.

Dated this 22nd day of June, 1998.

Leo M. Bounon
Chairman of the Board

Charles R. Olson
Member

Max E. Benitz
Member

Constituting the Board of County
Commissioners of Benton County
Washington.

Terry A. Marden/djh

Attest: *Jeri Lynn Cabbage*
Clerk of the Board

BENTON COUNTY RURAL PLANNING ADVISORY COMMITTEE MEMBERS

The Benton County Planning Staff would like to extend their thanks to the following Benton County residents who served on the Rural Planning Advisory Committees for their respective areas.

Prosser/Whitstran

Charles Dawsey
Eddie Petross
Shelly Pontin
Steve Hiatt
Harold & Cathie Hunt
Karen Anderson
Dan Donaldson
Mae Rediske
Billy & Phyllis Phelps
Bev Stone
Amy Hunt
Gladys Cain
Kay Simon
Bruce Etzel
Naomi Hinton
Robert Mc Laughlin
Lee Yager
Taylor Morris
Jeff Morris
P.J. & Sharon Philip
Lyle Ratcliffe
Marvin Durfey

Finley/Kennewick

Robin Emmingham
Gene & Theresa Mercer
John C. Conner
Gregg J. Wishkoski
Sidney Showalter
Rene= Norman
Bob Showalter
Judy Chapman
Jim & Dorl Richins
Nora Pinola
Rick & Pat Laws
Perry Dodd
Vernon Day

Sandi Strawn
Don Wiens
Duane Hamilton
A. Jensen
C.D. Jones
Sheila Thackham
Pam Wright
Mike & Von Corcoran
Dave Donaldson
Jay Mills
Ray & Leta Conway
Clyde & Beverly Cochlin
Sally Sanders
Steve Hunter
Nelse & Norma
Petermann
George & Phyllis
Garrison
Linda Carpenter
Don Fekete
Tom St. Hilaire
John Wilde
Joe Boyce
Tom Raeder
John St. Hilaire
Bob Gear
W. Darrell Boone
Perry Dodd
Eldon & Lorna Runge
Vicki Clark
Waddus B. Tate
Greg Porter
Max & Lou Tucker
Tom Vehec
Velma Williams
Don Newby
C.A. Sperline
Louise Bush

Ken Terrill
Carol Stafford
Margaret Germaine
Katerina Humbert
L. Henderson
Janette Branson
Mel Faller
Gregg Melde
H. Woodcock
Tim & Jamie Goforth
Walt Weaver
K.A. Schmidt
Ray & Susan Giddings
Jacci Herron
Jerry Livingston
Wayne Freeman
Bruce Mackebon
Zelma Swanson
Marv Kinney
Tonla Wayman
Dean Jones

Richland/West Richland

John & Doloris Nelson
Mac & Sally McLanahan
R.B. Mc Lees
Bill & Lisa Herrington
Carol Sealock
Mark & Pat Jaeger
William B. Stinson
Mike Lilga
Steve LePage
Allen & Vicki Goatcher
Susan Swanson
Courtney & Rusty Hann
Drew & Kathy Kachele
Rod & Jean Ostboe

Nancy Girvin
Steve Metcalf
Ron Hadley
Don Mannion
Glen Dunham
Pat Fheger
Doris Scott
Kathy Latham
Dennis Haffner
Art & Merle Haeberlin
Peyton & Pat Rackley
David Thonn
Curt Gjerdevig
Mildred Stice
James Hodgson
John & Kathleen
Moroney
Lee Wheeler
Tammy Slack
Donald Farquhar
Paul & Linda Ehrlich
Chuck & Nancy
Kovalchick
Bruce & Nancy Ogden
John & Judith Mowery
Fred & Evelyn Michel
M.J. & Kayrn Wiemers
Marty Peterson
Marian Hart
Joan Montelth
Al Robinson
Joe & Barbara Judy

Paterson/Plymouth

Larry & Cheryl Nehls
Dan Dufault
Art Berg
Dean & Jackie
Engbretson
Craig & Theresa
Engbretson
Ron Engbretson
Pat Tucker
Doug Watts

John & Vanessa Blasdel
Dale Cherry Jr.
Steven Townsend
DeVere & Nola Clarneau
Hank & Kathleen Wolfe
Delbert & Linda Pilot
Nora Robinette
Nancy Strom
Jesse Greenough Jr.
Bennie David
Frank & Beth Allen
Lois Finn
Steve & Judy Crow
Rachel Ireland
Bob Studdard
David Robertson
Bill & Carol Harris
Bruce Etzell

**Benton City/Kiona
Planning Area**

Sam & Margaret Meacham
Lois & Pierre Saget
William & Terry Mast
Mark Kastl
Ben & Nimo Rasch
Joe & JoAnn Kraus
Lisa Fitzner
Lorne Smith
John Daniel
Steve Dawson
Bob & Susan Rasmussen
Bob Maceyak
Don Perry
John Platt
Janie Levine
Molly Hart

