



**TO:** Elizabeth Pauli, City Manager  
**FROM:** Peter Huffman, Director, Planning and Development Services *PA*  
Stephen Atkinson, Principal Planner, Planning and Development Services  
**SUBJECT:** Tideflats Interim Regulations Study Session Presentation – September 22, 2020  
**DATE:** September 16, 2020

On Tuesday, September 22, 2020, Planning and Development Services staff will present an overview of the Tideflats Interim Regulations and the proposed schedule for re-authorization, as well as an update on permit activity and fossil fuel trends. The Tacoma Municipal Code, consistent with State law, requires that the City Council re-authorize the interim regulations every 6-months subsequent to the initial 1-year authorization period. At the time of re-authorization, the City Council may also consider amendments to the ordinance.

**BACKGROUND:**

On May 9, 2017, the City Council adopted Resolution No. 39723 initiating a subarea planning process for the Port/Tideflats area. In addition, the resolution requested the Planning Commission consider the need for interim regulations in the Tideflats area while the subarea planning process is under way.

The Planning Commission determined that interim regulations were warranted, and on October 4, 2017, the Commission forwarded its recommendation to the City Council for consideration. In support of their deliberation, the Commission conducted a public hearing, at which 81 people testified, and reviewed over 200 written comments.

Following its own public hearing, and substantial community input and deliberation, the City Council, on November 21, 2017, adopted the Tideflats Interim Regulations by Amended Ordinance No. 28470. Since the initial adoption of the Interim Regulations, the City Council has taken the following actions to extend the ordinance:

- November 13, 2018: Ordinance No. 28542 – 6-month Extension
- May 21, 2019: Ordinance No. 28582 – 6-month Extension
- November 12, 2019: Ordinance No. 28619 – 6-month Extension
- May 19, 2020: Ordinance No. 28671 – 6-month Extension

The current ordinance is set to expire on December 2, 2020.

**SUMMARY OF THE INTERIM REGULATIONS:**

The Tideflats Interim Regulations consist of the following elements, which are further described in Attachment A:

- Category 1: Expanded public notification of heavy industrial use permits;
- Category 2: Temporary prohibition of new non-industrial uses in the Port of Tacoma Manufacturing and Industrial Center;
- Category 3: Temporary prohibition of new residential development along Marine View Drive and NE Tacoma slopes; and
- Category 4: Temporary prohibition on certain types of new heavy industrial uses.



**PROPOSED SCHEDULE FOR REAUTHORIZATION:**

DATE	EVENT
September 22	<b>City Council</b> – Study Session on the proposed 6-month extension of the interim regulations and periodic reporting on permit activity and fossil fuel trends
September 29	<b>City Council</b> – Public Hearing on the proposed 6-month extension of the current interim regulations
October 13	<b>City Council</b> – Study Session to discuss public testimony and written comments and provide guidance on any potential modifications to the ordinance <b>City Council</b> – First Reading of Ordinance
October 20	<b>City Council</b> – Final Reading of Ordinance
December 2	Current ordinance expires

**PERIODIC REPORTING:**

To support the City Council’s ongoing review of the Tideflats Interim Regulations, Attachment B provides the following additional information which will be presented on September 22, 2020, during the City Council Study Session:

- Updated permit activity
- Statewide fossil fuel trends
- City of Tacoma fossil fuel trends and facilities

**ADDITIONAL INFORMATION:**

The following links provide additional information on the Interim Regulations and related Subarea Plan.

- Interim Regulations: [www.cityoftacoma.org/tideflatsinterim](http://www.cityoftacoma.org/tideflatsinterim). This page includes the full public record of the adoption of the Tideflats Interim Regulations.
- Interactive Map: <https://wspdsmap.cityoftacoma.org/website/PDS/TIR/>. This map enables a parcel search to determine if the interim regulations may apply to a specific property.
- Tideflats Subarea Plan: [www.cityoftacoma.org/tideflatsplan](http://www.cityoftacoma.org/tideflatsplan). This page includes information on the Tideflats Subarea Plan and relevant background information.

For more information, please contact Stephen Atkinson, Principal Planner, at (253) 591-5531 or [satkinson@cityoftacoma.org](mailto:satkinson@cityoftacoma.org).

Attachment

- A. Tideflats Interim Regulations Summary
- B. Tideflats Interim Regulations Periodic Data Reporting



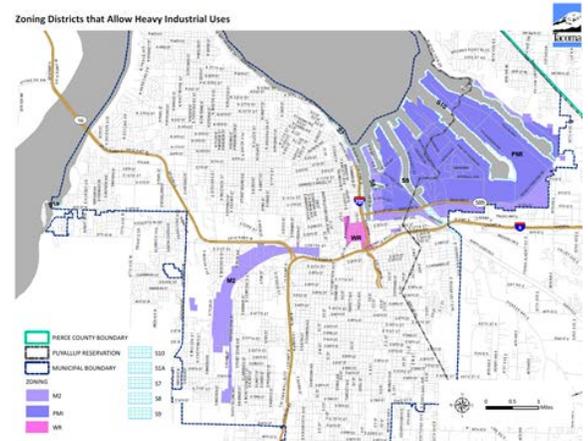
# Tideflats Interim Regulations

On November 21, 2017, the Tacoma City Council adopted Amended Ordinance No. 28470 - *Tideflats Interim Regulations*. The Interim Regulations have subsequently been extended on four occasions. Provided below is a summary of the Ordinance.

## What do the Tideflats Interim Regulations do?

### Expanded Notification for Heavy Industrial Uses

- These amendments expand public notification of heavy industrial use permits to taxpayers and interested parties.
- The taxpayer notification distances increase from 1000 feet to 2500 feet from the site of the proposal. For projects located within a designated manufacturing and industrial center (M/IC), the 2500-foot notification distance is measured from the boundary of the applicable center.
- This expanded notification applies to all heavy industrial projects city-wide that require a discretionary permit (such as a conditional use permit) or SEPA determination.



Map above: Zoning Districts that Allow Heavy Industrial Uses.

### Non-industrial Uses in the Port of Tacoma Manufacturing/ Industrial Center (M/IC)

- Certain new non-industrial uses are prohibited in the City's Heavy Industrial zoning districts (M-2 and PMI) within the Port of Tacoma M/IC, including:
  - Destination/high intensity parks and recreation,
  - Agriculture,
  - Residential uses,
  - Hospitals,
  - Airports,
  - Schools (K-12),
  - Retail,
  - Cultural institutions, and
  - Care facilities.
- Existing non-industrial uses may expand and are not subject to limitation.



Map above: Port of Tacoma Manufacturing and Industrial Center.



Planning and Development Services

City of Tacoma, Washington

Peter Huffman, Director

[www.cityoftacoma.org/planning](http://www.cityoftacoma.org/planning)

#### Staff Contact

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[satkinson@cityoftacoma.org](mailto:satkinson@cityoftacoma.org)

[www.cityoftacoma.org/tideflatsinterim](http://www.cityoftacoma.org/tideflatsinterim)

## Marine View Drive Residential Development Restrictions

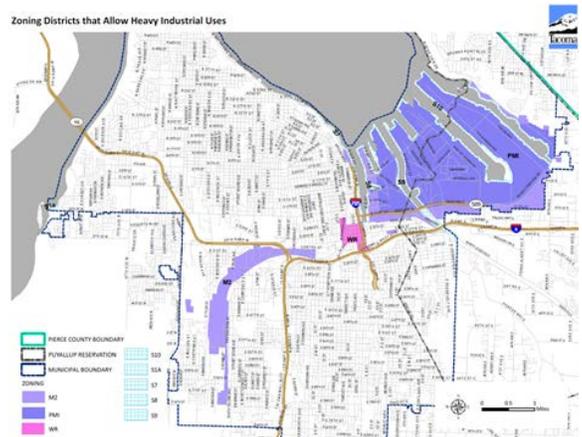
- These regulations pause all new residential platting and subdivision of land along Marine View Drive and the adjacent hillside.
- Property owners in the R-1 and R-2 single family zoning districts will be allowed to build a single residential unit on existing legal lots.
- New construction requires a notice on title regarding the proximity of the residential building to heavy industrial uses.



Map above: Area of Applicable Residential Development Restrictions.

## Heavy Industrial Zoning

- These interim regulations pause the establishment of the following new heavy industrial uses citywide:
  - Coal terminals and bulk storage facilities,
  - Oil or other liquefied fossil fuel terminals, bulk storage, manufacturing, production, processing or refining,
  - Chemical Manufacturing,
  - Mining and quarrying,
  - Smelting.
- Existing uses may expand under current permit procedures and land use standards.



Map above: Zoning Districts that Allow Heavy Industrial Uses.

## Proposed Schedule for Reauthorization

The Interim Regulations may be re-authorized by the City Council every 6 months thereafter until the Tideflats Subarea Plan is completed. The following is a tentative schedule for re-authorization of the Tideflats Interim Regulations:

DATE	EVENT
September 22	<b>City Council</b> – Study Session on the proposed 6-month extension of the interim regulations and periodic reporting on permit activity and fossil fuel trends
September 29	<b>City Council</b> – Public Hearing on the proposed 6-month extension of the current interim regulations
October 13	<b>City Council</b> – Study Session to discuss public testimony and written comments and provide guidance on any potential modifications to the ordinance <b>City Council</b> – First Reading of Ordinance
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**Attachment B:**  
**Tideflats Interim Regulations**  
**Periodic Reporting**

City of Tacoma  
Planning and Development Services  
September 22, 2020

## Section A: Permit Activity

**1. The Interim Regulations allow existing uses to expand, subject to existing development regulations and permit requirements. As part of the periodic reporting, the City Council has requested information on permit activity for existing fossil fuel industries and whether that permit activity has resulted in an expansion of storage or production capacity. The following is a summary of staff findings.**

### Seaport Sound Terminal (formerly Targa)

Permit Activity: Seaport Sound Terminal has applied for multiple permits during the interim period, including:

- December 2016 – Seaport Sound Terminal was permitted for piling replacement and pier modifications that resulted in an expansion of overwater coverage. This shoreline permit was approved prior to the Interim Regulations.
- November 2019 – Seaport Sound Terminal was permitted for four new rail spurs on the Taylor Way property that expanded the number of rail car unloading stations onsite from 36 to 68.
- July 2020 – Seaport Sound Terminal has applied for permits to demolish existing refinery equipment and replace it with new storage tanks. The proposal would result in a net increase of 166,000 barrels of bulk fuel storage onsite.

Staff Finding: The projects will result in an increase in the operational capacity of the facility long-term, subject to additional permitting, and an immediate increase in the volume of bulk fuels stored at the site.

### U.S. Oil and Refining

Permit Activity: Prior to the interim regulations taking effect, U.S. Oil and Refining applied for permits to convert a portion of the existing facility to ethanol production and mixing of biofuels. U.S. Oil permits during the interim period include a Commercial Alteration to install a new foundation, support structure and containment for two product transfer pumps.

Staff Finding: No capacity expansion has been permitted during the interim period by the City of Tacoma.

### NuStar Energy

Permit Activity: No significant permit activity during the interim period.

Staff Finding: No capacity expansion has been permitted during the interim period by the City of Tacoma.

### Phillips 66

Permit Activity: No significant permit activity during the interim period.

Staff Finding: No capacity expansion has been permitted during the interim period by the City of Tacoma.

### Pacific Functional Fluids

Permit Activity: No significant permit activity during the interim period.

Staff Finding: No capacity expansion has been permitted during the interim period by the City of Tacoma.

Puget Sound Energy – LNG Facility

Permit Activity: Puget Sound Energy, Inc. (PSE) is in the process of constructing a natural gas liquefaction and storage facility in the Tideflats. The project was permitted prior to the interim regulations taking effect and as such is considered an existing use under the City’s land use codes. Additional building and mechanical permits for the facility have been issued during the interim period, including an office conversion, interior remodel, right-of-way permits for fencing, and other operations.

Staff Finding: No capacity expansion beyond that which was considered as part of the initial environmental review has been permitted during the interim period by the City of Tacoma.

**2. The interim regulations adopted by the City Council prohibit the establishment of certain types of new uses and development activity. As part of the periodic extension of the interim regulations, the City Council has requested information on potential uses or development activity that have been prohibited as a result of the interim regulations. The following is a summary of staff findings.**

Residential use and development along Marine View Drive and NE Tacoma – Staff continues to receive inquiries from property owners who are subject to limitations on new residential development who have expressed a desire to develop these properties. In addition, the City Council has received public testimony throughout the initial adoption and subsequent extensions of the interim regulations, from residential property owners who have expressed interest in developing these properties and who have been impacted by the interim regulations.

Heavy Industrial uses (oil and other fossil fuel facilities, chemical manufacturing, smelting, mining and quarrying, and coal facilities) – Staff is aware of at least two inquiries for potential new use and development in the Tideflats that are currently prohibited under the interim regulations. These include:

- Oil transloading facility
- Chemical manufacturing facility

## Section B. Statewide Fossil Fuel Trends

**Figure B.1: Bulk Oil Moved in Washington State**

According to the U.S. Energy Information Administration, “Washington is a major crude oil refining center with the fifth-largest refining capacity of any state in the nation (<https://www.eia.gov/state/analysis.php?sid=WA>).” Every year, according to the Department of Ecology, over 20 billion gallons of oil is transported through the state via vessel, rail, and pipeline. Oil transported via rail is generally originating in North Dakota (83%), Alberta (12% and Saskatchewan (5%) and is predominantly entering the state from Eastern Washington, passing by major waterways including the Columbia River and Puget Sound, following the I-5 Corridor north. Oil transported via pipeline is predominantly entering the state from British Columbia and south along the I-5 Corridor to refineries in Cherry Point, Ferndale, Anacortes, and Tacoma, as well as destinations south of Washington State.

According to the Department of Ecology, oil transport via rail is a recent phenomenon:

“Historically, 90 percent of crude oil for refining was imported to Washington by vessel and pipeline. New technologies in oil fields in Canada, North Dakota, Montana, and other states mean the U.S. now produces the majority of its own refined oil products.

In 2012, the increase in U.S. oil production strained the capacity of existing oil pipeline infrastructure and caused a sudden shift in the supply chain to transporting oil by rail.”



### Statewide Facilities

- WA has five crude oil refineries and one biorefinery
- 21,000 miles of natural gas and hazardous materials pipelines
- 5,000 vessels transit waters annually
- 3100 miles of railroad tracks that could potentially transport oil

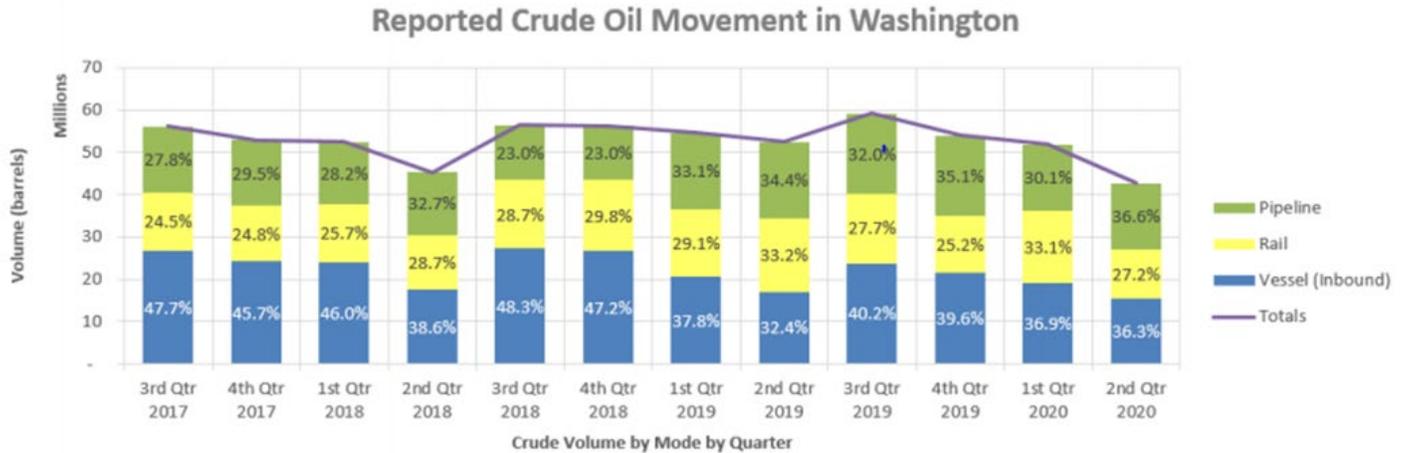
Source Data:  
Department of Ecology Crude Oil Movement Quarterly Reports;

<https://ecology.wa.gov/Spills-Cleanup/Spills/Oil-spill-prevention>

Figure A.1 Source:  
<https://www.psrc.org/sites/default/files/fmrt201704-ho-oiltransposafetyact.pdf>

**Figure B.2: Reported Crude Oil Movement in Washington State**

The following figure depicts crude oil volume by mode of transport from the 3<sup>rd</sup> quarter of 2017 (the Tideflats Interim Regulations were adopted in the 4<sup>th</sup> quarter of 2017) to the 2<sup>nd</sup> quarter of 2020, ending on June 30.



Staff observations:

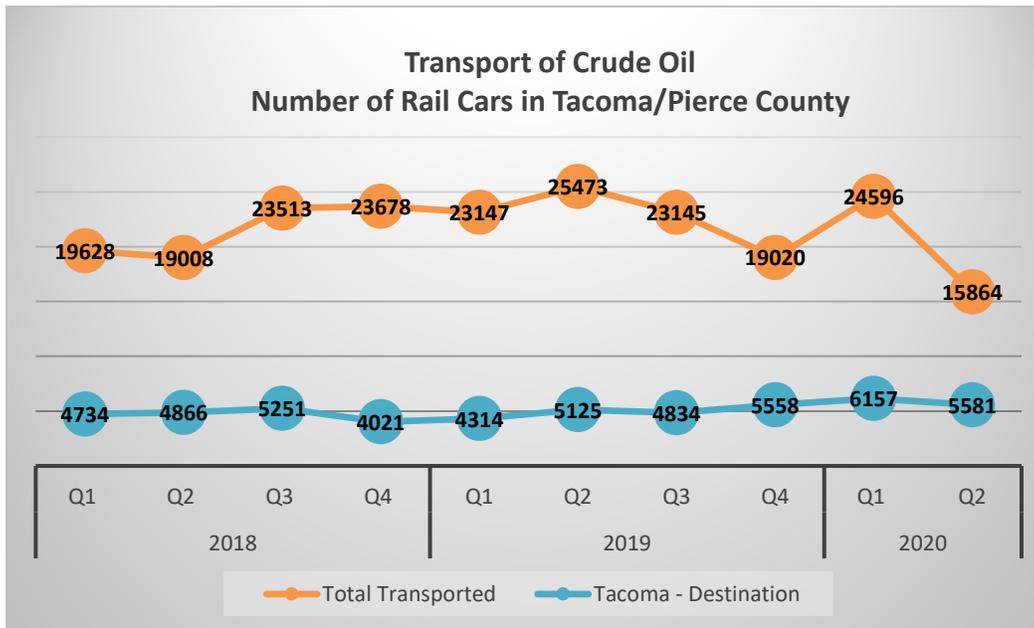
- Overall oil movement by volume peaked in the 3<sup>rd</sup> quarter of 2019;
- The share of crude oil delivered by inbound vessel has decreased while rail and pipeline volumes have increased;
- The second quarter of 2020 shows a significant decrease in overall oil movement corresponding to the time period most impacted by the COVID-19 pandemic and economic downturn;
- Generally, while there are quarterly fluctuations, there appears to be an overall upward trend in oil movement in the state.

## SECTION C: Tacoma Citywide Trends

### Mode: Rail

**Figure C.1: Transport of Crude Oil in Tacoma/Pierce County, by number of Rail Cars**

The following data shows the trend line for the total number of rail cars transporting crude oil through the City of Tacoma and the estimated number of those rail cars that are delivering crude oil to facilities located in the City of Tacoma.

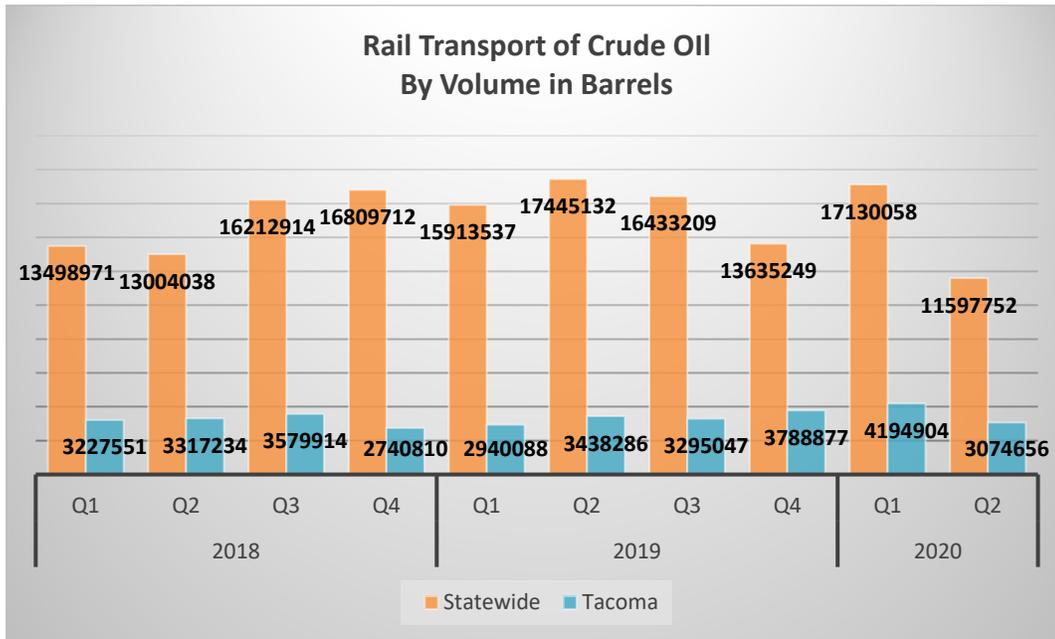


#### Staff Observations:

- The data shows an upward trend in overall rail transport from the 1<sup>st</sup> quarter of 2018 and peaking in the 2<sup>nd</sup> quarter of 2019.
- The City of Tacoma experienced an increase in the number of rail cars delivering to local facilities between the 4<sup>th</sup> quarter of 2018 and peaking in the 1<sup>st</sup> quarter of 2020.
- The decrease in the 2<sup>nd</sup> quarter of 2020, ending on June 30, corresponds to the time period most impacted by the COVID-19 pandemic and economic downturn.

**Figure C.2: Rail Transport of Crude Oil Volume (Barrels)**

The following data depicts the estimated volume of oil transported statewide as well as the volume of oil delivered to facilities located within the City of Tacoma.



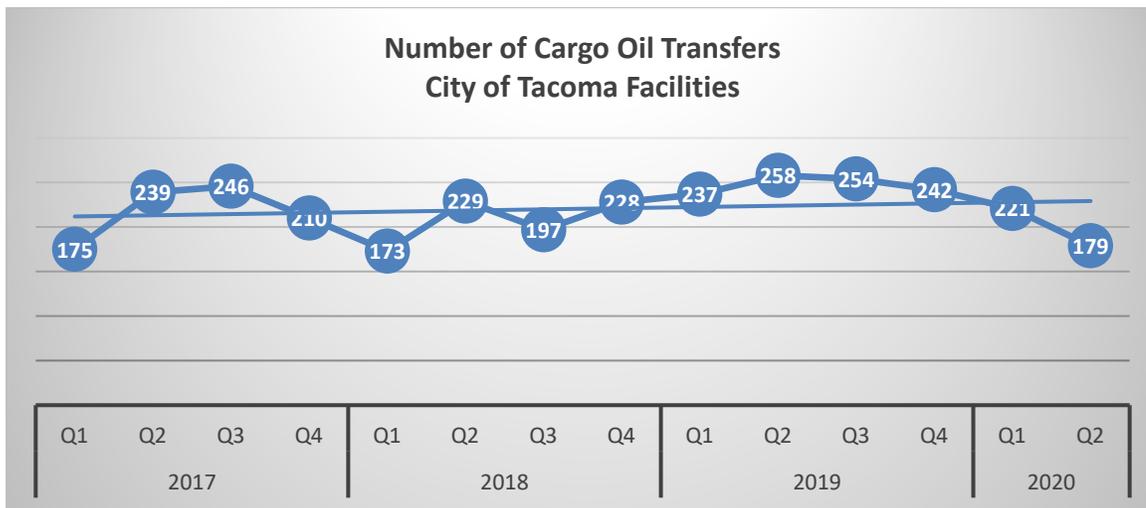
**Staff Observations:**

- The volume of oil delivered to facilities in the City of Tacoma peaked in the first quarter of 2020.
- The volume of oil delivered to facilities in the City of Tacoma have generally increased since the 4<sup>th</sup> quarter of 2018.
- The decrease in the 2<sup>nd</sup> quarter of 2020, ending on June 30, corresponds to the time period most impacted by the COVID-19 pandemic and economic downturn.

## Mode: Vessel Transfers

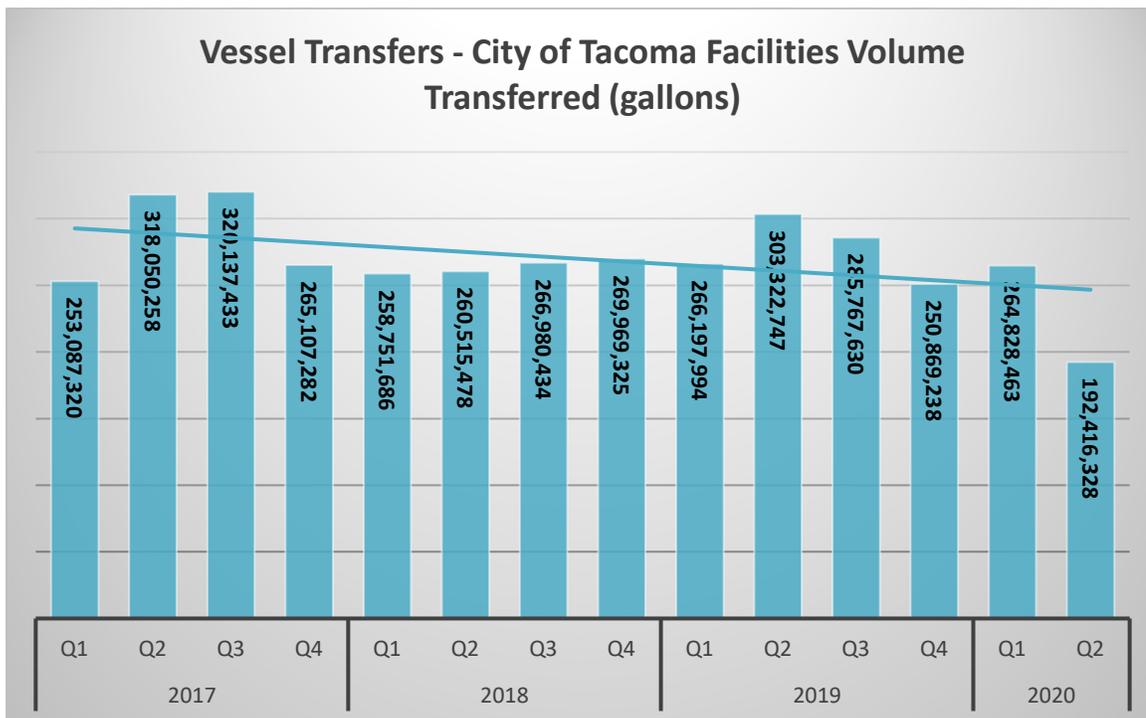
**Figure C.3: Vessel Transfers, inbound and outbound to City of Tacoma Facilities.**

The following data shows the frequency of vessel transfers of crude oil cargo, both inbound and outbound from City of Tacoma facilities.



**Figure C.4: Vessel Transfers, by volume, to City of Tacoma Facilities.**

The following data shows the volume of oil transferred between vessels facilities in the City of Tacoma Tideflats.



Staff observation:

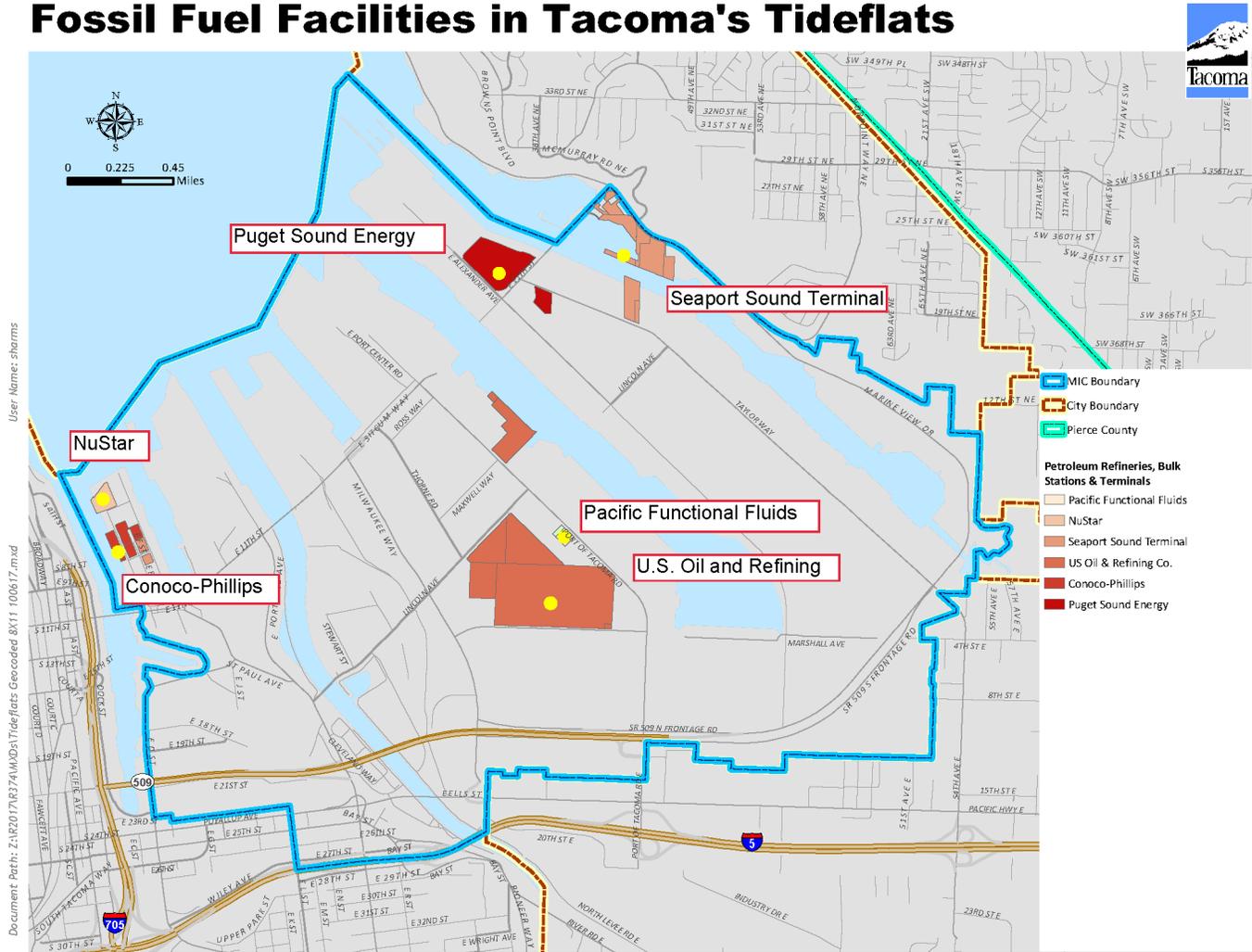
- While the overall frequency of vessel transfers has remained steady, with a slight increase over time, the overall volume of crude oil transferred by local facilities has decreased. This shift mimics the statewide shift towards a greater volume share transported via pipeline and rail.

# Section D. Tidelands Fossil Fuel Storage, Refinement and Processing Facilities

The City of Tacoma's tidelands are home to six fossil fuel storage, refinement, and processing facilities. These include:

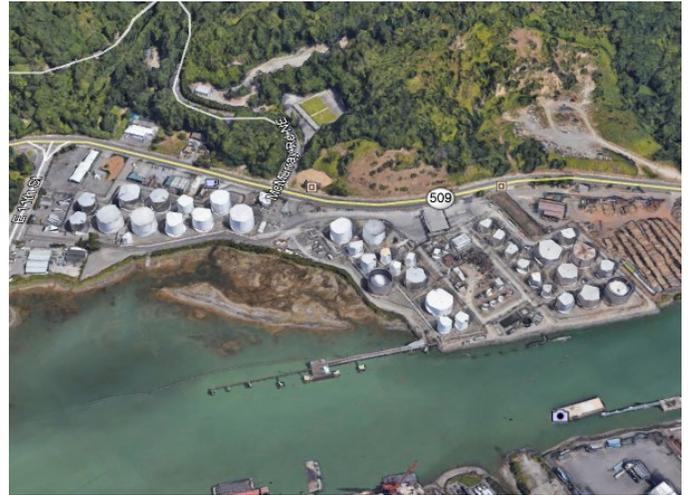
1. Seaport Sound Terminal
2. U.S. Oil and Refining
3. Conoco-Phillips
4. NuStar
5. Puget Sound Energy
6. Pacific Functional Fluids

## Fossil Fuel Facilities in Tacoma's Tidelands



## 1. Seaport Sound Terminal (TARGA)

**Facility Description:** “SeaPort Sound Terminal provides bulk liquid storage of petroleum, petroleum products, and renewable fuels. It is accessible by water, rail, pipeline, and truck and offers on-water diesel, a five-lane truck rack, oily water treatment, transmix, specialty blending, and rail car logistics. The Facility ... is two distinct parcels separated by the Hylebos Waterway. The main Facility is a 33-acre loading terminal with 52 aboveground storage tanks (ASTs), a 5-lane truck loading rack, an 800-ft tug and vessel fueling pier, and old un-used refining equipment. The topography is relatively flat. Each tank storing petroleum products is surrounded by secondary containment, and drainage is controlled by valves and piping with ultimate discharge to the Hylebos Waterway to the southwest. The second parcel is a 6-acre rail offload area with 36 rail spots located on the southwest side of the Hylebos Waterway. A pipeline under the Hylebos Waterway sediment transports fuel from the rail offload area to the terminal.”



**Source:** Seaport Sound Terminal LLC, “Spill Prevention, Control, and Countermeasure Plan,” December 2018.

**Tanks:** 52 tanks

**Storage Capacity:** 1,362,460 barrels

**Products/materials:** Diesel, gasoline, additives, ethanol

**Modes served:** Vessel, rail, pipeline, and truck.

**Truck Facilities:** 5 lanes

**Dock Data:** 800’ tug and vessel fueling pier.

## 2. U.S. Oil and Refining

**Facility Description:** “U.S. Oil & Refining Co.'s (USOR) Tacoma Refinery (NAICS Code 32411) is a continuous processing plant with 42,000 barrels (bbl) per day crude oil charge rate capacity. Products produced at the refinery include gasoline, jet fuel, diesel fuel, marine fuel oils, gas oils (intermediate product), as well as emulsified, medium curing and road asphalts. The refinery has storage capacity for approximately 2.8 million barrels of crude oil and refined products.

**Source:** “Facility Oil Spill Prevention, Control, and Countermeasures Plan Submittal Agreement for U.S. Oil & Refining Co., (2018)”

**Storage Capacity:** 2.8 million barrels of crude oil and refined products.



**Products/materials:** Gasoline, jet fuel, diesel fuel, marine fuel oils, gas oils, asphalts.

**Modes served:** Vessel, rail, pipeline, and truck.

**Average Daily Throughput:** 42,000 barrels per day

### 3. Conoco-Phillips

**Facility Description:** “The Tacoma Terminal is a 24-hr bulk storage and distribution terminal for finished products. Petroleum products (gasoline and mid-distillates) and additives are delivered to, stored at, and distributed from the terminal. Products are received by pipeline and barge, and distributed by tank trucks. The majority of the petroleum product is received through the Olympic Pipeline, with an average receipt range of 1,500-2,000 bph. Ethanol and gasoline additives are received at the terminal by tank trucks.”

**Source:** <https://www.phillips66pipeline.com/am-site/media/tacoma-renton-terminal-erap-2.pdf>



**Tanks:** 18 tanks

**Storage Capacity:** 298,809 barrels

**Products/materials:** Diesel, gasoline, additives, ethanol

**Modes served:** Pipeline, Vessel, and Trucks

**Truck Facilities:** 4 lanes

**Dock Data:** Draft: 26 feet; LOA: 450 feet; Loading rate 3,000-4,000 bph;  
Unloading rate: 7,000 bph

**Average Daily Throughput:** 504,000 gallons of bulk petroleum products

## 4. NuStar

**Source:**

[http://www.nustarenergy.com/Business/AssetSheets?assetid=TR\\_TAC\\_WA&assettype=Storage](http://www.nustarenergy.com/Business/AssetSheets?assetid=TR_TAC_WA&assettype=Storage)

**Tanks:** 15 tanks

**Storage Capacity:** 377,000 barrels

**Products/materials:** Gasoline, Aviation fuels, Diesel, Ethanol, Fuel Oils

**Modes served:** Barge, Pipeline, Rail, Truck, Vessel

**Truck Facilities:** 4 lanes

**Dock Data:** Draft: 26 feet; LOA: 450 feet; Loading rate 3,000-4,000 bph; Unloading rate: 7,000 bph

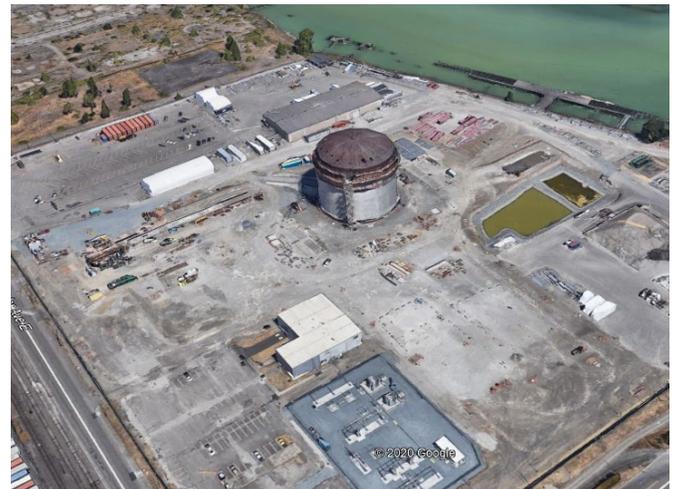


## 5. Puget Sound Energy LNG Facility

**Facility Description:** “The facility would chill natural gas to produce approximately 250,000 gallons of liquefied natural gas (LNG) daily for use as a reduced-emissions fuel for marine vessels and land-based vehicles, as well as for utility peak shaving during periods of high demand. A single eight-million gallon, non-pressurized full-containment LNG storage tank consisting of an inner nickel-steel tank and an outer concrete tank with interstitial insulation, would be located on the site. The facility would also include infrastructure for loading marine vessels with LNG from a new fueling platform and mooring dolphins to be installed on the Blair Waterway.”

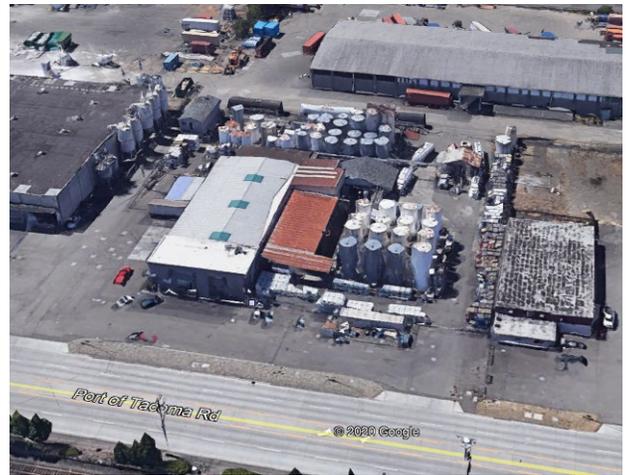
**Source:**

[https://www.cityoftacoma.org/government/city\\_departments/planning\\_and\\_development\\_services/planning\\_services/pse\\_proposed\\_tideflats\\_lng\\_facility](https://www.cityoftacoma.org/government/city_departments/planning_and_development_services/planning_services/pse_proposed_tideflats_lng_facility)



## 6. Pacific Functional Fluids

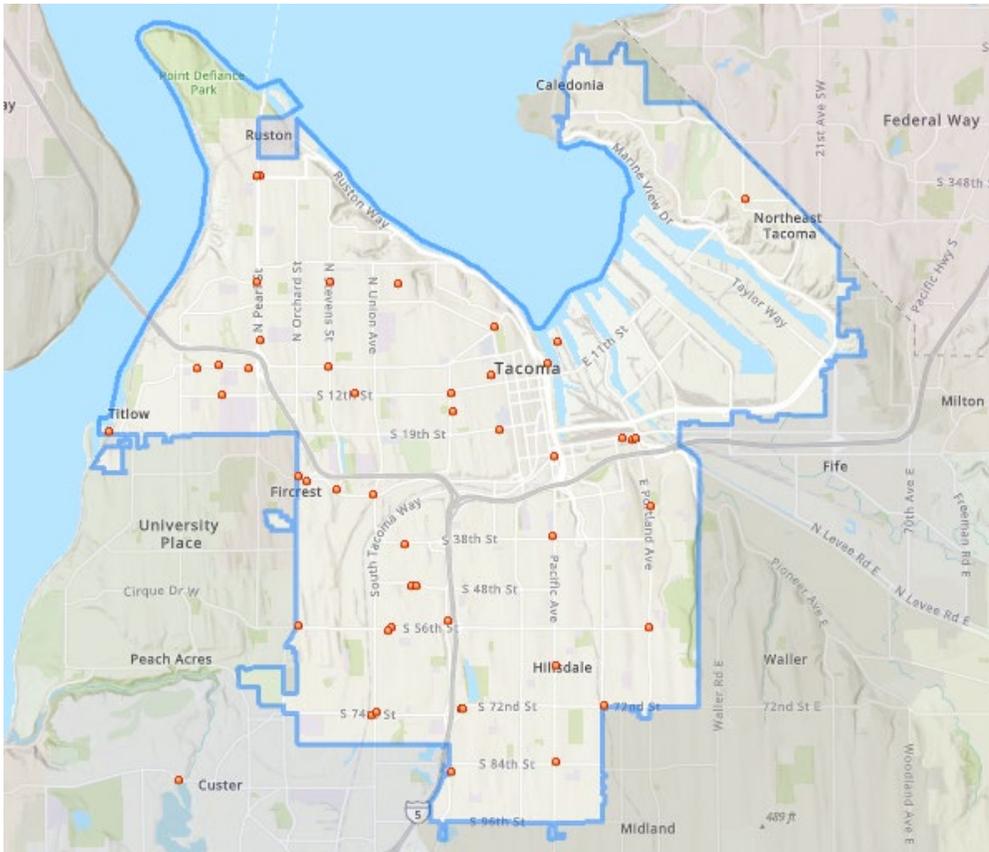
**Facility Description:** “This plant is primarily a storage/distribution facility, but also has blending/compounding capabilities. Non hazardous products stored at this plant include bio-diesel fuels; lubrication oils, Propylene Glycol, aircraft de-icing fluids, runway de-icing fluids, along with various chemical and oil blend additives. Hazardous products stored at this facility on a daily basis are Acetic Acid, Potassium Hydroxide (KOH), drums of gasoline, diesel fuel, small amounts of various solvents, and propane for fuel. Pacific Functional Fluids tank transport vehicles are occasionally parked in the containment area of the facility loaded with Jet Fuels, lubricating oils, and/or deicing fluids for delivery the next day.”



**Source:** Pacific Functional Fluids, “Oil Spill Plan,” 2011 (revised 2018).

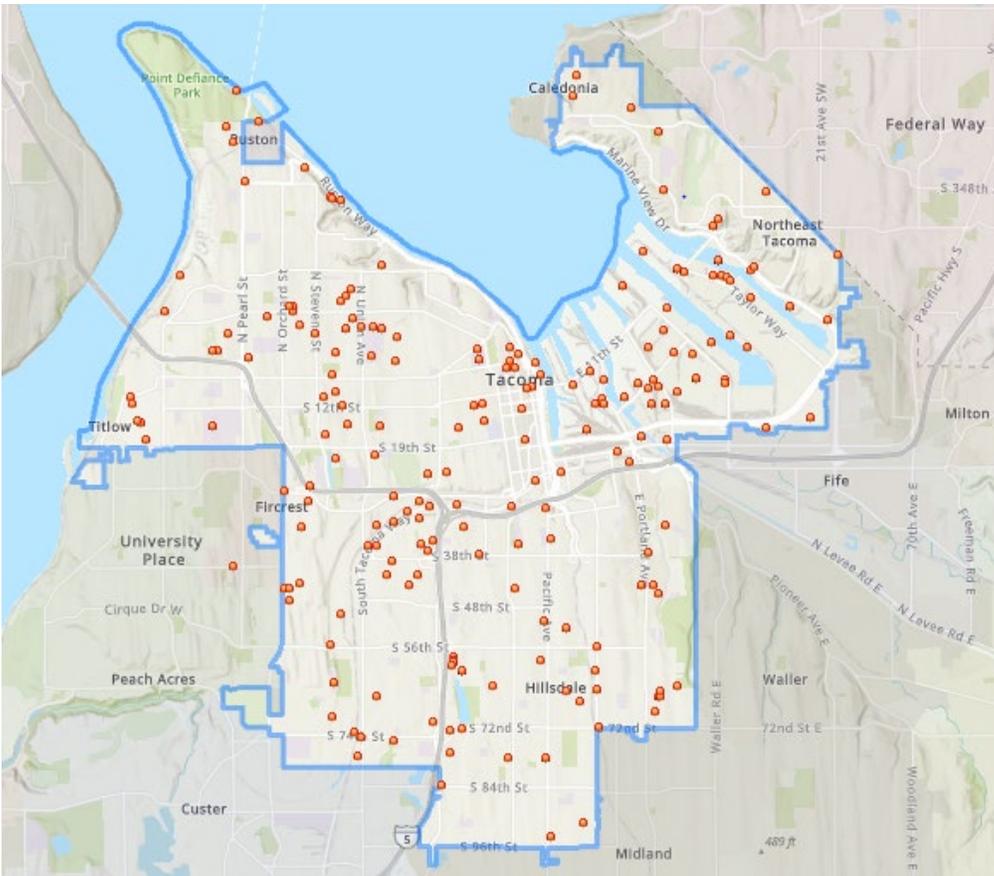
## Section E. Other Citywide Facilities

### E.1 Gas Stations (NAICS Code 447110) – 56 citywide



Source: City of Tacoma Tax and License Data

## E.2 Underground Storage Tanks (LPG and AG) – 355 Citywide



Source: City of Tacoma Tax and License Data

## Section F: Local Consumption

Source: 2012 City of Tacoma Greenhouse Gas Emissions Inventory,  
[https://cms.cityoftacoma.org/sustainability/City%20of%20Tacoma%20-%20Greenhouse%20Gas%20Emissions%20Update%20Report%202012\\_18-10-2013.pdf](https://cms.cityoftacoma.org/sustainability/City%20of%20Tacoma%20-%20Greenhouse%20Gas%20Emissions%20Update%20Report%202012_18-10-2013.pdf)

Table 17: List of data inputs for emissions estimates. Emission Source or Activity 2012 Value Units Community Sources and Activities

Residential Electricity 957,913 kilowatt hours

Residential Natural Gas 23,791,053 therms

Wood 5,282 short tons

Residential Oil 1,248,019 gallons

Residential Propane/LPG 572,411 gallons

Commercial Electricity 208,774,857 kilowatt hours

Commercial Natural Gas 20,694,621 therms

Industrial Electricity 1,531,015,620 kilowatt hours

Industrial Natural Gas 52,380,997 therms