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**From:** S Morris <sharon.morris100@gmail.com>  
**Sent:** Wednesday, November 27, 2013 7:28 AM  
**To:** EFSEC (UTC)  
**Subject:** Columbia River Project  
**Attachments:** TesoroProjectFSJltr11-22-13.pdf  
  
**Categories:** Green

Interim EFSEC Manager  
Energy Facility Site Evaluation Council  
P.O. Box 43172  
1300 S Evergreen Park Dr. SW  
Olympia, WA [98504-3172efsec@utc.wa.gov](mailto:98504-3172efsec@utc.wa.gov)

Dear Sir or Madam,

My name is Sharon Morris, and I have recently moved back from living in Asia for 22 years. We do not want our landscape to become like so many places in Asia. Full of rancid air and filthy waters. The USA should be proud that it is so green and we should strive to keep it that way. I urge you to please, think of your grandchildren, and their children after that...let's keep the Columbia River and surrounding areas clean and free from fossil fuels exports and the mess that they create.

Fossil fuel exports are a bad investment for the Pacific Northwest, will greatly contribute to the ongoing catastrophe of climate change worldwide, pose a direct risk to our Orca, and are potential disaster to the Columbia River Gorge and its communities (similar to the rail explosion in Lac-Mégantic, Quebec this past July which killed almost 50 people).

Please read the attached letter that was scripted from Friends of the San Juans, they have put a lot of research into their findings and I agree with what they say.

Thank you so much for your time,

Sharon Morris  
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98229  
[sharon.morris100@gmail.com](mailto:sharon.morris100@gmail.com)





November 22, 2013

Stephen Posner,  
Interim EFSEC Manager  
Energy Facility Site Evaluation Council  
P.O. Box 43172  
1300 S Evergreen Park Dr. SW  
Olympia, WA 98504-3172

Delivered via email: [efsec@utc.wa.gov](mailto:efsec@utc.wa.gov)

RE: Docket No. EF-131590 Application No. 2013-01 Tesoro Savage Vancouver Energy  
Distribution Terminal Comments

Dear Mr. Posner,

Thank you for this opportunity to provide scoping comments for preparation of the Tesoro Savage Vancouver Energy Distribution Terminal (Tesoro Savage). Please accept the following comments from the FRIENDS of the San Juans.

FRIENDS of the San Juans (FRIENDS) is a non-profit organization founded in 1979 to support local efforts to manage growth and protect the natural beauty and rich wildlife in Washington's San Juan Islands. Using science, policy, law, education, and citizen activism, FRIENDS works to protect, preserve, and restore the land, water, sea and livability of the San Juan archipelago. FRIENDS' activities include protection of orca whales and other endangered species; marine research and habitat restoration; ecological stewardship and conservation; land use and environmental compliance; community engagement and education. FRIENDS' efforts have produced cleaner, healthier habitats for sensitive species in beaches, parks, and waters; inventories of marine and nearshore habitat to help rebuild depleted salmon stocks; and increased protections for our magnificent orca whales. Members of FRIENDS live, work, and recreate in the San Juan Islands and in the surrounding waters, where they enjoy immersing themselves in nature. FRIENDS is concerned about the marine impacts associated with the Tesoro Savage project. Many of the concerns are echoed along the entire shipping route and must be included in the process. We offer these comments to secure standing for our staff, board and members in the process.

## **I. ECONOMY OF THE SAN JUANS**

San Juan County's current economic bread and butter are visitors, retirees, and part-time residents who have vacation homes in the islands. The San Juan Islands economy is inextricably connected to the beauty of our environment and the health of our ecosystems. Many islanders depend upon a healthy and sustainable salmon fishery and orca population. Tourism is the primary economy in San Juan County and our endangered Southern Resident Killer Whales (SRKW), also known as orca whales, are the prime driver of that economy.

With a boost from the recent designations of “#1 Island in the U.S.” by Trip Advisor<sup>1</sup>, “#2 in the New York Times’ Best Places to Visit,” “#3 on Lonely Planet’s ‘Top 10 Destinations for 2013’”, and National Monument status, the San Juan Islands are now a major tourist destination. San Juan County’s visitors and part-time residents provide significant state and local tax revenues.<sup>2</sup> In 2012, more than 700,000 people visited our islands and spent nearly \$158 million.<sup>3</sup> In the same year, 1,850 jobs here were directly related to the travel industry.<sup>4</sup> During August 2012, the peak travel month, the total number of non-agricultural jobs, direct (due to tourism), indirect and induced, in San Juan County was 6,450.<sup>5</sup>

The San Juan Islands face “direct, indirect and induced” damage to the health of our environment due to the Tesoro Savage increased shipping traffic, with its accompanying underwater noise, air and water pollution, increased risk of a fuel/cargo spill in our surrounding waters, and potential impacts to federally listed threatened and endangered fish, wildlife and marine mammals protected under the US Federal Endangered Species Act.

*Please address the following impacts in the Tesoro Savage Project:*

1. What are adverse impacts, including the adverse impacts from the increased risk of oil spills, to salmon, an essential food for the endangered SRKW, in the Columbia River?
2. What would be the adverse impacts to forage fish, an essential food for salmon and in turn SRKW, from increased oil spills in the Columbia River?
3. What is the economic threat from the loss of SRKW to the economy of the San Juans?
4. What would be the loss of property values and what would be the loss of tourism, real estate sales, from depleted fish and wildlife populations such as the SRKW in the event of a major oil spill in the Columbia River?

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<sup>1</sup> <http://www.youtube.com/watch?v=8ApKOSYothA>

<sup>2</sup> San Juan County collected \$884,314 and the Town of Friday Harbor collected \$298,830 in lodging taxes in 2012. Treasurer, Town of Friday Harbor; San Juan County Treasurer’s Office.

<sup>3</sup> San Juan Islands Visitors Bureau, <http://www.visitsanjuans.com>

<sup>4</sup> Dean Runyan Associates “Washington State Travel Impacts and Visitor Volume, 2002-2012.”



December 2012 and early April 2013 around the mouth of the Columbia River. Because Chinook salmon is the preferred food of the SRKW, they were likely feasting on upper Columbia and Snake River Chinook salmon that were transiting these waters at the time.

Juvenile Chinook salmon use the lower Columbia River for migration and sustenance. Adult salmon must migrate along the Columbia River past the site of the proposed Tesoro Savage terminal. Impacts associated with the proposed terminal, including fuel spills from vessels visiting the terminal, are potential threats to maintaining Chinook salmon runs adequate to sustain the SRKW population. Therefore we request that the scope of the EIS for the proposed Tesoro Savage project include a study of impacts to this key salmon population that is federally listed as Threatened under the Endangered Species Act. Chinook salmon are also subject to further conservation considerations under the Fish and Wildlife Coordination Act, 16 U.S.C. 661-667e and the Magnus-Stevens Fishery Conservation and Management Act-Essential Fish Habitat, Pub. L. 94-265 and by international conservation efforts under the Treaty. As species listed under the Endangered Species Act, their defined critical habitat must be protected under law.

*Please address the following impacts in the Tesoro Savage project:*

1. What would be the impacts to Chinook salmon, and especially to juvenile Chinook salmon, caused by the construction of this project?
2. What would be the cumulative impacts to Chinook salmon, and especially to juvenile Chinook salmon, of dredging contaminated river sediments near the Tesoro Savage Project site every few years to maintain access for Panamax-sized vessels?
3. What would be the impacts to Chinook salmon, and especially to juvenile Chinook salmon, of the noise and lighting during the round-the-clock operation of the proposed new rail lines and associated facilities, conveyors, and equipment?
4. What would be the impacts to Chinook salmon, and especially to juvenile Chinook salmon, of cumulative smaller fuel spills from the vessel traffic associated with the Tesoro Savage Project?
5. What would be the adverse impacts to migrating Chinook salmon smolts from oil spills of all sizes and in particular from heavy (also referred to as persistent) oils?
6. What would be the impacts to Chinook salmon, and especially to juvenile Chinook salmon, from improper flushing of vessel bilge spaces to remove oil, oil vapors, and other chemicals that may be lethal or sub-lethal to juvenile salmon?
7. What would be the impacts to Chinook salmon, and especially to juvenile Chinook salmon, from pollution-bearing stormwater from the proposed Tesoro Savage Project facilities into the Columbia River?
8. What would be the impacts to the federally listed Endangered Southern Resident Killer

Whales from declining runs of Upper Columbia River and Snake River Chinook salmon?

The Tesoro Savage Project should also study the cumulative adverse impacts to Chinook salmon of the proposed Morrow Pacific Coyote Island Project, the proposed Port Westward Transloading Coal Barge Dock, the proposed Vancouver Energy Distribution Terminal, the proposed Global Partners facility at Clatskanie, the proposed Millennium Bulk Terminals, Longview, and the proposed Paramount Terminal at Portland.

### **III. CUMULATIVE IMPACTS OF VESSEL TRAFFIC**

The total number of cargo and tanker vessels calling at Columbia River terminals in 2012 was about 1428<sup>7</sup>. The Tesoro Savage Project must consider additional vessels projected in the Columbia River including the Millennium Bulk Terminal, Port Westward Coyote Island Terminal, and Ambre's Pacific Trans loading Barge Dock. The number of vessels navigating the Columbia River could increase by as much as 50%. The number and size of ships visiting the existing and proposed terminals and the amounts of hazardous cargo or fuel within those ships elevates the risk of shipping accidents and fuel spills in the Columbia River, the Columbia River Bar, or surrounding ocean waters.

Although the annual number of oil tanker spills fell about three-fold world-wide between 1992 and 2011, the number of fuel spills for allisions, collisions, and groundings of tankers and bulk cargo carriers in restricted and inland waters did not decrease during this period. These data indicate that improvements in the shipping industry, the efforts of the International Maritime Organization, and national governments have not decreased the number of accidents in inland and restricted waters. As an inland waterway, the Columbia River's significant spill risk could be even greater than the world-wide average.

In contrast to the reduction in tanker fuel spills (likely due to double-hulls and other structural improvements in tanker design); world-wide bunker fuel spills did not decrease between 1992 and 2011.<sup>8</sup> Bunker fuel is the generic term for fuel used by ship engines. It is heavier and more polluting than other fuels. The bunker fuel capacity of most large bulk carriers can be as much as 1.2 million gallons. These are single hull vessels with double bottoms that experience a historically higher mechanical failure and accident rates than other vessels. Combine these characteristics with the fact that most are operated by foreign crews and misunderstandings or miscommunications will additionally contribute to navigational errors and an increased risk level (despite the presence of a US Pilot).

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<sup>7</sup> Washington State Department of Ecology, Spill Prevention, Preparedness and Response Programme. (2013). *Vessel Entries and Transits for Washington Waters: VEAT 2012*. ( Washington State Department of Ecology).

<sup>8</sup> Figures 9 & 13 in: *Trends in Oil Spills from Tankers and ITOPF Non-tanker Attended Incidents* Susannah Musk, Technical Support Coordinator -International Tanker Owner Pollution Federation Ltd, ITOPF London, UK

Bulk carriers travel without tug escorts, and require a large amount of room to maneuver. In an emergency, they require up to 1¼ miles to stop with power, and up to 7 miles without. In addition, these ships have large areas above the water that act as a sail. At low speed, this “sail area” makes them difficult to maneuver. An un-powered ship is even more subject to wind and currents, and will be essentially out-of-control without power or tug assistance. The absence of tug assistance, inadequate ship maintenance and crew training, along with severe weather all increase the risk of a fuel spill.

In an emergency, tug assistance can be undependable because it is based on the vessel of opportunity concept. This means that any tug that happens to be in the area may be called upon to provide assistance to a stricken vessel. However, a randomly available tug may not have the power, the proper equipment, or crew training necessary to render effective assistance to a large vessel in distress.

The bar at the entrance to the Columbia River is a physical challenge to any mariner and seagoing vessel. The following is from “Running the Bar” in the February, 2009 Smithsonian Magazine:

‘Each of the 16 bar pilots has the authority to close the bar when conditions are too dangerous.’ Still, “When we shut down the bar for two days, trains are backed up all the way into the Midwest. And just like a traffic jam on the freeway, once you clear the wreck, it takes a long time for it to smooth out again.”

The impediment of the Columbia Bar has the potential to cause substantial delays in shipping schedules, particularly during stormy conditions. Shutting down “the bar” for several days in bad weather could result in crude trains accumulating all along the rail transport corridor.

Because of the increased vessel traffic from all proposed facilities, the Tesoro Savage Project EIS should include vessel traffic and risk evaluation studies. These assessments should consider not only the increased vessel size and numbers, but also the requirement for an expansion in the number of trained ship pilots to ensure safe navigation of the Columbia River from the bar to the proposed terminals and to sea again.

*Please address the following questions within the EIS being developed for Tesoro Savage Project:*

1. What would be the adverse impacts to Columbia and Snake River Chinook salmon (which are an essential food source for Southern Resident Orca Whales) from the increased risk of oil spills associated with the Tesoro Savage Project and the other proposed terminal on the river?
2. What would the economic losses to commercial and recreational fisheries be as a result of intermittent, and point source medium, and large oil spills in the Columbia River system impacting salmon, other finfish, and shellfish populations?

3. Are there adequate oil spill response resources and capability (trained personnel, equipment, response plans, and vessels) available and resident in the lower Columbia River to respond to, contain, and clean up oil spills? If not, please determine what would be required, what would be the cost, and who would pay to upgrade response resources necessary to adequately address oil spills on the river?
4. What would be the economic and social impacts from a storm-related or terminal equipment malfunction delay (possibly for days) in the scheduled shipping of crude from the proposed terminals, on the rail transportation system, and communities along the rail shipment corridor? Please study the impacts on local businesses, medical response time, traffic, and the efficient movement of goods by trucks created by any foreseeable delays in transportation of fossil fuels to export terminals
5. In addition to trains, would ships be backed up? Would ships remain offshore or would some need to anchor in the river? Both choices increase navigational hazards in dangerous waters.
6. What would be the loss of property values, tourism revenue, real estate sales and related tax revenue from a major oil spill in the Columbia River or associated waters?
7. For each of the impacts above, please conduct “worst-case” scenario analyses considering each and all combinations of possible, compounding factors such as storms, floods, earthquakes and human errors.
8. Identify, quantify and evaluate the types and volumes of fuel (including fuel oil and diesel fuel), lubricating oil, hydraulic oil, mechanical oil, and cargo that would be carried by Tesoro Savage vessels, and under what circumstances, including results of an accident or during operations, fuel and other oils, and/or cargo could be spilled, discharged, or otherwise released into the environment;
9. Evaluate the types and efficacy of all safety communication systems and equipment that would be on board each Tesoro Savage vessel and the entities that would be responsible for providing and maintaining this equipment;
10. Identify and evaluate all rescue protocols and maritime accident response infrastructure along the Tesoro Savage vessels’ routes;
11. Identify, quantify, and evaluate all potential impacts of Tesoro Savage vessel accidents or operational events that may result in fuel, oils, and cargo spills and/or other materials discharges on:
  - a. oceans and shorelines, including all aquatic and terrestrial habitats;
  - b. fish, marine mammals, other marine vertebrates and invertebrates;
  - c. seabirds and their rookeries, water fowl, shorebirds and all other birds;
  - d. terrestrial mammals;
  - e. phytoplankton and zooplankton;
  - f. aquatic and terrestrial plants

- g. the marine food web;
  - h. commercial, sport, and subsistence fisheries;
  - i. tourism, local economies, communities, and cultures;
12. Identify who would pay the costs of response, assessment of damages, remediation, cleanup, and restoration of natural resources and damages for all impacts that could result from a Tesoro Savage vessel accident or operation.

#### **IV. IMPACTS OF OCEAN ACIDIFICATION**

Since the beginning of the industrial age ever-increasing amounts of carbon dioxide have been released into the atmosphere, not only warming the planet but increasing oceanic CO<sub>2</sub> content by 30% during the same period. For many years scientists have been measuring and reporting that oceanic CO<sub>2</sub> absorption is causing seawater to be more acidic. The chemistry of our oceans is changing. This change is already impacting coral reefs and could now threaten the entire marine food chain.

Ninety-seven percent of climate scientists agree that the burning of fossil fuels by industry, transportation, and energy production are responsible for the climate and chemical changes occurring in the atmosphere and oceans. If oceanic biodiversity is important for the species we rely upon as a food source, it would seem illogical to continue to promote the use of fuels associated with physical and economic damages linked to atmospheric and oceanic changes. Executive Order 12-07, Washington's Response to Ocean Acidification, includes implementation of the recommendations of Governor Gregoire's Blue Ribbon Panel on Ocean Acidification; the number one recommendation is to reduce emissions of carbon dioxide. The proposed Tesoro Savage Project presents a direct contradiction to that Executive Order.

*Please address the following impacts in the Tesoro Savage Project:*

1. The project's impact on climate change. This analysis should include climate change impacts from crude oil as well as tar sands oil from cradle to grave.
2. What would be the economic cost to the shellfish industry in Washington State because of ocean acidification due to increased oceanic CO<sub>2</sub> from the burning of the 360,000 barrels of oil each day through the Columbia River?
3. The increased risk of an oil tanker spill on Washington State waters and along the shipping route.
4. What would be the economic losses to the sea food and fishing industry, in terms of jobs and capital infrastructure, as a result of the decrease or loss of important species of marine food animals due to ocean acidification from GHG's and CO<sub>2</sub> contributed by burning fuel from products exported from the *Tesoro Savage* and the other proposed northwest fossil fuel export terminals?

5. What would be the economic costs to coastal communities of sea level rise due to climate change driven by the additional CO<sub>2</sub>, and other GHG's produced from the burning of fuel shipped from the Tesoro Savage Terminal and the other terminals proposed in the Pacific Northwest?
6. What economic losses would the Columbia River system sustain because of a decline, or loss, of tourist, commercial, and recreational fishing revenue due to decrease in salmon fisheries because of ocean acidification affecting the marine food web attributable to CO<sub>2</sub> contributions from the proposed *Tesoro Savage* terminal?
7. What would be the cultural and socioeconomic losses to Native American Tribes of the region from a further decline in salmon populations due to ocean acidification by the additional CO<sub>2</sub> contributions from the Tesoro Savage project and other terminals proposed for the Pacific Northwest?
8. What would be the economic costs to San Juan County from the adverse impacts of ocean acidification on Chinook salmon? Since Chinook salmon are the main food source of the Endangered Southern Resident Killer Whales, what would a decline in both their Salish Sea and Columbia River food supply mean for their survival?

## **VI. IMPACTS OF CLIMATE CHANGE AND SEA LEVEL RISE**

The Tesoro Savage project at full capacity will transport 360,000 barrels a day of oil by rail through the Columbia River Gorge to the Port of Vancouver on the banks of the Columbia River.<sup>9</sup> The adverse effects of climate change are those which result in changes to the physical environment or biota and which have significant deleterious effects on the composition, resilience, or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare.<sup>10</sup>

The potential impacts of this change upon island communities such as the San Juan Islands are astronomical. The San Juans are comprised of over 450 islands, rocks, and pinnacles.<sup>11</sup> Twenty of these islands are inhabited by residents. Many of the remaining islands serve as summer recreation areas, research sites, or nesting or breeding haul out sites for marine mammals and seabirds. They could all be adversely impacted by sea level rise.

Washington State is believed to be particularly vulnerable to a warming climate particularly because of its snow-fed water supplies that provide drinking water, irrigation for agriculture and which are also responsible for nearly three-fourths of the state's electrical power. In addition to the

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<sup>9</sup> <http://www.efsec.wa.gov/Tesoro%20Savage/Revised%20Scoping%20Notice%20Electronic%2011-8-13.pdf>

<sup>10</sup> FCCC: Article 1. Definitions.

<sup>11</sup> <http://www.blm.gov/or/resources/recreation/sanjuans/>

San Juan Islands, nearly 40 other communities, including some of the state's largest population areas, exist along 2,300 miles of Washington's shoreline, which is threatened by rising sea levels and ocean acidification.

It has been estimated that if no action is taken, potential costs to Washington state from climate change impacts are projected to reach nearly \$10 billion per year by 2020 from increased health costs, storm damage, coastal destruction, rising energy costs, increased wildfires, drought, and other impacts.<sup>12</sup>

Due to the severity of this threat, Pacific coast leaders in the United States have recognized this threat to their regional environment and economy and on October 28, 2013, leaders of California, Oregon, Washington and British Columbia signed the Pacific Coast Action Plan<sup>13</sup> on Climate and Energy to begin to address these threats.

Climate impacts to island communities are well documented. Small islands are at the forefront of the extreme risks posed by climatic change. The threat of, 'possible adverse effects of sea level rise on islands'<sup>14</sup> was recognized in the United Nations *Framework Convention on Climate Change* (FCCC). It was added that such 'small island countries' are 'particularly vulnerable to the adverse effects of climate change'.<sup>15</sup> The 'deep concern' for small island states was reiterated at the 7<sup>th</sup> COP in 2001.<sup>16</sup> This concern, which is continually reiterated by groups such as the South Pacific Forum,<sup>17</sup> is due to their specific situation, which according to the 1994 United Nations Global Conference for the Sustainable Development of Small Island Developing States stated,

While small islands developing states are among those that contribute least to global climate change and sea level rise, they are among those that would suffer most from the adverse effects of such phenomena and could in some cases become uninhabitable.<sup>18</sup>

Based on the volume of fuel to be exported and subsequently burned, we would request that the Tesoro Savage EIS include an analysis on the impacts of climate change on the San Juans.

*Please address the following impacts in the Tesoro Savage Project:*

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<sup>12</sup> Department of Ecology, State of Washington (2012). *Preparing for a Changing Climate Washington State's Integrated Climate Response Strategy*. (DOE, Olympia, Publication No. 12-01-004) 2-6.

<sup>13</sup> <http://www.pacificcoastcollaborative.org/Documents/Pacific%20Coast%20Climate%20Action%20Plan.pdf>

<sup>14</sup> The United Nations *Framework Convention on Climate Change Preamble Paragraph 12*.

<sup>15</sup> The United Nations *Framework Convention on Climate Change Preamble Paragraph 19*

<sup>16</sup> The Marrakesh Ministerial Declaration. COP 7 (Marrakesh). FCCC/CP/2001/13/Add.1. 21 January 2002. Part II. Action Taken. Decision 1/CP. 7.3.

<sup>17</sup> Example: "Global warming and sea level rise were among the most serious threats to the Pacific region and the survival of some island states." South Pacific Forum Communique. Paragraph 29. Available from [www.forumsec.org/fj/docs/fc93.htm](http://www.forumsec.org/fj/docs/fc93.htm)

<sup>18</sup> Report of the Global Conference on the Sustainable Development of Small Island Developing States. A/CONF.167/9. October, 1994. Annex I, Section III.

1. What would be the impacts of the acceleration of climate change to San Juan County's public infrastructure (roads, water, sewer, and electric utilities)?
2. What would be the costs from associated increased storm winds, ocean surges, and precipitation on the San Juans from climate change?
3. What are the impacts of sea level rise on marine mammal haul out sites and nesting and/or foraging sites for seabirds?
4. What would be the costs associated with more intense storms coinciding with the highest tides on our public roads and infrastructure?

## **V. CONCLUSION**

Our members share common interest in the rich and diverse fish and wildlife resources that spend their lives in both the San Juans and the Columbia River. FRIENDS of the San Juans respectfully requests that you fully exercise your legally conferred duties as trustees to study in detail the broader implications and impacts of the Tesoro Savage Proposal, including the impacts on cultural resources, and fish and wildlife.

Many of the impacts we have raised in these comments cannot or would not be mitigated or mitigation would be ineffective to prevent or remediate permanent environmental harm. Unless every one of these impacts, singly and in combination, would be fully mitigated, we recommend the "no action" alternative.

We look forward to the Draft EIS addressing all of our comments with in-depth analysis and with reasonable alternatives identified, including the no build option. Should the project be permitted, all feasible mitigation measures should be required to be implemented.

Thank you for this opportunity to comment on the scope of the EIS for the proposed Tesoro Savage Project.

Sincerely,



Stephanie Buffum, MPA/MURP  
Executive Director  
FRIENDS of the San Juans

