



## Jeff Walker, PWS

*Botanist and Wetland Biologist*

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### Overview

Mr. Walker has over eleven years of experience as a botanist and over seven years of experience as a wetland biologist. He has directed vascular and nonvascular plant surveys, performed monitoring of rare plant populations, and conducted noxious weed surveys. He has conducted wetland delineations and reconnaissance investigations throughout the Pacific Northwest and successfully acquired wetland and environmental permits and approvals for numerous large and small projects. Mr. Walker has designed, inspected, and monitored several wetland mitigation projects. He has experience writing NEPA and SEPA EIS documents, as well as working with Best Available Science and Critical Areas updates. He has also conducted ESA consultation for large projects with regards to federal and state listed Threatened and Endangered species. Mr. Walker develops wetland reports, biological assessments, impact assessments, compensatory wetland mitigation plans, monitoring reports, conservation assessments, and vegetation restoration plans.

### Areas of Expertise

Botany  
Wetland Biology  
Threatened & Endangered Species  
Project Management  
NEPA, SEPA, and ESA  
Compliance

### Years of Experience

With URS: 7 Years  
With Other Firms: 4 Years

### Education

BS, 1995, Botany and  
Environmental Studies, University  
of Washington  
Wetland Science and Management  
Certification, 2000, University of  
Washington

### Registration/Certification

Professional Wetland Scientist,  
2005

### Project Specific Experience

**I-90 Snoqualmie Pass East, Washington Department of Transportation, Kittitas County, Washington.** Task manager for wetland work associated with the I-90 road improvements between Hyak and Easton. The road improvements would ease traffic congestion, replace deteriorating pavement, improve safety by realigning the road away from sharp curves and unstable slopes, and connect habitat via wildlife bridges. The project area includes the shores of Keechelus Lake and numerous tributaries to the Yakima River. Work on this project includes preparing a wetland report, mitigation site assessment, and mitigation plan.

**Elwha River Restoration, Bureau of Reclamation, Clallam County, Washington.** URS provided wetland services for the Elwha River Restoration Project to aid the Bureau of Reclamation in obtaining wetland permits for the removal of the Elwha and Glines Canyon dams on the Elwha River. Task manager for delineation of wetlands and other jurisdictional waters in over 20 construction project areas associated with the dam removal. These projects are located throughout the lower Elwha watershed and include areas within the Lower Elwha Klallam Reservation and Olympic National Park. As part of this project we identified and assessed wetlands in a variety of hydrogeomorphic classes, including estuarine, riverine, lake-fringe, depression, and slope wetlands. The work was performed to meet permitting requirements of the U.S. Army Corps, Washington Department of Ecology, and Clallam County. Our tasks also include assessing the functions of the wetlands within the Elwha River floodplain that will be affected by the sediments released after dam removal.



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**Peach Arch Port of Entry Redevelopment, US General Services Administration, Blaine, Washington.** Project manager for wetland delineation and wetland permitting assistance redevelopment of the Peach Arch Port of Entry within the City of Blaine. The new redevelopment project was designed to solve inefficiencies of the current layout as well as minimize potential impacts on Peace Arch State Park. Completed a wetland delineation, wetland report, and JARPA. Challenges included conducting field work during an extremely winter and examining jurisdictional issues surrounding the federal ownership of the land.

**DD6 Emergency Dike Repairs, City of Everett, Snohomish County, Washington.** In December 2006 the DD6 dike was damaged in many areas. Emergency repairs to Ebey Slough dike were completed at the end of February 2007. Completed an impact assessment for the emergency repair work, estimating the amount of additional fill placed below the OHWM of Ebey Slough on one side of the dike and the wetland on the other side. Also assisted in preparing the JARPA for the emergency repairs and proposed repairs to the tide gates, which were also damaged in the floods.

**5 Line Pipeline Protection, City of Everett, Snohomish County, Washington.** Currently assisting the City of Everett in identifying practicable design alternatives for protection the 5 Line water pipeline. Alternatives include different dike footprints and the possibility of a large area of wetland restoration and enhancement in the Snohomish estuary.

**Heavy Mineral Sands Project, Oregon Resources Corporation, Coos Bay, Oregon.** Conducted wetland delineations and OHWM identification in several areas proposed for mining heavy mineral from sand deposits. Work included navigation in second-growth forests, clearcuts, and dense gorse (non-native shrub) stands.

**Semiahmoo Substation, Puget Sound Energy, Whatcom County, Washington.** Project manager for wetland reconnaissance and Phase I ESA site investigation on two potential properties for a substation. Led the wetland reconnaissance efforts and identified multiple forested and herbaceous wetland communities on each site. Task included report discussing the development constraints from wetlands and buffers. The report was used to determine which site would be easier to permit.

**Timberline Ridge Tree Investigation, Sammamish, Washington.** Project manager and technical lead for investigation of dying trees in Timberline Ridge housing development. Conducted a site visit to document the existing conditions on two parcels that contained an increasing amount of water and dying trees. Completed a technical memorandum that described the findings from the site visit and recommended possible next steps for resolving the problem.

**Minago Nickel Mine, Victory Nickel Inc., Manitoba, Canada.** Task lead for vegetation surveys and analysis for proposed nickel mine located



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near Grand Rapids, Manitoba. Also responsible for vegetation section of the Environmental Impact Assessment.

**Beebe Springs Natural Area Development, Washington Department of Fish and Wildlife, Chelan County, Washington.** Assisted the Washington Department of Fish and Wildlife in design of 43.13 acre public park. The site is located just upstream of the Highway 97 Beebe Bridge, adjacent to the Columbia River. Completed a vegetation community assessment and wetland delineation of the site. Completed a wetland report and contributed to design memorandum and JARPA. Also investigated the feasibility of funding future phases of the project by establishing a mitigation bank, comprehensive mitigation area, or fee-in-lieu program.

**Maralco Redevelopment Project, Brown Dog LLC, Kent, Washington.** Completed JARPA permit package for redevelopment of an urban property with aluminum dross (industrial waste) stockpile. Washington State Department of Ecology started clean-up activities on the site, but ran out of money before finishing the project. Part of the clean-up involved altering the hydrology of the site. Completed wetland delineation and mitigation plan for the project. Wetland delineation included researching jurisdictional issues in regards to man-made ditches and alterations to the hydrology.

**Anacortes Coker Project, Tesoro Refining and Marketing Company, Anacortes, Washington.** Completed wetland delineations at four locations for a new coker facility and associated staging and flare areas on the Tesoro Anacortes Refinery campus. Assisted refinery personnel in avoiding the need for a wetland permit by avoiding impacts to wetlands, buffers, and jurisdictional "Talent" ditches.

**West Eugene Parkway, Oregon Department of Transportation, Eugene, Oregon.** Task manager and principal investigator for special status plant and noxious weed surveys along proposed transportation alignment alternatives. Project vicinity contains rare wet and upland prairie habitats and several known sites of federal and state listed plant species. Work included designing survey protocol, directing survey crew, technical identification of numerous species, and GPS mapping of target species. Management of this task also included coordinating with various federal, state, and local agencies including the Bureau of Land Management and City of Eugene. Prepared the Rare Plant and Noxious Weed Technical Memorandum. Also assisted in preparation of the Biological Assessment and conducting ESA consultation for both state and federal listed plant species.

**Wemme to Lolo Pass Road Improvements, Oregon Department of Transportation, Clackamas County, Oregon.** Assisted in botanical survey for road widening project. Searched project area for both special status plant species and noxious weeds. Found and marked populations of spotted knapweed (*Centaurea maculosa*).



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**Muckleshoot K-12 School Project, Muckleshoot Reservation, King County, Washington.** Conducted wetland delineation for tribal school project. Wrote wetland delineation report to be included in the Environmental Assessment for the project.

**Buckhorn Mine EIS, Washington Department of Ecology, Okanogan County, Washington.** Prepared wetland and vegetation EIS technical sections for proposed mine. Vegetation technical report included discussions of rare plants, noxious weeds, forest resources, and plants of cultural importance. Responded to comments on the vegetation EIS section. Also performed fieldwork and research to identify impacts from the project to wetlands.

**Crescent Bay Sewage Lagoon, City of Oak Harbor, Island County, Washington.** The Navy proposed a restoration of the Crescent Bay marsh that surrounds the Oak Harbor waste water treatment plant by opening up the main tidal channel to permit greater tidal mixing and fluctuation. At the City's request, conducted a vegetation evaluation to investigate how the plant community will change in Crescent Bay marsh after restoration and if there will be an extensive mudflat.

**Sediment Removal in Powder Mill Creek Corrective Action Program, Boeing Commercial Airplanes, Everett, Washington.** Designed and oversaw implementation of planting plan for remediation of contaminated stream reach. Design included plantings in restored stream channel, steep slopes, and existing riprap. Wrote planting, seeding, and erosion control specifications. Also assisted in electrofishing stream reach, stream habitat characterization, and marking Ordinary High Water Mark in the field.

**Perry Avenue Residential Development, Kitsap County, Washington.** Conducted a wetland delineation on a proposed development property north of Bremerton. Electrofished stream to determine fish presence. Wrote critical areas report that addressed site constraints on the property and mitigation plan design to compensate for impacts to wetland and stream buffers.

**Pacific Mountain Energy Center, Kalama, Washington.** Task manager for biological resources portions of EFSEC application. Identified and delineated wetlands along proposed railroad spur and natural gas pipeline for a proposed power plant. Conducted vegetation community analysis along both routes as well as the plant site. Completed wetland report and EFSEC application sections.

**Bradwood Landing Pipeline, Clatsop and Columbia Counties, Oregon and Cowlitz County, Washington.** Task manager for special plant survey for natural gas pipeline. Documented locations for two rare plant species: western wahoo (*Enonymus occidentalis*) and loose-flowered



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bluegrass (*Poa laxiflora*). Wrote botanical report for project and made mitigation recommendations. Also assisted with wetland delineation

**Stewart Residential Development, Alder, Pierce County, Washington.** Completed a wetland delineation of a proposed drug lab cleanup and residential redevelopment in Pierce County. The property also contains two streams, which are considered fish and wildlife habitat conservation areas in Pierce County. Gave guidance to client on buffer requirements for both wetlands and other critical areas.

**Home Depot Development, Port Orchard, Kitsap County, Washington.** Project manager for wetland permitting activities for proposed Home Depot commercial development. Prepared JARPA application package including coordinating off-site mitigation.

**Potential Refinery Expansion, ConocoPhillips Ferndale Refinery, Whatcom County, Washington.** Completed wetland delineation and reconnaissance investigations on several parcel on the ConocoPhillips Ferndale Refinery campus. The parcels are areas of possible future development. The field investigation included areas with forested, scrub-shrub, and emergent wetlands as well as fish and wildlife conservation areas.

**KinderMorgan Ferndale Facility, Whatcom County, Washington.** Conducted a wetland investigation for a proposed expansion of a natural gas pipeline facility. Completed SEPA checklist sections regarding vegetation, wildlife, and critical areas.

**Cherry Point Cogeneration Project Cultural Plant Survey, BP Cherry Point Refinery, Whatcom County, Washington.** Conducted cultural plant survey for cogeneration facility impact site and mitigation areas. Survey consisted of traversing the project area with elder of the Lummi Nation to identify plants with traditional medicinal, utility, and food value. In collaboration with the Tribe, wrote report documenting findings.

**Cowlitz Casino Project, Clark County, Washington.** Provided expert review and due diligence assistance for a tribal casino project. Reviewed biological resource sections of the DEIS for deficiencies. Also investigated potential alternative sites not included in the DEIS for wetland and habitat constraints. Found northernmost occurrence of a state threatened plant, coyote thistle (*Eryngium petiolatum*), on one of the potential alternative sites.

**Tongue Point Project, Clatsop County, Oregon.** Assisted in technical memorandum and revised specifications to remedy initial restoration effort.

**Refinery Lab Building, ConocoPhillips Ferndale Refinery, Whatcom County, Washington.** Completed a wetland determination of wetland adjacent to a site proposed for construction of a refinery lab.



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Flagged wetland boundary in the field and wrote letter summarizing findings for submittal to Whatcom County.

**North Bend Park and Ride, North Bend, Washington.** Conducted a wetland delineation and “Talent” ditch survey for a proposed park and ride lot in the City of North Bend. Completed a critical areas study covering wetlands, floodplain, stream, and fish and wildlife conservation areas.

**Sumner Power Plant, NESCO, Sumner, Washington.** Conducted site visit on parcel proposed for development of a power plant. Analyzed potential wetland and wildlife issues. Researched city code for habitat management plan requirements. Completed SEPA Checklist and Exhibit IV document sections.

**Residential Development, Seabeck, Kitsap County, Washington.** Conducted a wetland determination for a residential development in Kitsap County. Per County’s request, the wetland boundary was flagged and a letter report was prepared rating the wetland and documenting the field conditions.

**Spanaway Home Depot, Pierce County, Washington.** Conducted site visit to assess potential Oregon white oak woodland critical area. This work included measuring the dbh of large oak trees and estimating the size of the oak stand. Made recommendations to client regarding the code requirements and site development constraints.

**ConocoPhillips Refinery Development Site #3, Whatcom County, Washington.** Conducted a wetland delineation on a potential development site on the ConocoPhillips Ferndale Refinery campus. Researched “Talent” ditch issues associated with the site. Discussed potential mitigation opportunities. Completed wetland delineation report.

**Wetland Evaluation, AMB, SeaTac, Washington.** Reviewed two conflicting wetland reports for site along a planned WSDOT transportation corridor. Conducted site visit and made recommendations to client regarding the dispute.

**Upper Garden Gulch Road Repair Project Biological Assessment, Federal Emergency Management Agency, Nez Perce County, Idaho.** Contributed to Biological Assessment and analyzed impacts from project to Spalding’s catchfly (*Silene spaldingii*) for a road rehabilitation project.

**Old Stilly Flood Drainage Gate Biological Assessment, Federal Emergency Management Agency, Snohomish County, Washington.** Assisted preparing a Biological Assessment for pre-disaster mitigation project. The Old Stilly Flood Drainage Gate would correct the current drainage problem which results in the detention of millions of cubic feet



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of floodwater trapped between the hillside and the river levees, with no significant exit.

### **Clark County Flood Protection Wall Biological Assessment, Federal Emergency Management Agency, Clark County, Washington.**

Assisted preparing a Biological Assessment for pre-disaster mitigation project. The 36<sup>th</sup> Avenue Sanitary Sewer Pump Station Flood Protection Wall would involve building a flood protection wall to protect critical sanitary sewer service and prevent raw sewage overflows into Salmon Creek. If the pumps station flooded, raw sewage could back up in the line and potentially 13.4 gallons per day of raw sewage could overflow into Salmon Creek and the adjacent wetlands.

**Proposed Industrial Facility, Confidential Client, Ferndale, Washington.** Identified critical areas that constrain the siting of an industrial facility. Conducted 700-acre wetland reconnaissance to verify an out-of-date wetland delineation. Prepared a Wetland Reconnaissance Report and addressed opportunities and constraints of multiple suggested location alternatives.

**Electrical Substation, BP Cherry Point Refinery, Whatcom County, Washington.** Conducted wetland delineation for proposed electrical substation on the BP Cherry Point Refinery campus. Work also included characterizing soils for the geotechnical investigation.

**Snohomish County Critical Areas Regulations Update EIS, Snohomish County, Washington.** Assisted in writing biological sections of EIS to update critical areas regulations. Also provided Best Available Science (BAS) expertise and helped develop the No Action and Action alternatives for the EIS. The regulations update will include innovative approaches to critical areas regulation in the state.

**Ordot Dump Closure, Ordot-Chalan Pago Municipality, Guam.** Researched and recommended plants adequate for design of landfill cap. Determined if the species had potential to negatively impact environment. The plant species recommendations included sterile vetiver grass (*Vetiveria zizanioides*) for the benches and sponge luffa (*Luffa cylindrica*) for the slopes.

**Refinery Expansion Wetland Reconnaissance, Tesoro Refining and Marketing Company, Anacortes, Washington.** Conducted wetland reconnaissance on selected sites at the Tesoro Anacortes Refinery campus. Identified potential wetland concerns for future facility expansion projects.

**City of Everett Water Transmission Pipeline River and Slough Crossings Emergency Repair Project, Snohomish County, Washington.** Conducted delineation of tidally-influenced freshwater wetlands adjacent to the Snohomish River and Ebey Slough as part of an emergency water pipeline repair project. Aided the City of Everett in



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efforts to acquire after-the-fact wetland permit for the emergency repair project.

**Best Available Science Review, Lake Stevens, Snohomish County, Washington.** Conducted a best available science review for the City of Lake Stevens. Researched the latest technical documents on wetland ratings, buffers, and mitigation and applied that information to make recommendations for modifications to the City's critical areas ordinance. Project also included characterizing the wetlands within the entire jurisdiction.

**Juneau Access Improvements Project, Alaska Department of Transportation, Alaska.** Task leader and principal investigator for special status plant surveys along proposed transportation corridor through the Tongass National Forest. Survey sites were remote and required travel via helicopter and navigation with Global Positioning System (GPS). Completed a Biological Evaluation for Forest Service Sensitive Species with potential to occur along the alternative alignments. Also produced Vegetation Technical Memorandum detailing the methodology and results of the botanical survey including discussion of noxious weeds and other special status plants.

**West Seattle Residential Development, Seattle, Washington.** Conducted wetland delineation and prepared wetland report for proposed short plat. The wetland on the subject property is urban wetland that contains historical fill material. Successfully assisted landowner in City of Seattle critical areas review of the property. Currently preparing a wetland buffer planting plan for the project.

**Gas Pipeline Emergency Repairs, BP Cherry Point Refinery, Whatcom County, Washington.** Assisted in acquiring an after-the-fact permit for emergency gas pipeline repairs and soil remediation. Assessed damage to wetland areas adjacent to the pipeline leak and contacted agencies regarding permitting the clean-up activities.

**Northern Grass-of-Parnassus Conservation Assessment, Olympic National Forest, Mason, Jefferson, and Grays Harbor Counties, Washington.** Prepared conservation assessment for a rare plant species. The conservation assessment included discussion of the species' taxonomy, life history, population biology, and distribution. Project also included monitoring several known sites of the species. During field monitoring, several previously unknown sites of northern grass-of-Parnassus were located. The conservation assessment was prepared in order for the Olympic National Forest to write management recommendations for the species.

**Brown Road Materials Storage Area, BP Cherry Point Refinery, Whatcom County, Washington.** Successfully permitted 20-acre laydown area for refinery maintenance and construction. Conducted wetland delineation on laydown area and 94-acre mitigation site, one of the largest



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in Washington State. Prepared documents for permitting, including wetland delineation report, compensatory wetland mitigation plan, JARPA application, Alternatives Analysis, SEPA checklist, Whatcom County Grading permit application, Construction Stormwater General Permit application, and CZMP Consistency.

**Moses Lake Residential Development, Inland Construction Company, Moses Lake, Washington.** Conducted wetland delineation on parcel proposed for construction of apartment building complex. The parcel is situated on the Gloyd seeps and adjacent to an arm of Moses Lake and a WSDOT mitigation bank. The project required additional agency research to determine hydrologic regime. Coordinated with federal and state agencies to successfully permit the project.

**Kingswood Center Proposed Commercial Development, Tumwater, Washington.** Conducted wetland delineation on property proposed for development of commercial retail facility. Investigated potential mitigation sites for anticipated wetland impacts and discussed potential permit requirements.

**Picnic Point Wastewater Treatment Facility, Alderwood Water and Wastewater District, Snohomish County, Washington.** Identified and delineated riparian wetlands adjacent to Picnic Creek. Determined buffers and building setbacks for proposed wastewater facility expansion. Completed wetland report and critical areas study. Determined the Ordinary High Water Mark of Picnic Creek and resulting Native Growth Protection Area boundary.

**Wild Horse Wind Project, Puget Sound Energy, Kittitas County, Washington.** Provided expert review and due diligence assistance for a wind power project. Reviewed rare plant and habitats technical report and vegetation and wetlands sections of the DEIS and EFSEC application for deficiencies.

**Yak Ski Acres Verizon Wireless Facility, Kittitas County, Washington.** Conducted a site reconnaissance to identify critical areas along proposed project access route which crossed the Mount Baker-Snoqualmie National Forest. Wrote report summarizing existing conditions and included recommendations to minimize impacts of construction work. Conducted mid-project and final inspection of access route and made recommendations to rectify construction impacts.

**Blasser Property Stream Reach Study, Bellevue, Washington.** Conducted stream study of unnamed drainage in Bellevue. The study includes discussion of the riparian corridor, analysis of four buffer alternatives and potential development scenarios including a variance and conservation easement.

**Kopiah Excess Spoil Area, TransAlta Centralia Mining LLC, Lewis County, Washington.** Contributed to a conceptual mitigation plan for a



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coal mine project requiring 11 acres of wetland fill. Conceptual mitigation included rerouting a channelized stream back to its historical channel. Conducted delineation of the proposed mitigation area, which is located in a floodplain that has undergone hydrologic modifications. Assembled JARPA materials for submittal to U.S. Army Corps, Washington Department of Ecology, Environmental Protection Agency, and Washington Department of Fish and Wildlife.

**Group Health Cooperative Property, Trammell Crow Company, Everett, Washington.** Conducted verification of 13-year-old wetland delineation which led to a re-delineation of the site. Determined category and buffer of forested wetland and made recommendations regarding development constraints.

**Abbey View Wetland Reconnaissance, Evergreen-Washelli, Brier, Washington.** Conducted a wetland reconnaissance on proposed road project and wrote a letter report to fulfill City of Brier's critical areas ordinance requirements.

**Elhard v Lloyd Proposed Road Easement Delineation, Corr Cronin, King County, Washington.** Conducted wetland delineation on proposed road easement alternatives in rural King County. Contributed technical expertise to legal counsel.

**Client Confidential, Whatcom County, Washington.** Conducted initial site investigation for parcel near shoreline in Whatcom County. Work included a wetland reconnaissance and literature review of previous work done on site. Identified potential site constraints and made recommendations of further actions.

**Condit Dam Removal Project, Skamania and Klickitat Counties, Washington.** Reviewed supplemental NEPA EIS for SEPA adequacy. Supplemental EIS included discussions of dam removal and associated impacts. Prepared scoping documents and outline for Supplemental Draft SEIS to address SEPA issues.

**Benthic Invertebrate Monitoring, Muckleshoot Reservation, Washington.** Collected benthic invertebrate samples from Pussyfoot Creek on Muckleshoot Reservation in accordance with the Washington Department of Ecology's Benthic Macroinvertebrate Protocol. Work also included recording baseline habitat and stream channel morphology data. Monitoring was performed to fulfill requirements in USFWS and NOAA Fisheries Biological Opinion for the White River Amphitheatre.

**Bellingham Airport Master Plan, Bellingham, Washington.** Completed environmental portions of NEPA Checklist and associated environmental report for multiple airport expansion projects.

**Maple Leaf School Site, Seattle Public Schools, Seattle, Washington.** Conducted a wetland investigation for a Seattle Public School property.



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Work also included researching heritage tree issues and contacting Seattle Department of Transportation arborist to discuss tree removal permits.

**Darrington Cogeneration Facility, Darrington, Snohomish County, Washington.** Prepared the biological resources portions of the Expanded SEPA checklist for a new 20 MW cogeneration facility that would convert waste wood residue to steam and electricity. Analyzed potential impacts from the project to threatened and endangered species. Also analyzed impacts to the adjacent Sauk River, which is classified as a Wild and Scenic River.

**Eastside Corridor Project EIS, Washington Department of Transportation, East Wenatchee, Washington.** Prepared biological resources technical section for proposed highway modifications to SR 2-97. Analyzed several alternative route alignments in order to identify impacts from the project to wetlands, priority habitats, and Endangered Species Act (ESA) listed species. Conducted wetland reconnaissance, rare plant surveys, and addressed noxious weed concerns. Recommended measures to mitigate impacts to wetlands.

**BP/Blaine School District Schoolhouse, BP Cherry Point Refinery, Whatcom County, Washington.** Aiding in completion of Conditional Use Permit for education facility.

**Muckleshoot Water Pipeline, Muckleshoot Reservation, Washington.** Conducted delineation of wetland and streams along proposed water pipeline route on the Muckleshoot Reservation. Completed a wetland report and investigated potential permit needs for project.

**I-90 Two-Way Transit and HOV Operations EIS, Sound Transit, King County, Washington.** Prepared biological resources technical report and EIS section for project that proposes to provide reliable two-way transit and HOV operations on I-90 between Seattle and Bellevue. Report included discussion of threatened and endangered species wetlands, and noxious weeds.

**Pacific Sound Resources Superfund Site, Seattle, Washington.** Designed marine shoreline planting plan for superfund site in Elliot Bay. Design includes experimental beach plantings and large woody debris placement. Design also includes shrub plantings along armored shoreline.

**Muckleshoot Individual Allotment Permits, Muckleshoot Reservation, Washington.** Conducted wetland determinations for single family residences. Recommended lot design to minimize wetland impacts.

**Holden Mine Remedial Investigation, Chelan County, Washington.** Responded to USDA Forest Services comments on Draft Remedial Investigation Report. Addressed ESA and Northwest Forest Plan Survey



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and Manage issues. Researched the required Survey and Manage and ESA-listed surveys required for the preferred remedy.

**West Patrol Road Ditch Expansion, BP Cherry Point Refinery, Whatcom County, Washington.** Conducted wetland delineation along roadside ditch. Recommended areas where ditch expansion would be feasible and wetland impacts would be minimized.

**Justice Property Delineation, Muckleshoot Reservation, Washington.** Assisted with wetland delineation on a 20-acre parcel of land with long history of disturbance. Work included identifying isolated wetlands and determining land use history of site.

**Judy Reservoir Wetland Mitigation Area, Skagit County Public Utility District 1, Skagit County, Washington.** Inspected plant materials prior to installation. Inspected completed plantings to ensure compliance to planting plan. Conducted first three years of monitoring to assess percent cover of emergent and scrub-shrub wetland areas.

**Cherry Point Cogeneration Project, BP Cherry Point Refinery, Whatcom County, Washington.** Delineated wetlands on proposed cogeneration facility site and on proposed mitigation areas. Surveyed and assessed the coverage of reed canarygrass (*Phalaris arundinacea*), an invasive weed, on the mitigation areas. Information was used to determine which weed control method to use in each area. In addition, completed permit application for Whatcom County grading and clearing permit for geotechnical investigations. Assisted in design of hydrologic monitoring plan.

**Proposed Commercial Development, Home Depot, Woodland, Washington.** Conducted wetlands determination for due diligence on proposed Home Depot transit facility.

**Plymouth Generating Facility, Plymouth LLG, Plymouth, Washington.** Prepared biological resources technical section for proposed combined-cycle power plant and associated access roads and transmission lines. Analyzed impacts from alternate transmission lines and access routes. Performed fieldwork and research to identify impacts from the project to wetlands, priority habitats (including shrub-steppe), and ESA listed species. Recommended mitigation measures and potential habitat restoration opportunities. Prepared a Biological Assessment and successfully completed informal agency ESA consultation.

**Chase Lake Property, City of Edmonds, Snohomish County, Washington.** Conducted wetland reconnaissance for City of Edmonds. Located and described peat wetlands surrounding Chase Lake. Researched history of site as a peat mine and a Snohomish County stormwater management site. Provided letter report discussing development restrictions.



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**Northeast Lands General Parcel Inventory, Bureau of Land Management, Stevens County, Washington.** Conducted initial botanical inventories on BLM parcels in northeastern Washington. Fieldwork included plant community typing, habitat mapping, rare plant survey, and noxious weed and cultural plant survey. Other information collected included forest stand composition and density, stand age, disturbance regime, and snag data.

**Natural Resources Building, Muckleshoot Reservation, Washington.** Assessed wetlands on disturbed parcel that undergoes frequent mowing. Completed wetland delineation and report for proposed natural resources building. Researched isolated wetland issues on Tribal land with regard to recent court decision. Made recommendations regarding jurisdictionality of isolated wetlands on subject property. Also aided in design of stormwater pipeline in order to avoid further wetland impacts.

**Machias Pipeline Replacement Project, Williams Pipeline, Snohomish, Washington.** Completed wetland delineation and wetland report for 3.2-mile natural gas pipeline repair project. Work consisted of assessing wetlands within 75-foot right-of-way that undergoes active disturbance regime of mowing and grazing.

**White River Amphitheatre EIS, Muckleshoot Reservation, Washington.** Aided in editing and production of multi-volume Final EIS document for proposed open-air amphitheatre. Assisted in delineation of off-site mitigation area. Coordinated responses to comment letters from DEIS. Updated JARPA application and mitigation plan for project. Also completed monitoring and mitigation plan, as required by the formal ESA consultation process.

**Hadachek Property Wetland Delineation and Restoration Plan, Pierce County, Washington.** Assessed wetland and wetland buffer violation in unincorporated Pierce County. Completed wetland delineation report for property. Designed restoration plan for cleared wetland and wetland buffer areas. Worked with Pierce County to successfully get an after-the-fact wetland approval and building permit.

**Longfellow Creek Habitat Improvement Project, Seattle, Washington.** Assessed wetland and upland plantings in riparian restoration project. Identified species with poor survivorship. Recommended species for replacement and substitution.

**Bellevue Stream Rehabilitation, Bellevue, Washington.** Assessed health of riparian vegetation communities for four salmon-bearing urban creeks: Sears Creek, Newport Creek, Upper Kelsey Creek, and Upper Richards Creek. Identified potential wetland issues associated with rehabilitation efforts. Recommended restoration opportunities and noxious removal techniques.



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**Sumas 2 Generating Facility, Sumas, Washington.** Identified and delineated wetlands on proposed mitigation site for EFSEC permitted generating facility.

**Tuxekan Island Timber Sale EIS, US Forest Service, Southeast Alaska.** Task manager and principal investigator for special status plant surveys in Tongass National Forest. Identified all vascular plant species located in proposed timber sale units. Collected voucher specimens for inclusion in Flora of North America project. Compiled and developed text for botany reports. Entered stream survey data into GIS coverage. Completed EIS issue processing. Prepared EIS technical sections. Responded to USDA Forest Service comments on recreation and scenery issues.

**Kosciusko Island Timber Sale EIS, US Forest Service, Southeast Alaska.** Task manager and principal investigator for special status plant surveys in Tongass National Forest. Identified all vascular plant species located in proposed timber sale units. Collected voucher specimens for inclusion in Flora of North America project. Compiled and developed text for botany reports. Entered stream survey data into GIS coverage. Completed EIS issue processing. Prepared EIS technical sections. Responded to USDA Forest Service comments on recreation and scenery.

**Otter Lake Timber Sale EIS, US Forest Service, Southeast Alaska.** Coordinated DEIS production for USDA Forest Service document. Prepared and edited technical sections of DEIS. Aided in identification of significant issues. Responded to USDA Forest Service comments on recreation, scenery, and wetland issues. Developed maps and text for botany reports. Additional work included identifying plant specimens and compiling survey reports.

**Preliminary Airport Master Plan, Pullman-Moscow Regional Airport, Pullman, Washington.** Conducted wetland determination on airport campus. Wrote wetland report for inclusion into Preliminary Airport Master Plan.

**Fall City-Snoqualmie Road Cellular Tower, SBA Inc, King County, Washington.** Conducted wetland determination in response to concerns raised by King County over wetland issues. Submitted letter report documenting findings as part of permit application.

**Rieth Windpower Project, Pendleton, Oregon.** Conducted biological surveys for proposed windpower project. Identified and mapped populations of federally and state listed animals and plants, including difficult to identify milk-vetch species (*Astragalus* sp.).

**Wallula Power Project, Walla Walla County, Washington.** Conducted site visit for completion of biological resources section of SEPA Checklist for a proposed natural gas power plant.



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### **Davis Housing Project, Muckleshoot Reservation, Washington.**

Contributed to wetland sections of Biological Assessment for proposed Tribal housing project. Conducted wetland reconnaissance to determine potential stormwater discharge points.

### **Wax Road Cellular Tower, SBA Inc, King County, Washington.**

Assessed potential wetland buffer violation in unincorporated King County. Delineated wetland boundaries and determined stream classes. Determined buffer widths and submitted report for after-the-fact permit.

**North Creek/Vitulli Cellular Tower, Nextel Communications, Bothell, Washington.** Completed wetland and stream reconnaissance for proposed cellular tower site. Determined stream and wetland categories and corresponding buffers. Recommended placement of equipment shed outside of wetland buffer. Submitted report to be included with permit application.

**Proposed Skagit River Intake and Water Pipeline, Skagit County Public Utility District 1, Skagit County, Washington.** Identified and delineated wetlands along proposed water pipeline from Skagit River to Judy Reservoir. Completed wetland report and conceptual mitigation plan for the project. Assisted in preparation of the Joint Aquatic Resource Permit Application (JARPA).

**IBI Group, Inc., Parkland, Washington.** Identified and delineated wetland on proposed cellular hub facility site. Met with Pierce County to discuss permitting issues. Developed conceptual mitigation plan for the site.

**Goldendale Energy Project, Goldendale Energy Inc., Goldendale, Washington.** Identified and delineated wetlands along proposed natural gas pipeline route and electric transmission line route. Conducted rare plant surveys and vegetation community analysis along both routes. Completed technical report for inclusion into SEPA Checklist. Assisted in JARPA and Endangered Species Act informal consultation process, including site visit with Washington Department of Ecology.

**Satsop Combustion Turbine, Thurston and Grays Harbor Counties, Washington.** Conducted survey of critical areas and rare plants on Fort Lewis military base property. Completed initial research for Biological Assessment for natural gas pipeline project spanning Thurston and Grays Harbor Counties. Also researched potential mitigation sites for wetland compensation. Research included identifying whether proposed sites contained habitat for federal and state listed threatened and endangered species.

**Air Cargo Facility, Spokane International Airport, Spokane, Washington.** Conducted a wetland reconnaissance and produced a technical memo for a proposed air cargo facility.



## Jeff Walker

**Palmyra Atoll Environmental Compliance Plan, Palmyra, South Pacific.** Developed vegetation enhancement strategy for bird habitat. Contributed to Environmental Compliance Plan for pelagic fish harvest facility.

**Kootenai Cutoff Mitigation Sites, Idaho Transportation Department, Ponderay, Idaho.** Monitored wetland mitigation sites as a result of the widening of US Highway 95. Prepared monitoring report for Army Corps of Engineers. Recommended measures to improve value of mitigation areas.

**North Bend Gravel Operation EIS, North Bend, Washington.** Responded to comments letters regarding ESA and botanical concerns. Updated EIS section to include discussion of noxious weeds and ESA plant species.

**Water Tower Project, Tractebel Power, Inc., Chehalis, Washington.** Contributed to SEPA Checklist for proposed City of Chehalis water tower project.

**Monohan Camp Sambica Cellular Tower, Nextel Communications King County, Washington.** Responded to stream buffer concern raised by King County. Completed site visit and determined stream class and buffer width. Submitted report to be included with permit application.

**Sewer Pipeline Project, BP Cherry Point Refinery, Whatcom County, Washington.** Identified and delineated wetland along multiple proposed sewage pipeline routes.

**Mist Gas Pipeline, Northwest Natural Gas, Clackamas, Marion, and Washington Counties, Oregon.** Conducted rare plant survey along 60-mile route of proposed natural gas pipeline in northwestern Oregon. Aided in preparation of permit document. Also assisted in developing list of habitat types and categories for habitat mapping project. Created habitat maps in ArcView and performed field verification of habitat maps.

**Tomahawk Island, Multnomah County, Oregon.** Conducted rare plant survey on island in the Columbia River. Aided in preparation of permit document.

**Drug and Alcohol Treatment Facility, Muckleshoot Reservation, Washington.** Conducted wetland delineation on proposed site of tribal drug and alcohol treatment facility.

**Collins Property, Kenmore, Washington.** Conducted wetland verification of residential property.

**Nextel Communications, Pennsylvania.** Completed NEPA checklists for various cellular phone towers.



## Jeff Walker

**Bureau of Land Management, Coast Range Resource Area, Lane County, Oregon.** Conducted rare plant surveys in proposed timber sale units. Created complete vascular and nonvascular species inventory lists for these sales, which required being able to identify hundreds of plants. Contributed to botanical sections of timber sale environmental assessments. Monitored restoration sites in the West Eugene Wetlands. Produced GIS (Geographic Information Systems) maps of the West Eugene Wetland complex.

**Hawaii Volcanoes National Park, National Park Service, Hawaii.** Established and monitored fire restoration and succession research burns. Established and monitored invasive plant control study areas. Collected, planted, and monitored the success of native plants in restoration projects. The work included hiking to remote coastal areas and through dense rainforest. The work required learning to identify numerous tropical plant species, including difficult to diagnose ferns.

**Bureau of Land Management, South Valley Resource Area, Lane County, Oregon.** Conducted special status vascular plant surveys. Conducted Survey and Manage surveys under the President's Forest Plan. These surveys included searching for and identifying bryophytes, lichens, and fungi. The identification required both field and laboratory skills. Monitored special status plant populations, including species of Aster. Entered, analyzed, and reported data collected from field work. Produced GIS maps of rare plant sites.

**Rare Plant Monitor, Rare Plant Care and Conservation Program, Center for Urban Horticulture, University of Washington.** Monitored known rare plant locations across Washington State. Work augmented the Washington Natural Heritage Program site database. Monitored species in various habitats including sagebrush steppe, vernal pools, and riparian corridors. Also made collections of rare species and associated plants for inclusion in the collections at the University of Washington Herbarium.

**Duwamish Restoration Site Steward, Seattle, Washington.** Worked with People for Puget Sounds as a site lead for monitoring of restoration projects in the Duwamish River estuary. Duties included monitoring vegetation in upland and estuary areas, evaluating site for potential problems (noxious weeds, damage to integrity of goose-excluder fences), and training new site stewards.

### Professional Societies/Affiliates

Society of Wetland Scientists, PNW Chapter Secretary  
Society of Ecological Restoration  
Native Plant Society of Oregon  
Washington Native Plant Society  
Cascade Mycological Society  
Puget Sound Mycological Society



## Jeff Walker

### Specialized Training

Using the Revised Washington State Wetland Rating System, 2007, Coastal Training Program

How to Determine the Ordinary High Water Mark, 2007, Coastal Training Program

Arid West Wetland Delineation Manual Supplement Training, 2007, Army Corps of Engineers

### Publications

“*Parnassia palustris* var. *neogaea*”, *Douglasia: Journal of the Washington Native Plant Society*, Vol. 28, No. 4, Fall 2004.

Editor of *Ooze News*, Society of Wetland Scientists – Pacific Northwest Chapter Newsletter, 2004–present.