Mukilteo Multimodal Project
Season Four Marine Mammal Monitoring Report

Washington State Department of Transportation
Ferries Division

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Submitted To:

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Cover: Harbor seal at Mukilteo Project Site. February 2018. Tyler Graham. WSDOT/WSF.

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1.0 Description of the Activity

WSF is proposing to relocate the Mukilteo Ferry Terminal approximately one-third of a mile east of the existing terminal. The Mukilteo terminal has not had significant improvements since the early 1980s and components of the facility are aging and do not meet current seismic standards. The current terminal layout makes it difficult for passengers to get in and out of the terminal and contributes to traffic congestion, safety concerns and conflicts between vehicle and pedestrian traffic. The new terminal will improve operations and multimodal connections and safety.

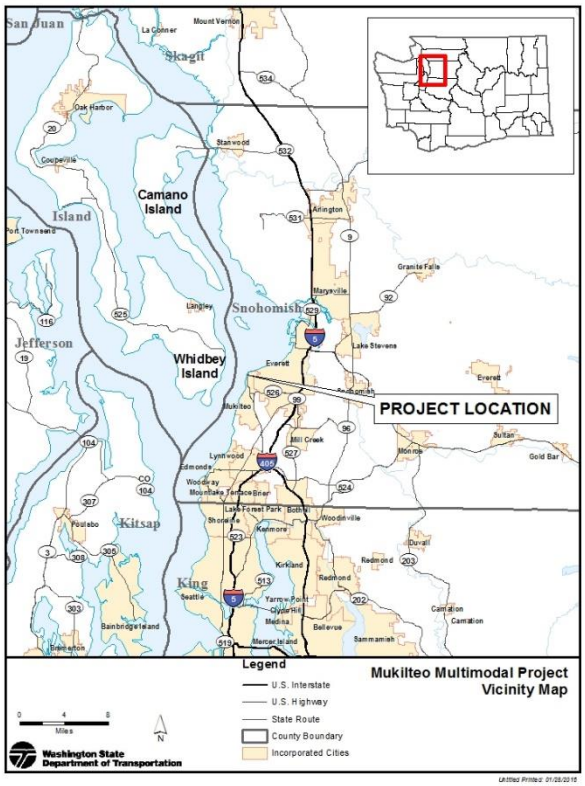

Figure 1-1 Location of Mukilteo Ferry Terminal

The WSDOT/WSF and the Federal Transit Administration (FTA) are constructing the Mukilteo Multimodal Project to improve the operations and facilities serving the mainland terminus of the Mukilteo-Clinton ferry route in Washington State. The ferry route is part of State Route (SR) 525, the major transportation corridor crossing Possession Sound, the portion of Puget Sound that separates Island County (Whidbey Island) from the central Puget Sound mainland.

The purpose of the Mukilteo Multimodal Project is to provide safe, reliable, and effective service and connection for general purpose transportation, transit, high occupancy vehicles (HOV), pedestrians, and bicyclists traveling between Island County and the Seattle/Everett metropolitan area and beyond. The Mukilteo ferry terminal has not had significant improvements for almost

30 years and needs key repairs. The existing facility is deficient in a number of aspects, such as safety, multimodal connectivity, capacity, and the ability to support the goals of local and regional long-range transportation and comprehensive plans. The project is intended to:

- Reduce conflicts, congestion, and safety concerns for pedestrians, bicyclists, and motorists by improving local traffic and safety at the terminal and the surrounding area that serves these transportation needs.
- Provide a terminal and supporting facilities with the infrastructure and operating characteristics needed to improve the safety, security, quality, reliability, efficiency, and effectiveness of multimodal transportation.
- Accommodate future demand projected for transit, HOV, pedestrian, bicycle, and general purpose traffic. The Mukilteo Multimodal Project consists of four in-water construction seasons:

1.1 Construction Seasons

The project consists of four in-water work seasons:

- Season 1 was the demolition of the Tank Farm Pier and dredging of the navigation channel, which was completed in 2015/16.
- No in-water work took place in 2016/17.
- Season 2 included ground improvement, trestle and terminal building foundation piles, and was completed in 2017/18.
- Season 3 consisted of installation of the remaining permanent in-water piles for the overhead loading structure, vehicle transfer span and public fishing pier, which was completed in 2019/20.
- Season 4 consisted of the demolition of the existing Mukilteo terminal, and the removal of temporary piles and the installation of floating dolphin anchor piles at the new terminal site. All work is now complete for this project.

1.2 In-water Project Elements Completed in 2020/21 (Season 4)

1.2.1 Temporary Pile Removal

Sixty-nine temporary 24” steel piles installed to support work platforms were removed with a vibratory hammer.

1.2.2 Floating Dolphin Piling

The floating dolphin was moved from the current terminal to the new terminal. A combination of anchors (4) and piles (4) will be used to secure the dolphin anchor chains to the sea floor. Four 30” steel piles were installed with a vibratory hammer.

1.2.3 Existing Terminal Removal

The existing terminal was removed once the new terminal was complete. The existing terminal included 290 12-inch diameter creosote-treated piles. Demolition took approximately two weeks.

Pile work is summarized in the table below.

Table 1-1 Season 4 In-water Pile Work

Method	Pile Size (inch)	Season 4 Completed
Vibratory Removal	12 (timber)	290
Vibratory Removal	24 (steel)	69
Vibratory Drive	30 (steel)	4

2.0 Project Setting and Land Use

The Mukilteo Ferry Terminal is located in the City of Mukilteo, Snohomish County, Washington. The terminal is located in Township 28 North, Range 4 East, Section 3, in Possession Sound. The new terminal would be approximately 1,700 feet (ft.) east of the existing terminal in Township 28N, Range 4E, Section 33 (Figure 1-2). Land use in the Mukilteo area is a mix of residential, commercial, industrial, and open space and/or undeveloped lands.

3.0 Take Results and Monitoring

Marine mammal monitoring was implemented for all pile driving and removal in the 2020/21 in-water work window (August 1 to February 15). The marine mammal monitoring plan is attached. Pile driving/removal was paused for 11 minutes in Year Four to avoid unpermitted take or prevent injury.

IHA reporting requirement 6a. (xi) Number of individuals of each species (differentiated by month as appropriate) detected within the monitoring zone, and estimates of number of marine mammals taken, by species (a correction factor may be applied to total take numbers, as appropriate).

No correction factor has been applied to the observed take noted in Table 3-2, as WSF has not been able to identify a method that can be used, and no guidance is available from NMFS regarding acceptable correction factors.

Permitted take, observations and take used are provided below:

Table 3-1 2020/21 Level B Take

Species	Individuals Observed	Permitted Level B	Level B Used
Harbor Seal	587	3,888	41
Northern Elephant Seal	0	7	0
California Sea Lion	345	1,620	29
Steller Sea Lion	17	108	4
SR Killer Whale	0	0	0
Transient Killer Whale	1	56	0
Gray Whale	2	9	0
Humpback Whale	0	7	0
Minke Whale	0	3	0
Harbor Porpoise	43	1,322	3
Dall's Porpoise	0	35	0
Bottlenose Dolphin	0	49	0
Unidentified Pinniped	15	N/A	6[1]
Unidentified Whale	2	N/A	0
Unidentified Dolphin/Porpoise	1	N/A	1[2]

[1]Based on observer notes, added to California Sea Lion take total

[2] Based on most often observed Dolphin/Porpoise, added to Harbor Porpoise take

All data was collected in ArcGIS Survey123. Major data fields collected are listed in Table 3-3, and data is attached as a separate spreadsheet. The spreadsheet includes additional data fields.

For example, attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals was captured by the Comments and Duplicate Sighting fields.

Table 3-2 Data Fields

Protected Species Observer Data Fields
PSO Monitor Name
Project
PSO Monitoring Station ID
Construction Activity
Weather Conditions
Specify other. (Weather)
Observation Date & Time
Species Observed
Specify other. (Species)
Duplicate Sighting
Number of Individuals Observed
Direction of Sighting from the PSO
Distance from the PSO
Compass Bearing towards Animal from PSO (optional data)
Distance from PSO to Animal (Meters) (optional data)
Compass Bearing to Noise Source from PSO (optional data)
Distance from PSO to Noise Source (Meters) (optional data)
Calculated Angle between the Bearings (optional data)
Distance of Animal from Noise Source (Meters) (optional data)
Observed Behavior
Direction of Travel
Comments about the Sighting
Zone Selection
Number of Individuals in Shutdown Zone
Number of Individuals in Harassment Zone
Harassment/Shutdown Comments