



Ferry Maintenance Facility Siting Study - Appendices

June 2024



APPENDIX H

SUMMARY OF ENVIRONMENTAL MITIGATION CONSIDERATIONS

Memorandum

To: Kitsap Transit
From: Tessa Gardner-Brown, Floyd|Snider
Date:
Project: Kitsap Transit Ferry Maintenance Facility
Re: **Mitigation Considerations for Ferry Maintenance Facility Impacts to the Natural and Built Environment**

This memorandum has been prepared to support the continued evaluation of sites for a Kitsap Transit Ferry Maintenance Facility. The selected site would be developed with new in-water, over-water, and shoreline infrastructure. This would result in impacts to the natural environment that must be offset in order to obtain the environmental permits and approvals that will be required prior to project construction. All potential sites are currently developed with recreational moorage, which would also be impacted by the new ferry maintenance facility. Refer to Figure 1 for a map of the potential sites for a new ferry maintenance facility. Displacement of the recreational moorage at these sites would be considered an unavoidable impact to the built environment and could be mitigated to reduce the severity of impact.

This memorandum provides an overview of the regulatory requirements to offset impacts to the natural environment and the process to evaluate opportunities to mitigate impacts to the built environment. It provides a high-level summary of the magnitude of potential project impact, the type of mitigation that may be considered to offset those impacts, and associated order of magnitude costs.

This memorandum has been prepared using conceptual design drawings. All information contained herein will be refined as design progresses; however, this should provide an overview of the mitigation considerations to support informed decision-making during site selection. Though, this memorandum will demonstrate that the natural and built environment impacts of the sites are very similar and mitigation requirements may not vary substantially enough to influence decision-making at this early stage.

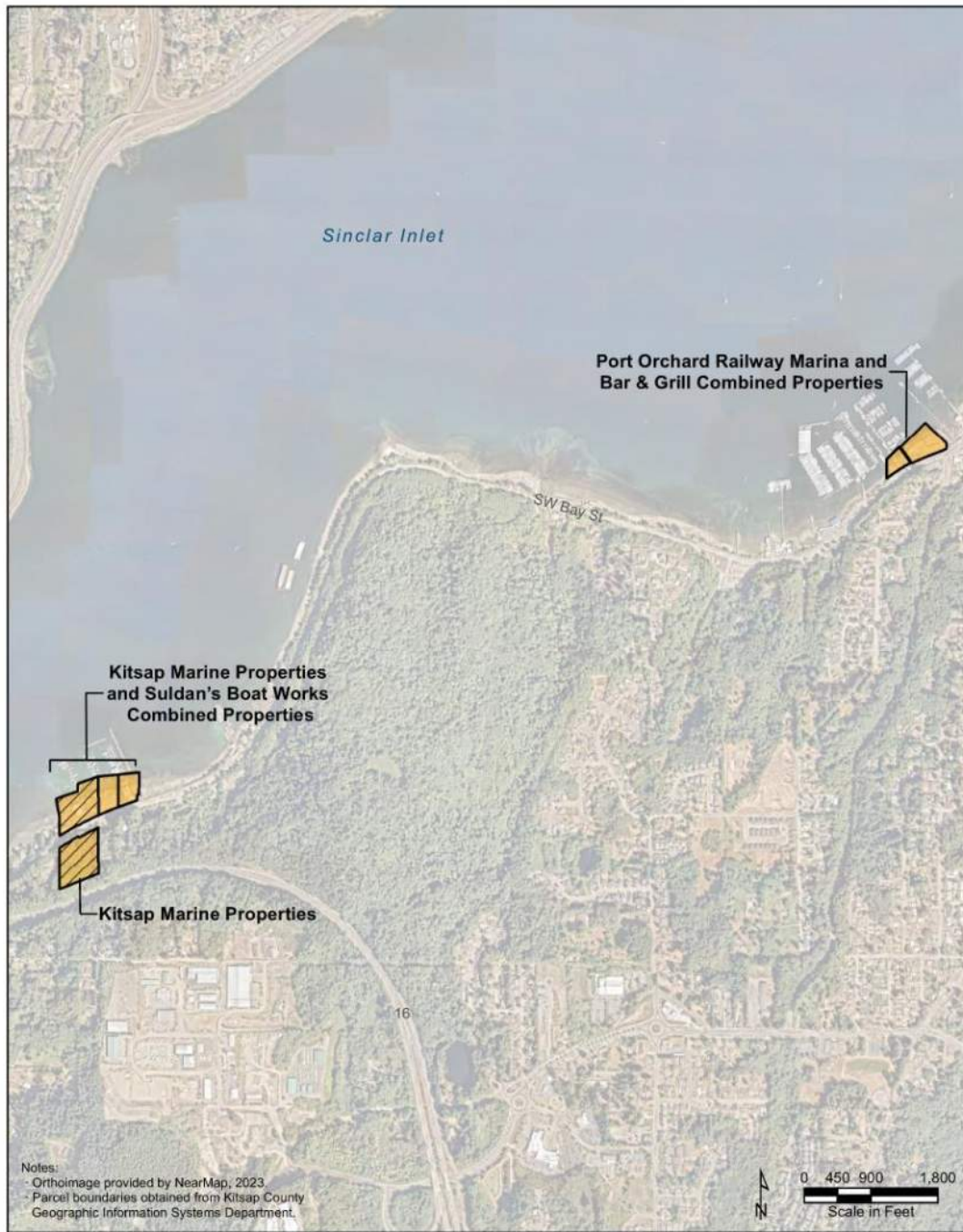


Figure 1: Map of Potential Sites

REGULATORY REQUIREMENTS TO OFFSET IMPACTS TO THE NATURAL ENVIRONMENT

As part of the environmental permitting process, a series of federal consultations will be initiated, including consultation with NOAA National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (collectively referred to as “the Services”) in accordance with Section 7 of the Endangered Species Act (ESA). In 2022, the Services began to review most projects that are proposed within the Salish Sea and with impacts to the nearshore environment using the recently completed Salish Sea Nearshore Programmatic (SSNP). A key component of the SSNP is a conservation calculator that assesses the impact of a project on the natural environment, and imposes a mitigation requirement for all projects that show a negative value after being input into the conservation calculator. The conservation calculator considers existing habitat values, existing site conditions, changes in development within the nearshore environment, impacts of the project and potential project benefits.

The ferry maintenance facility would be subject to SSNP, the conservation calculator, and the requirement to offset impacts such that the calculator output is zero (rather than negative). This process must be completed before ESA consultation is considered complete, and before the U.S. Army Corps of Engineers (the Corps) will issue the federal authorization for construction.

As part of the suite of federal consultations, the Corps will initiate consultation with local area tribes that have Usual and Accustomed fishing grounds and stations in Sinclair Inlet, where all sites are located. This consultation must also be complete before the Corps will issue the federal authorization. In recent years, the tribes have requested mitigation to offset impacts to tribal fishing that occur from barge movements during construction and from new overwater structures in fishable areas. The mitigation approach is then negotiated between the tribe and applicant.

It should be noted that the state, through authority provided to the Washington State Department of Fish and Wildlife, may also require mitigation to offset facility impacts to the natural environment. This can often be satisfied through the mitigation approach developed in coordination with the Services, but not always.

PROCESS TO EVALUATE OPPORTUNITIES TO MITIGATE FOR IMPACTS TO THE BUILT ENVIRONMENT

The ferry maintenance facility project will undergo environmental review, either in accordance with the State Environmental Policy Act (SEPA) or the National Environmental Policy Act (NEPA), depending on the lead agency and/or the type of funding leveraged for the project. In either case, this review process is intended to support agencies in considering the environmental impacts of a project, to consider public input on the proposal, and to evaluate opportunities to avoid, minimize or mitigate impacts that have been identified.

The environmental review process will highlight the unavoidable displacement of recreational moorage as a result of the project. It is reasonable to assume that the public will submit

comments regarding this impact given that recreational moorage is a predominant feature of the Port Orchard shoreline and contributes to its overall waterfront character. Port Orchard currently provides one of the highest density areas of recreational moorage in Kitsap County, where opportunities for recreational moorage across Kitsap County are more limited.

During the environmental review process, Kitsap Transit will evaluate opportunities to mitigate the impact to recreational moorage. Identifying reasonable mitigation will help to reduce the severity of impact; this reduces complexity of the environmental review process because projects with potential significant impacts are reviewed with a finer level of detail, through an Environmental Impact Statement; whereas, projects that include mitigation to reduce impacts to a less than significant threshold can complete a higher level of environmental review, through a NEPA Environmental Assessment or SEPA checklist. Reasonable mitigation will also certainly help to reduce potential public opposition to the project. Neither NEPA or SEPA will provide a prescriptive approach for offsetting impacts to the built environment; the outcome will be determined by Kitsap Transit through information obtained during the detailed impact and mitigation evaluations and through public comment.

In addition to impacts to the natural and built environment, existing private businesses would be displaced by development of a maintenance facility at any of the potential sites. This business displacement would also be highlighted in the environmental review process. These types of impacts would be mitigated through compliance with the Uniform Relocation Act, as amended. This is typically handled through real estate services and legal counsel and is generally not considered an environmental impact; therefore, it is not discussed further in this memorandum. These impacts would represent an additional, meaningful project cost.

OVERVIEW OF IMPACTS TO THE NATURAL ENVIRONMENT

Construction of a ferry maintenance facility would result in meaningful new development within the nearshore environment. In recognition of this, the KPFF engineering team has developed the conceptual site plans in a way that would minimize facility impacts to the natural environment. The table below provides an overview of the changes to total overwater coverage at each site, and within the different aquatic zones of the nearshore environment.

Table 1. Summary of Changes to Overwater Coverage Across the Potential Sites

Potential Site	Changes Based on Conceptual Design (all values reported in square feet)				
	Total Existing Overwater Coverage	Total New Overwater Coverage	Net Change in Overwater Coverage	Net Change in Overwater Coverage in USZ and LSZ	Net Change in Overwater Coverage in DSZ
Kitsap Marina	24,600	23,000	-1,600	-1,000	-600

Kitsap Marina & Suldan’s	59,000	16,000	-43,000	-29,000	-14,000
Marina Bar & Grill	29,000	21,000	-8,000	-9,000	+1,000

USZ = Upper Shore Zone: Measured from the Highest Astronomical Tide to +5-feet Mean Lower Low Water (MLLW). This is an intertidal zone that often provides preferable spawning substrate for forage fish.

LSZ = Lower Shore Zone: Measured from +5-feet MLLW to -10-feet MLLW, and/or to the outer limit of submerged aquatic vegetation (SAV).

DSZ = Deeper Shore Zone: Measured from -10-feet MLLW or from the outer limits of SAV, where SAV no longer grows.

As shown in Table 1, the ferry maintenance facility would reduce the amount of overwater coverage at each potential site. This would occur by removing the existing recreational moorage and replacing it with a ferry maintenance facility, which would represent a smaller footprint than the existing recreational moorage in each case. This change is considered a benefit because it reduces the overall amount of shoreline development. The greatest reduction in overwater coverage would occur at the Kitsap Marina & Suldan’s site because this combined site has more existing overwater coverage and recreational moorage than the other two sites, and because a smaller overwater structure for the ferry maintenance facility could be constructed at this site given that there is more upland space to develop in support of facility operations. At this stage of conceptual design, the ferry maintenance facility proposed at the combined Kitsap Marina & Suldan’s site has a smaller overwater footprint than the structures that would be required at the other potential sites.

At each potential site, the ferry maintenance facility would be extended into deeper water to accommodate Kitsap Transit vessels, away from the upper shore zone (USZ) and lower shore zone (LSZ). The movement into deeper water is considered favorably by the conservation calculator because the USZ and LSZ provide a greater habitat value than the deeper shore zone (DSZ). Minimizing overwater coverage in the shallower waters of the USZ and LSZ areas helps to support important habitat values, including growth of submerged aquatic vegetation and freer migration patterns for juvenile salmonids. Conceptual layouts for the ferry maintenance facility incorporated reduction of overwater coverage in the nearshore areas where possible.

The greatest change occurs at the Kitsap Marina & Suldan’s site because of the removal of recreational moorage located in these shallow waters, and relatively limited infrastructure that would be needed in the USZ and LSZ for the ferry maintenance facility. The Kitsap Marina & Suldan’s site would also have the greatest reduction of overwater structure in the DSZ, for the same reasons.

The conservation calculator would analyze these types of changes numerically. Given the reduction in overwater coverage and the movement into deeper water for all potential sites, the total debt generated by the project is expected to be relatively low. Though, some debt will be

accrued because project proposes to introduce and maintain new structure in the nearshore environment.

Potential Opportunities to Mitigate Impacts to the Natural Environment

The conservation calculator provides significant credit for removal of creosote-treated piling and other structures. This would be accomplished through removal of the existing recreational moorage at each site, which is expected to have creosote-treated piling and other creosote-treated elements. The conservation calculator also provides credit for shoreline softening and riparian planting, which could potentially be achieved at each site where ferry maintenance facility operations are not programmed. This appears to be feasible at the west side of the Kitsap Marina site, at the east side of the combined Kitsap Marina & Suldan's site, and at the west side of the Marina Bar & Grill Site. Providing shoreline enhancements at the sites, if feasible, would be a significant benefit that is highly valued in the conservation calculator and by the regulatory agencies and tribes.

The combination of reduced overwater coverage, removal of creosote-treated piling and other structures, movement into deeper water, and potential environmental improvements to the shoreline may potentially alleviate the need for compensatory mitigation. At this time, initial input of the conceptual designs into the conservation calculator would support that conclusion; though this review is cursory and is at very early stages of project design. If the key assumptions are maintained as design progresses, it could avoid the significant regulatory complexity associated with identifying and negotiating additional compensatory mitigation and would minimize the associated costs.

If these key assumptions cannot be maintained or the facility is expanded significantly, additional compensatory mitigation will likely be required. The mitigation requirement would need to be fulfilled through purchase of mitigation credits at a mitigation bank or through a fee in-lieu transaction. Or, Kitsap Transit could elect to purchase and restore a site at the scale needed to reach a neutral (rather than negative) calculator output. Both of these options are much more complex and typically much more expensive than integrating shoreline enhancements at the development site.

Separately, Kitsap Transit should assume that some type of mitigation will be needed to offset impacts to tribal fishing. This mitigation is negotiated on a project-specific basis, but is generally provided in four ways: 1) payment to the tribe to compensate for lost fishing access or impacted fishing time during facility construction; 2) agreement to purchase tribal fishing nets if they are damaged during construction as a result of barge traffic or other associated activities; 3) notifications to tribes during construction so tribal fisherman are aware of barge traffic or other associated activities; and 4) long-term opportunities to tie tribal fishing nets to the facility, if reasonable and feasible.

OVERVIEW OF IMPACTS TO THE BUILT ENVIRONMENT

Construction of the ferry maintenance facility would displace the existing recreational moorage (and existing private businesses) at each potential site. Based on facility size and intended operations, reconfiguration of the recreational moorage alongside the ferry maintenance facility is not feasible. As such, approximately 60 – 70 slips would be removed at the Kitsap Marina site. Approximately 100 total slips would be impacted from development at the combined Kitsap Marina & Suldan’s site. Similarly, approximately 100 total slips would be impacted at the Marina Bar & Grill Site.

Potential Opportunities to Mitigate Impacts to the Built Environment

There is not a prescriptive approach to offsetting this impact to the built environment. Potential opportunities would certainly be evaluated during the future environmental review, and in coordination with the public as comments are submitted and impacted stakeholders are notified. At this early planning stage, Kitsap Transit may consider relocation of the displaced vessels as a likely request or outcome. It would be reasonable to assume that most boat owners would prefer relocation within Sinclair Inlet, with some preferring Port Orchard to Bremerton for consistency in the community and to avoid the faster currents on the other shoreline. This would require Kitsap Transit to identify and secure moorage for up to approximately 100 boats (assuming 100% moorage capacity at the selected site at the time the mitigation is determined).

The terms of relocation would be determined by Kitsap Transit in later phases of this project. Mitigation to offset displacement of the recreational moorage could begin with providing coverage for the security deposit that is required as moorage is established at a new marina. The agreement could be enhanced to include payment to cover increases in the monthly slip fee for a specified period, if the slip fee would increase as a result of the move. If there are not enough slips to rehome the displaced boats, Kitsap Transit could further investigate whether existing derelict vessels at the area marinas would be interested in a buy-out to free-up additional moorage across Sinclair Inlet. That moorage could then be reserved for impacted boat owners.

These are preliminary concepts only that would be evaluated further during the environmental review process for feasibility, cost, public interest, and other considerations.

ORDER OF MAGNITUDE COST FOR ENVIRONMENTAL MITIGATION

During the conceptual design phase, a placeholder is typically held for environmental mitigation at approximately 10% of the assumed construction cost. This order of magnitude is typically used when specific mitigation needs or opportunities have not yet been identified.

CONCLUSION

The Kitsap Transit Ferry Maintenance Facility Project will result in impacts to the natural environment, built environment, tribal fishing, and private businesses. The project team has

reviewed the conceptual layouts and has determined that the type of impact is similar at each potential site; this means that none of the sites avoid one or more of the impact types altogether. Additionally, the conceptual layouts have been reviewed for the potential severity of impact and the sites are relatively similar. Refer to the table below for an overview; please remember that this summary is based on existing available information at a conceptual level of design only.

Table 2. Summary of Impact Type and Severity Across the Potential Sites

Impact Type	Impact Severity		
	Kitsap Marina	Kitsap Marina & Suldan’s	Marina Bar & Grill
Natural Environment	Least reduction in overwater coverage and movement to deeper water compared to existing conditions	Greatest reduction in overwater coverage and most movement to deeper water compared to existing conditions	Moderate reduction in overwater coverage and movement to deeper water compared to existing conditions
Tribal Fishing	Impacts to fishing access during construction		
Built Environment	Impacts to ~60-70 slips	Impacts to ~100 slips	Impacts to ~100 slips
Private Business	Displacement of 1 private business	Displacement of 2 private businesses	Emanant domain over mixed-used development under construction

The evaluation and identification of measures to avoid, minimize or mitigate these impacts will be a meaningful component of the environmental review process. It is likely that the approach to mitigation would be similar at each site; the approach or extent of mitigation should not vary widely enough that it would be a driving force in the decision-making process. The ability to identify and refine the likely mitigation measures and cost of mitigation will increase as design progresses; this type of planning typically runs concurrently to the 30- and 60-percent design processes.