

## 1. INTRODUCTION

Tesoro Refining & Marketing Company LLC (Tesoro) is proposing infrastructure additions and upgrades to their existing Tesoro Anacortes Refinery (refinery) to meet federal requirements to produce cleaner burning gasoline by 2017 and to produce 15,000 barrels per day (bpd) of mixed xylenes. The purpose of this Draft Environmental Impact Statement (EIS) is to examine the potential environmental impacts related to constructing and operating the proposed Tesoro Anacortes Clean Products Upgrade Project (proposed project).

As determined by Skagit County in the Determination of Significance dated March 17, 2016, an EIS is required for the proposed project under the State Environmental Policy Act (SEPA) (Skagit County 2016a). The EIS is required because the lead agency, Skagit County, determined that the proposed project has the potential for significant adverse environmental impacts. The environmental review process under SEPA helps state and local agencies identify and consider possible environmental impacts that could result from the proposed project. This chapter provides an overview of the proposed project, the purpose and need, the SEPA process, the public scoping process and public involvement activities, scope of analysis, as well as a list of relevant agencies, agency permitting authorities, and consulting parties. A detailed description of the proposed project is provided in Chapter 2, Proposed Action and Alternatives.

### 1.1. PROJECT OVERVIEW

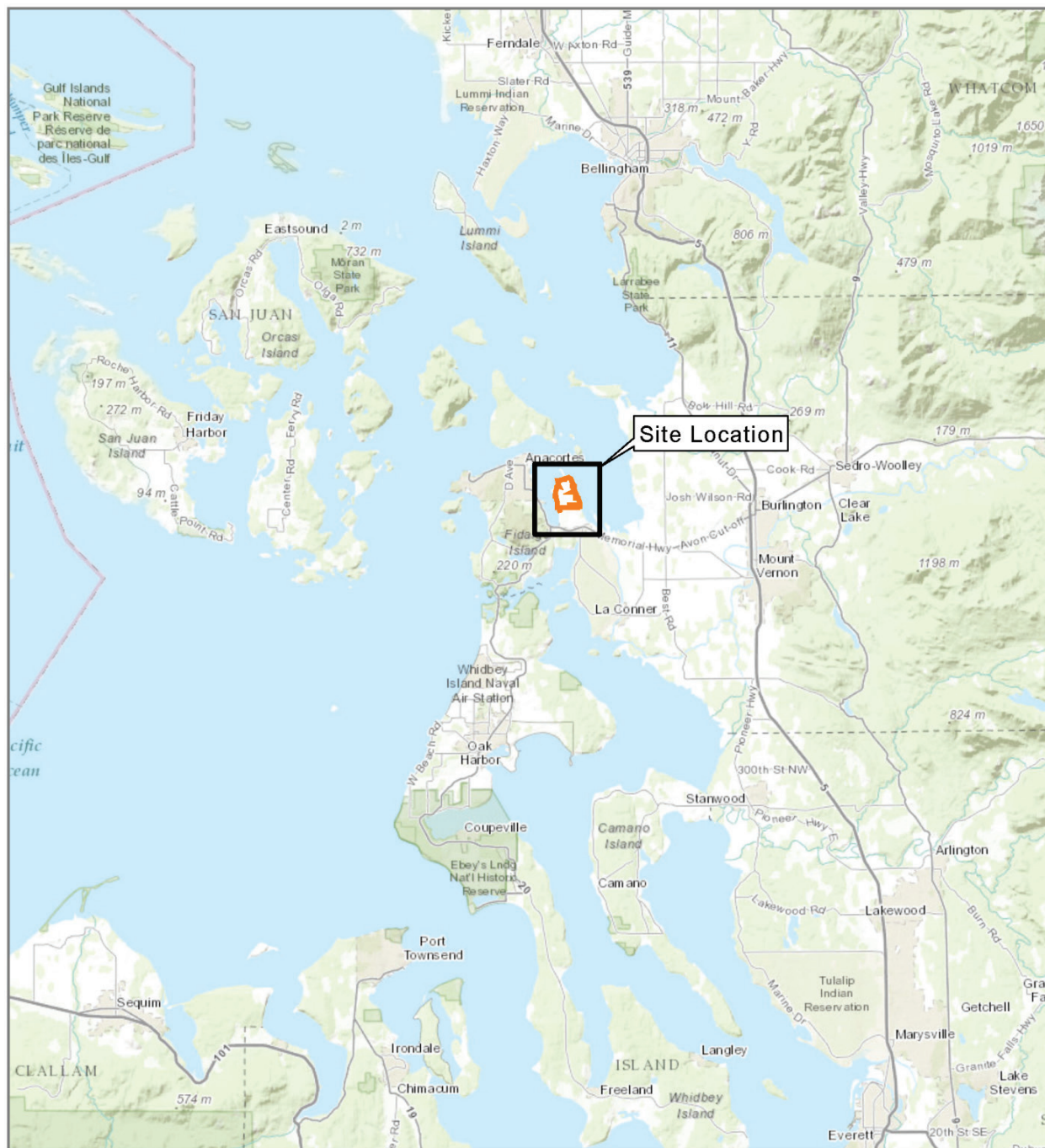
Tesoro is proposing to install new components and upgrade existing components at the refinery to produce cleaner burning gasoline and a new product, mixed xylenes. The refinery is located about 70 miles north of Seattle on the northern half of the March Point peninsula on Fidalgo Island in western Skagit County, generally east of the city of Anacortes. March Point is located on the Puget Sound portion of the Salish Sea and is bordered by Fidalgo Bay to the west and Padilla Bay to the east. Figure 1-1 shows the general location of the refinery and Figure 1-2 shows the refinery property.

#### ***Xylenes***

Mixed xylenes are a group of three different petrochemicals: ortho-xylene, meta-xylene, and para-xylene. Xylenes are one of many compounds found in gasoline and similar petroleum products. Pure xylenes are made from a petroleum feedstock called reformate. In a process known as catalytic reforming, refiners distill partly refined crude oil and convert the distillate into reformate, a high-octane liquid (de Place and Stroming 2014; USEPA 1994).

Mixed xylenes are a key component for manufacturing many consumer products and are in high demand by global manufacturers. The U.S. is a primary supplier of xylenes to overseas markets, which are used in the following applications:

- Medical films and x-rays
- Spray paints
- Solvents and cleaners
- Synthetic fiber production
- Rubber and plastics manufacturing
- Industrial printing
- Paint thinners
- Papermaking



### Legend

Tesoro Refinery Boundary

Source: ESRI Topographic Web Mapping Service NAD 1983 UTM Zone 10N


0 4 8 16  
Miles

**Figure 1-1: Site Location**





**Legend**

 Tesoro Refinery Boundary

Source: ESRI Imagery Web Mapping Service NAD 1983 UTM Zone 10N

0 1,500 3,000 6,000  
Feet

**Figure 1-2: Tesoro Anacortes Refinery**

The elements of the proposed project include constructing additional process units in mostly developed areas within the refinery boundaries and road refinements on North Texas Road adjacent to the refinery to the south. One of the planned areas within the refinery would require development on open pasture land owned by the refinery; the other areas are being constructed within already-developed refinery areas. The proposed project would not change the amount of crude oil received at the facility via pipeline and rail. There would be an increase of five ships per month docking at the refinery's marine terminal for exporting xylenes and for receiving additional reformat, a petroleum mixture used as a feedstock for xylenes production.

The proposed project is expected to be completed between 2017 and 2018.

## 1.2. PURPOSE AND NEED

Tesoro is pursuing the proposed project in order to:

- *Improve the refinery's capability to deliver cleaner transportation fuels per U.S. Environmental Protection Agency (USEPA) requirements.* The USEPA has adopted new, more stringent fuel standards that require lowering the sulfur content in gasoline, which went into effect January 1, 2017. The proposed project would install upgrades at the refinery to comply with the new federal fuel standards in a manner that is economically viable for the operation of the refinery. These new fuel standards are referred to by the USEPA as "Tier 3" standards. The upgrades would lower the sulfur content in gasoline (i.e., cleaner fuel).
- *Enable the refinery to produce mixed xylene feedstocks* (Tesoro 2016; Rodland 2016). The proposed project would also diversify the refinery's product mix, achieving two objectives. First, it would increase the value of products produced by the refinery, increasing both employment and economic value. Second, a more diverse product mix increases the long-term economic viability and financial security of the refinery.

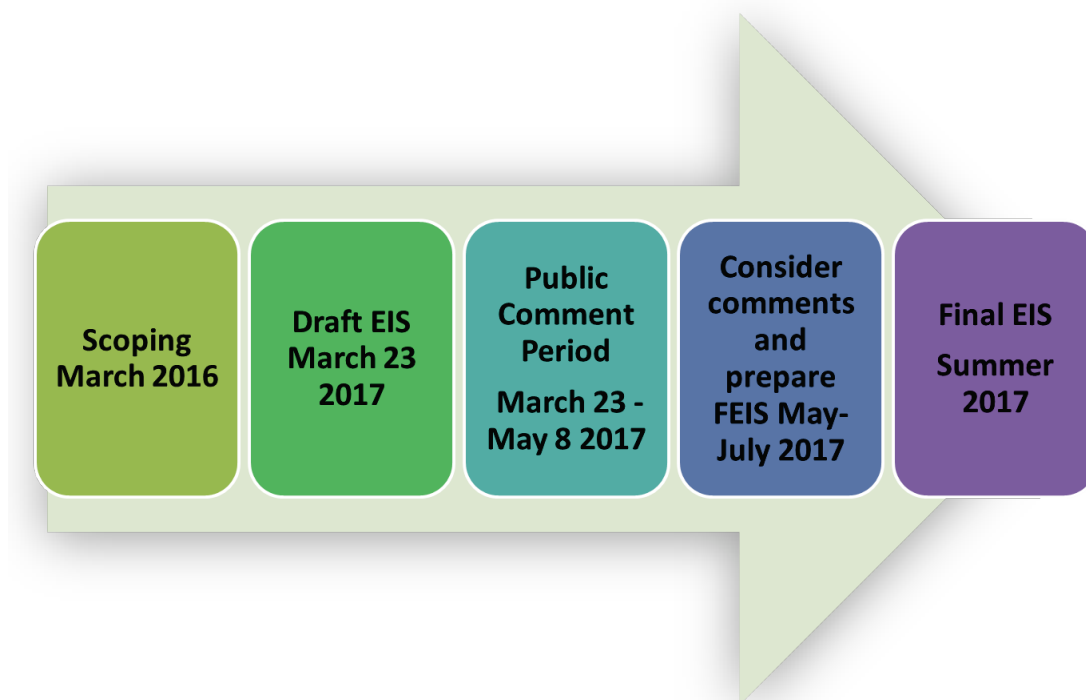
## 1.3. PROJECT BACKGROUND

On June 22, 2015, Tesoro filed an application for a Shoreline Substantial Development Permit for the proposed project with Skagit County Planning and Development Services. On July 9, 2015, Skagit County Planning and Development Services issued a Notice of Development Application.

Skagit County determined that the proposed project may have a significant adverse impact on the environment, and therefore an EIS is required under the Revised Code of Washington (RCW) 43.21C.031. The Determination of Significance dated March 17, 2016, is included as Appendix 1-A, Determination of Significance.

## 1.4. ENVIRONMENTAL REVIEW PROCESS

Skagit County, as the lead agency, is overseeing the preparation of this EIS in accordance with SEPA. According to SEPA, an EIS must be prepared when the lead agency determines a proposal is likely to result in significant adverse environmental impacts. The SEPA environmental review process includes the steps in Figure 1-3.



**Figure 1-3: EIS Process**

### 1.4.1. EIS Scoping Process

The first step in the development of an EIS is called scoping. During the scoping process, agencies, tribes, local communities, organizations, and the public are invited to comment on factors that should be analyzed and considered in the EIS. Specifically, this proposed project's scoping process was intended to collect input on the following topics:

- Reasonable range of alternatives
- Potentially impacted resources and extent of analysis for those resources
- Potential measures to avoid, minimize, and mitigate impacts of the proposed project
- Potential cumulative impacts

The scoping period occurred between March 17 and April 15, 2016. The scoping process, including a summary of public meetings and comments received during public scoping, is documented in



the *Tesoro Anacortes Clean Products Upgrade Project Environmental Impact Statement Public and Agency Scoping Report* (Skagit County 2016b).

### **1.4.2. Draft EIS Preparation, Publication, and Review**

After scoping, a Draft EIS is then prepared using the results of the scoping process. The purpose of the Draft EIS is to provide an impartial discussion of significant environmental impacts and reasonable alternatives and mitigation measures that avoid or minimize the potential for adverse environmental impacts. The information in this Draft EIS is provided for review and comment by interested parties and will be used by Skagit County to evaluate the proposed project.

Skagit County will seek comments from agencies, tribes, local communities, organizations, and the public during a 45-day comment period from March 23 to May 8, 2017. During the comment period, a public hearing will be held on April 17, 2017, at the Anacortes High School. Comments will also be accepted by means of a post office box, in person at Skagit County, by an online open house, by e-mail, and by voicemail. Comments received during the comment period will be addressed in the Final EIS.

### **1.4.3. Final EIS Publication**

Following the comment period, the lead agency will issue the Final EIS. The Final EIS will address comments received during the comment period, and may include additional information and input received from Tesoro, the lead agency, other agencies with jurisdiction or concern, tribes, and the public regarding the proposed project. Skagit County and other agencies will use the Final EIS to inform permitting decisions.

### **1.4.4. Public, Agency, and Tribal Involvement**

Skagit County has provided many opportunities for the public; federal, state, and local agencies; tribes; and other interested parties to provide input on the proposed project. Specifically, Skagit County announced a scoping period via a press release to local news outlets, mailers, and e-mails to interested individuals and published ads online and in local papers. In addition, the County established a project website and hosted an online open house. The site was live throughout the public comment period and received more than 940 visits from 679 users. A public scoping meeting was held in Anacortes on March 31, 2016. Comments were accepted via an online open house, voicemail, email, verbal comments during the public meeting and written format (letters and comment forms). 2,503 comments were received through the various available methods (Skagit County 2016b).

Skagit County will seek further input from the public, agencies, and tribes during the Draft EIS comment period.

### **1.4.5. Federal, State, and Local Permits and Approvals**

After completion of the EIS, Tesoro will need to obtain permits and authorizations to construct and operate the proposed project. Agencies can use the EIS when making permitting decisions.

Table 1-1 provides a summary of the anticipated permits and approvals that would be needed to implement the proposed project.

**Table 1-1: Federal, State, and Local Permits and Approvals**

Permit/Authorization	Agency
<b><i>Federal</i></b>	
Section 10 of the Rivers and Harbors Act	U.S. Army Corps of Engineers
<b><i>State</i></b>	
Prevention of Significant Deterioration (PSD) Air Permit	Washington State Department of Ecology (Ecology)
Clean Water Act Section 401 Water Quality Certification	Ecology
National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit	Ecology
NPDES Industrial Wastewater Discharge Permit	Ecology
Coastal Zone Management Consistency	Ecology
Hydraulic Project Approval	Washington Department of Fish and Wildlife (WDFW)
Aquatic Use Authorization	Washington Department of Natural Resources (WDNR)
Nonattainment New Source Review (NANSR)	State of Washington
Washington State Operating Permit Regulation (WAC 173-401)	State of Washington
Superload Transport Permit	Washington State Department of Transportation (WSDOT)
<b><i>Local</i></b>	
Notice of Construction (NOC) Approval Permit	Northwest Clean Air Agency (NWCAA)
Critical Area Review	Skagit County
Skagit County Grading Permit	Skagit County
International Building Code (SCC 15.04) Permit	Skagit County
Shoreline Substantial Development Permit	Skagit County
Heavy haul and related Permits	Skagit County
Right-of-way Permit	Skagit County

Source: Tesoro 2016

SCC = Skagit County Code; WAC = Washington Administrative Code

## 1.5. DRAFT EIS ORGANIZATION

The second chapter of this Draft EIS describes the proposed project and alternatives considered. Chapters 3 through 13 each evaluate a specific resource. For each resource, the chapters describe the study area applicable to the resource, describe the affected environment, characterize potential impacts on that particular resource, and assess the significance of potential impacts. The study areas considered for the impact analysis for each resource are presented at the beginning of each resource section, and vary by resource. A summary of each chapter and the resource areas assessed follows:

- Chapter 1: Introduction—Provides an overview of the proposed project, the SEPA process, and the scope and methodology of the EIS analysis.
- Chapter 2: Proposed Action and Alternatives—Presents the details of the proposed project that are evaluated in the Draft EIS.

- Chapter 3: Geologic Resources—An evaluation of topsoils, subsoils, and topographic features that could be changed by the proposed project. An assessment of geological hazards (e.g., earthquakes) and terrestrial spills at the refinery is also included.
- Chapter 4: Air Quality and Climate Change—An evaluation of the types and amounts of chemicals emitted to the air from the proposed project’s new air emission sources. An evaluation of greenhouse gas emissions due to new sources and emissions in the event of a spill (terrestrial and marine spill) are also included.
- Chapter 5: Freshwater Resources—An evaluation of surface water, groundwater, and wetlands that could be impacted by the proposed project, including the potential for freshwater resources to be impacted by a terrestrial spill at the refinery.
- Chapter 6: Terrestrial Vegetation and Wildlife—An evaluation of terrestrial vegetation and wildlife present or in close proximity to the proposed project that might be impacted due to disturbance or wildlife habitat degradation or loss. Terrestrial wildlife refers to animals that predominantly live on land, but shorebirds, marine birds, and other waterfowl that use both terrestrial and aquatic habitats are included in this chapter. As such, an evaluation is also included of the proposed project activities of increased vessel traffic and the potential for both terrestrial and marine spills that might result in disturbance or habitat degradation or loss.
- Chapter 7: Marine and Nearshore Resources—An evaluation of resources that occur in predominantly saltwater systems that are not significantly diluted by freshwater runoff including marine vegetation and marine wildlife and their habitats. An evaluation is also included of the proposed project activities of increased vessel traffic and the potential for marine spills that might result in disturbance or habitat degradation or loss.
- Chapter 8: Energy and Natural Resources—An evaluation of the energy and natural resources that would be consumed in association with construction and operation of the proposed project, specifically electricity, natural gas, petroleum fuels (gasoline and diesel), water, and construction materials. An evaluation of the potential for energy and natural resources to be impacted by spills is also included.
- Chapter 9: Environmental Health—An evaluation of the human health impacts due to exposure to air emissions, increases in terrestrial vehicle traffic and noise, and exposure in the event of a terrestrial or marine spill.
- Chapter 10: Land and Shoreline Use—An evaluation of changes in land use and shoreline use, recreational areas and activities, and visual enjoyment of the lands and shorelines that could be impacted by the proposed project’s activities. An evaluation is also included of the proposed project activities of increased vessel traffic and the potential for both terrestrial and marine spills.
- Chapter 11: Social and Economic Environment—An evaluation of how the proposed project activities might impact housing, public services available in communities, and economic activity, including jobs or other livelihoods that may have social, and/or financial importance. Potential impacts to tribal resources and treaty rights, as well as environmental



justice, are included in this chapter. An evaluation is also included of the proposed project's activities of increased vessel traffic and the potential for both terrestrial and marine spills.

- Chapter 12: Cultural Resources—An evaluation of whether the proposed project activities might impact cultural resources that are potentially eligible for listing in, or are listed in, the National Register of Historic Places; locations with traditional value to Native American or other groups; cemeteries; and burial sites. An evaluation is also included of the proposed project activities of increased vessel traffic and the potential for marine spills that could impact cultural resources.
- Chapter 13: Marine Transportation—An evaluation of impacts related to marine transportation from the refinery wharf along the marine vessel transportation route to the Pacific Ocean. The chapter includes an analysis of vessel traffic, vessel safety, and potential marine spills—including spill modeling—from a marine vessel in transit or during a product transfer at the refinery wharf.
- Chapter 14: List of Preparers
- Chapter 15: Distribution List
- Appendices

## **1.6. SCOPE OF ANALYSIS**

The Draft EIS discusses potential direct, indirect, and cumulative impacts on the following resources:

- Geologic resources
- Air quality and climate change
- Freshwater
- Terrestrial vegetation and wildlife
- Marine and nearshore habitats
- Energy and natural resources
- Environmental health
- Land use and shoreline use
- Communities, housing, public services and the economy including tribal fisheries
- Cultural resources
- Marine transportation

The geographic scope of the Draft EIS varies between resources and depends on the mechanism of potential impact. For example, for some resources, the study area did not extend beyond the boundaries of the refinery, while other resources looked at impacts in the city of Anacortes, all of Skagit County, or the marine vessel transportation route through the Strait of Juan de Fuca to the open ocean. The edge of U.S. territorial waters in the Pacific Ocean, approximately 12 nautical

miles seaward of the entrance to the Strait of Juan de Fuca, was selected as the western boundary of the study area. This boundary was selected as an appropriate limit for the proposed project study area considering the size of the Pacific Ocean and the volume of international vessel traffic on the ocean. Global impacts due to climate change are considered in Chapter 4, Air Quality and Climate Change.

The scope also covers the period that includes both the construction and future operations of the proposed project.

## 1.7. METHODOLOGY

The impact assessment methodology used in this Draft EIS included the following approach for each resource area:

- A description of the study area and the methodology used to analyze potential impacts
- A description of the affected environment
- Identification and characterization of the potential impacts of the proposed project
- Assessment of the significance of potential adverse impacts
- Development of strategies to reduce or eliminate potential significant adverse impacts of the proposed project (i.e., mitigation)
- An assessment of cumulative impacts (the proposed project impacts combined with past, present, or reasonably foreseeable future impacts)

**Direct impacts** are caused by an action and occur at the same time and place as the action. Direct impacts can take place through direct interaction of an activity (e.g., construction or operation of the proposed project) with an environmental resource.

**Indirect impacts** are similar to direct impacts in that they are caused by the same action, but may occur later in time or be farther in distance from the activity causing the impact. A direct impact on one resource may result in an indirect impact on another (e.g., a direct impact on wildlife habitat could cause an indirect impact on recreational hunting opportunities).

**Cumulative impacts** are incremental impacts of an action when added to other past, present and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions (e.g., numerous small changes in land use could collectively lead to degradation of a watershed).

### 1.7.1. Direct and Indirect Impacts

Preparation of an EIS is an integrated process that identifies a project's potential adverse impacts on resources and develops mitigation measures to reduce potential significant adverse impacts. The characterization of impacts starts with understanding how environmental changes caused by a project might result in direct, indirect, and cumulative impacts on a particular resource. The methodology used for cumulative impacts is described in Section 1.7.2.

Potential impacts were determined through a public scoping process and by considering the proposed project's potential to impact a particular resource. A series of scoping meetings were conducted during the scoping period for the proposed project, with the public, tribes, and

government agencies providing verbal and written comments. Once a potential impact has been identified, the EIS assesses the characteristics of the potential impact by analyzing the magnitude, geographic extent, and duration of the impact and then assigning a significance of the impact based on the results of the analysis.

The SEPA rules define “significant” as something that has a *reasonable likelihood of more than a moderate adverse impact on environmental quality* (Washington Administrative Code [WAC] 197-11-794). Further, the definition for significance requires examining context and intensity (WAC 197-11-330) and *does not lend itself to a formula or quantifiable test as the context may vary with the physical setting*. Intensity depends on the magnitude and duration of the impact. SEPA states: “*The severity of an impact should be weighed along with the likelihood of its occurrence. An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.*” Based on these SEPA requirements, the characterization of potential adverse impacts accounted for the following parameters:

- Positive or negative: Whether the potential impact would be positive or negative (adverse)
- Magnitude or intensity: The size or scale of the impact, including an assessment of the sensitivity, vulnerability, and/or importance of the resource or receptor impacted
- Geographic extent: The geographic area or the full area over which the impact would occur for each resource
- Duration or frequency: The temporal scope of the impact, including short-term and/or temporary impacts such as during construction or long-term and/or permanent impacts during operation

Based on the characteristics of the impact, the significance of each potential adverse impact is then assigned to one of two categories: *less than significant* or *potentially significant*.

Criteria for assessing the significance of potential adverse impacts from the proposed project were developed for each resource in the Draft EIS and are included in Appendix 1-B, Impact Criteria Tables.

If potentially significant adverse impacts were identified, after accounting for embedded controls (project design features and best management practices [BMPs]) that would be implemented as part of the proposed project, the need for additional mitigation measures was considered for recommendation according to SEPA mitigation hierarchy as follows:

- Avoid the impact
- Minimize the impact (e.g., reduce the magnitude, change technology)
- Rectify the impact (e.g., restore damaged environment)
- Reduce the impact over time
- Compensate for the impact
- Monitor the impact and take corrective measures

A discussion of the no action alternative (see Chapter 2, Proposed Action and Alternatives) is included in each resource section.

The above analysis approach was used for the anticipated planned activities or events that would occur during the construction and operation of the proposed project. This Draft EIS also examines the impacts for unplanned events. Unplanned events are not intended, but could occur as a result of the proposed project activities. For example, a spill of xylenes or reformat to the marine environment due to a vessel collision is an unplanned event. Other examples of unplanned events include fire and natural disasters like earthquakes or tsunamis.

The impacts from unplanned events are assessed for their magnitude, extent, and duration, just as for planned activities. In addition, if the impact of the unplanned event is potentially significant, unplanned events are also evaluated for how likely they are to occur. Where the likelihood was evaluated, the likelihood of an event occurring was assigned using a qualitative scale of probability categories described as follows:

- Negligible: The event is possible, but improbable; occurs only very rarely; or is very unlikely to occur during the life of the project except as an extreme deviation from normal operating conditions.
- Low: The event is possible, but unlikely to occur; occurs rarely; has a remote chance of occurring; or is unlikely to occur during the life of the project except as a deviation from normal operating conditions.
- Medium: While not planned, the event is expected to occur at some point in time; or is likely to occur sporadically or several times over the life of a project during normal operating conditions.
- High: The event would occur during normal operating conditions, and has the potential to occur frequently or continuously over the life of the project during normal operating conditions.

Unplanned events assessed in this Draft EIS include natural disasters (earthquakes and tsunamis), fires, spills within the refinery, and spills in the marine environment.

### **1.7.2. Cumulative Impacts**

Cumulative impacts are changes to resources that can occur when the potential impacts of one project are considered in combination with impacts from other past, current, or new projects (including other actual proposals and future proposals). The Washington State Department of Ecology (Ecology) provides guidance on defining “cumulative impacts” with reference to the federal definition under the National Environmental Policy Act (NEPA): “cumulative impact” is not defined in state rules, but it is defined under federal rules implementing NEPA as an “impact on the environment which results from the incremental impact of the action when added to other

past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.”<sup>1</sup>

Cumulative impacts are assessed by: 1) identifying the geographic extent for each resource; 2) determining the timeframe in which the potential cumulative impacts could be expected to occur; and, 3) identifying reasonably foreseeable future projects for each resource. The cumulative impacts analysis is presented at the end of each resource chapter.

#### ***1.7.2.1. Identification of Geographic Extent and Timeframes***

The geographic extent includes the area potentially impacted by the proposed project. For many resources (e.g., geologic, land use, and shoreline use), the geographic extent primarily consists of the proposed project footprint and immediate surrounding areas as described in Chapter 2, Section 2.1, Overview of Proposed Action. However, for some resources (e.g., air and marine resources), the geographic extent is more expansive. Chapters 3 through 13 describe the potential impacts of the proposed project to various resources, and explain the geographic areas where the proposed project could potentially impact those particular resources.

The timeframe in which proposed project impacts could be expected to occur includes the duration of construction and operation activities (i.e., the overall project lifespan). The proposed project lifespan is estimated to be 20 years. Since an analysis of cumulative impacts must also take into account past actions, the timeframe considered for purposes of this assessment includes the proposed project lifespan of 20 years, as well as the number of years Tesoro has been operating the facility (since 1998), or approximately 19 years prior to the preparation of this Draft EIS.

#### ***1.7.2.2. Identification of Projects/Actions***

Refinery development on March Point began in 1953 with the construction of the Shell and Texaco refineries. According to the City of Anacortes Comprehensive Plan as well as a review of historic aerial photos, past projects and associated actions on March Point over the past six decades have consisted primarily of refinery development and operation activities including land grading, facility construction, and other associated activities. As explained in Chapter 10, Land Use and Shoreline Use, the city of Anacortes has adopted a Heavy Manufacturing Use District (HM) designation for March Point. The HM zoning applicable to March Point allows a variety of manufacturing uses at the refinery and surrounding lands. In addition to the Shell Puget Sound Refinery, other existing land uses on March Point include industrial manufacturing and fabrication facilities, a chemical manufacturing facility, and a cogeneration plant.

Any permanent impacts as a result of the past projects and actions addressed above that could contribute to significant cumulative impacts have been taken into consideration in describing the current/baseline conditions for each resource addressed in this Draft EIS. These discussions are included in the Affected Environment section of each resource-specific chapter.

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<sup>1</sup> This definition was cited with approval by the Washington Court of Appeals. See *Gebbers v. Okanogan PUD No. 1*, 144 Wn. App. 371 (2008) (Ecology 2016a).



Present and reasonably foreseeable projects or actions were identified that could result in similar impacts as those anticipated for the proposed project. Table 1-2 summarizes present and future actions that, in combination with the proposed project, could potentially result in cumulative impacts. Because of the global nature of greenhouse gas (GHG) emissions and climate change impacts, they are evaluated based on emissions trends for the state of Washington, the U.S., and globally.

**Table 1-2: Reasonably Foreseeable Future Projects and Actions Identified for Cumulative Impacts Analysis**

<b>Project Name</b>	<b>Location</b>	<b>Description</b>	<b>Resources Potentially Impacted</b>
Trans Mountain Pipeline Expansion	Strathcona County, Alberta to Burnaby, British Columbia	“Twinning” an existing crude oil pipeline would increase the capacity of the system from 300,000 bpd to 890,000 bpd. The project would result in approximately 34 tankers per month loaded at the Westridge Marine Terminal/Kinder Morgan pipeline expansion project in Burnaby, British Columbia. That terminal currently handles about five tankers per month. Tankers associated with this expansion could impact marine vessel traffic for xylene tankers associated with the project near the western portion of the Strait of Juan de Fuca by increasing the overall volume of tanker traffic compared to current levels. The Trans Mountain vessel route would diverge from Tesoro’s proposed project’s marine vessel transportation route at a point in the Strait of Juan de Fuca that is between the mouth of the Lower Elwha River and Port Angeles.	Marine and Nearshore Resources; Land and Shoreline Use; Marine Transportation
BP Cherry Point Dock	Ferndale, Washington	Marine vessel traffic associated with the BP Cherry Point Dock navigates through the Strait of Juan de Fuca, the Rosario Strait, and the area surrounding Cherry Point, Washington. The May 2014 Draft Environmental Impact Statement for the project assessed the incremental risk for operating the dock with two berths (a northern berth and a southern berth) and indicated that the maximum potential increase in marine vessel traffic associated with operating two berths as opposed to one was 85 vessels per year. According to the project’s Draft EIS, an annual average of 321 vessel calls occurred at the Cherry Point dock from January 1998 through December 2010. The Draft EIS outlined three marine vessel traffic forecasts based on potential future crude oil and refined product market conditions. The highest range forecast for marine vessel traffic associated with the BP Cherry Point Dock would be between 350 and 420 vessels per year through 2030, which would be an increase of up to 85 vessels per year above the current maximum.	Marine and Nearshore Resources; Land and Shoreline Use; Marine Transportation; Economics

Project Name	Location	Description	Resources Potentially Impacted
Tesoro Savage Vancouver Energy Distribution Terminal Facility	Vancouver, Washington	This project is a proposed crude oil terminal on the Columbia River. The facility would be capable of receiving 360,000 bbl of crude oil per day for storage on site and loading onto marine vessels for delivery to refineries, potentially including those in the states of Alaska, Hawaii, California, and Washington. Marine vessel calls on the Columbia River associated with this project would range from 345 to 365 per year, or approximately one per day. The number of vessels, if any, that could contribute to traffic in the same waters as the proposed Tesoro Anacortes facility is unknown.	Marine Transportation; Air
Pacific International Terminals Gateway Pacific Terminal (Cherry Point)	Whatcom County, Washington	This project is a proposed deepwater marine terminal for commodity export purposes, primarily coal. The proposed terminal would be capable of exporting up to 54 million metric tons of commodities per year, with a maximum of 487 vessel calls per year. Marine vessels carrying coal and other commodities from the terminal would navigate some of the same waters as ships associated with the Tesoro Anacortes facility. Pacific International Terminals submitted applications to Whatcom County and other agencies; however, the EIS process was suspended on April 1, 2016 through May 15, 2016 at the applicant's request. On May 9, 2016, the Seattle District U.S. Army Corps of Engineers announced that the project, as then proposed, could not be permitted as they determined that potential impacts on the Lummi Nation's fishing rights would be greater than <i>de minimis</i> .	Marine and Nearshore Resources; Land and Shoreline Use; Marine Transportation; Economics

Sources: Bernton 2016; Trans Mountain Undated; USACE 2014; Washington Energy Facility Site Evaluation Council 2015; Ecology 2016b; USACE 2016a, 2016b

## 1.8. REFERENCES

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