PARTIAL DRAFT #1

Port of Port Townsend

2016-2021 CAPITAL REPAIR & REPLACEMENT PLAN

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TABLE OF CONTENTS

Port of Port Townsend:
DRAFT 2016-2021 CAPITAL REPAIR & REPLACEMENT PLAN

LIST OF FIGURES:

PARTIAL DRAFT #1

Port of Port Townsend
2016-2021 CAPITAL REPAIR & REPLACEMENT PLAN

I. Executive Summary

This report presents the Port of Port Townsend's Draft 6-year Capital Repair & Replacement Plan (CRRP) for Fiscal Years 2016 to 2021. This document focuses exclusively on planning and financing the repair, renovation and replacement of existing Port facilities. In this respect, it is unlike the Port's Capital Improvement Plan (updated in 2013), which described new or expanded capital infrastructure projects over a 20-year timeframe. The object of this Plan is to inventory, survey, and assess all the Port's principal infrastructure systems and buildings, identify deficient conditions, accurately estimate the cost to correct each deficiency, and outline a realistic plan of finance to fund the most necessary capital repair and replacement projects.

This Draft Plan clearly shows that existing and projected funding for capital repair and replacement projects falls short of identified needs. The Draft 2016-2021 CRRP identifies funding to address approximately 79% of identified project costs necessary to maintain a good state of repair.

FIGURE #1
Port of Port Townsend – Draft 2016-2021 6-Year Capital Repair & Replacement Plan

Project Category	Amount of Work Identified
Capital Repairs & Renovations	$10,683,169
Capital Repairs Needed to Avoid "Red-Tag"	$150,000
Replacement of Existing Capital Infrastructure	$5,233,200
Detailed Engineering Assessments[1]	$85,000
Total Addressed in this CFP	**$16,151,369**

The Port of Port Townsend's properties and facilities are many things to many people, revealing a thicket of competing demands that are sometimes in conflict (e.g., a desire for affordable rates and fees, set against a desire for renovated or improved facilities). The Port's 2010 Strategic Plan is the Port Commission's adopted planning document

[1] Note: These assessments (Boat Haven Breakwater – Original Section, and Shoreline Stabilization Study for the beach west of Boat Haven) are likely to result in new capital projects. The scope of any capital project that may be recommended by the Shoreline Stabilization Study is entirely unknown at this time; however, the Boat Haven Breakwater assessment is anticipated to result in a new capital renovation project requiring up to $3,000,000 within the 6-year timeframe of this CRRP. Accordingly, $3,000,000 has been included within the project category "capital repairs and renovations" for financial planning purposes.

that provides the policy framework to guide the sensitive balancing and investment of increasingly scarce capital resources.

As reflected in this Draft CRRP, a number of projects critical to the future of Port operations must be undertaken over the next 6 years:

- Demolition and replacement of the Point Hudson Jetty (constructed in 1934);
- An engineering reconnaissance and detailed condition survey of the original Boat Haven Breakwater (also constructed in 1934) which is likely to result in a significant new capital renovation project;
- A reconnaissance study to identify and recommend alternatives to mitigate shoreline erosion along the 850 feet of beach lying west of the marina - another study which will could result in a substantial capital project to protect the wash down pad as well the 300-ton lift station from beach erosion and storm surge;
- Renovations and repairs to both the linear and C&D docks at the Boat Haven;
- Resurfacing of the runway at the Jefferson County International Airport (JCIA); and
- High priority repair projects to ensure that Port buildings at Boat Haven and Point Hudson continue to remain leasable.

Figures #2 and #3, below, summarize the percentage and amount of identified capital repair and replacement needs by cost center. Unsurprisingly, the greatest needs are found at Point Hudson and the Boat Haven.

FIGURE #2

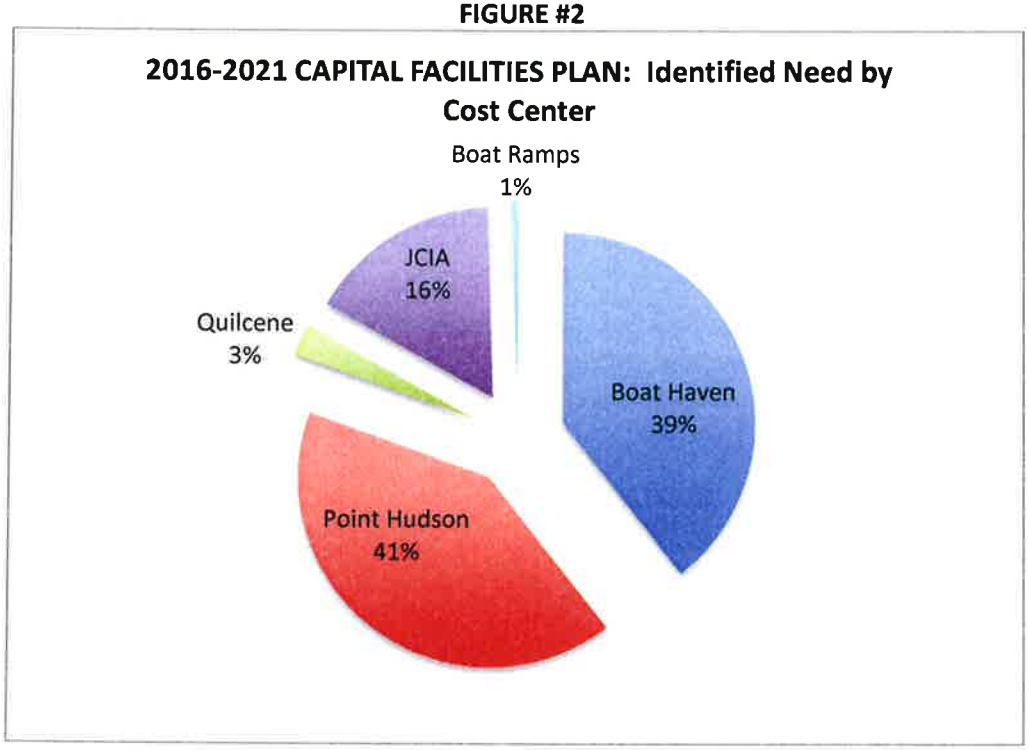


FIGURE #3 2016-2021 CRRP: Repair & Replacement Needs by Cost Center	
Cost Center	**Amount & Percentage of Work Identified**
Boat Haven	$6,351,136 (39%)
Point Hudson	$6,637,539(41%)
Quilcene	$449,550(3%)
Jefferson County International Airport (JCIA)	$2,634,881 (16%)
Boat Ramps (i.e., Mats Mats Bay)	$78,263 (1%)
Total Identified Need	**$16,151,369**

Because the Port's capital repair and replacement needs exceed available resources, the projects described in this 6 year CRRP have been prioritized by the policy guidance provided by the Port's 2010 Strategic Plan. Specifically, each potential repair and replacement project has been evaluated to determine the degree to which it advances the relevant policy direction of the Strategic Plan (see Appendix C – Project Evaluation Worksheets/Rankings). By evaluating all potential projects in this way, it is possible to identify those that protect core Port functions, maintain critical and high value Port assets, and serve the broadest cross-section of the public.

The 2016-2021 Plan of Finance outlines a 6-year plan to fund the 13 highest priority projects ("Priority 1 Projects"), totaling **$12,685,051**. These highest priority projects are necessary during the six-year life span of the CRRP to maintain a state of good repair, protect key public assets, and avoid even more costly repairs in future. Anticipated funding sources and amounts for Priority 1 Projects are as follows:

- $1,731,851 million from property taxes and the Port's annual operating budget (over the course of six years)[2];
- $3,950,389 from Revenue Bond proceeds;
- $5,152,811 from federal grant sources and direct federal funding (i.e., FAA support for the JCIA and US Corps of Engineers funding for the Boat Haven Breakwater);
- An estimated $850,000 from the sale of buildings at the Boat Haven (e.g., New Day Fisheries and the Gold Star Marine buildings); and
- $1,000,000 in Boat Haven cash reserves.

[2] This figure assumes improvements to the Port's balance sheet which include: a) rate and fee increases that exceed the rate of inflation; and b) annual property tax increases up to the one percent (1%) levy limit.

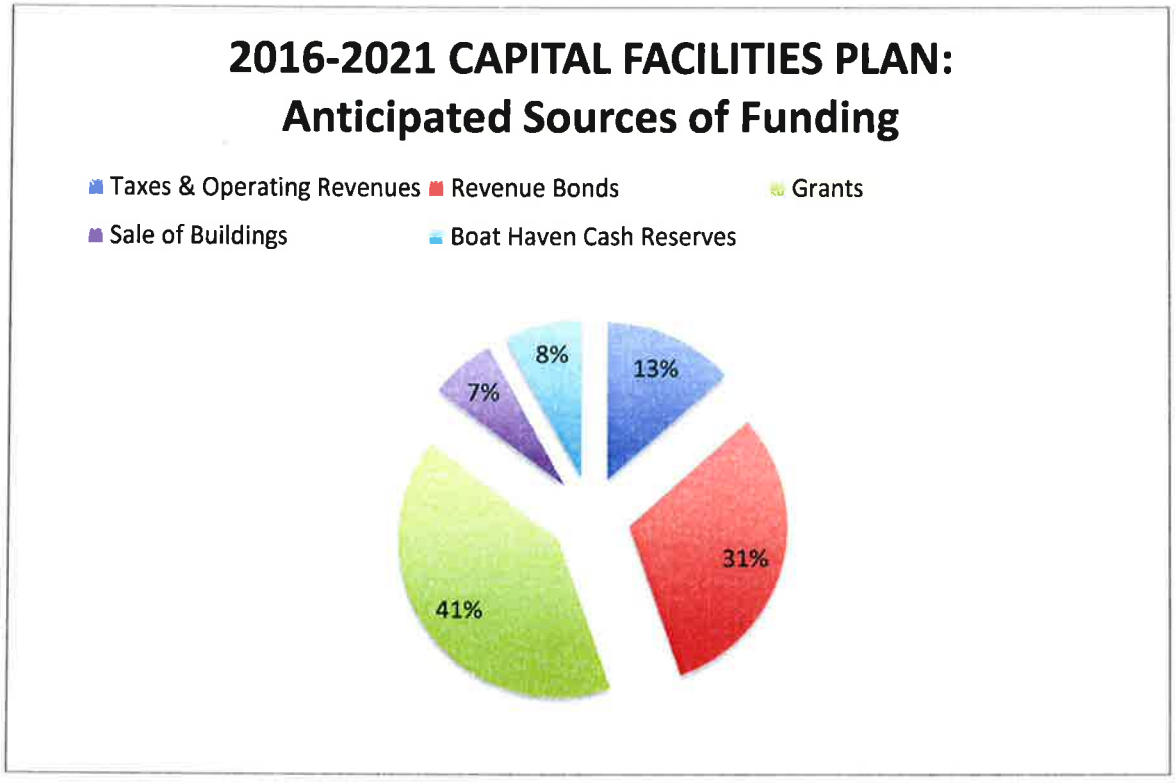
Figure #4, below, depicts the anticipated shares of funding by source, with the lion's share of monies for recommended projects coming from grants (41%) and revenue bond proceeds (31%).

In addition to Priority 1 Projects, this CRRP has identified 29 medium and lower priority repairs ("Priority 2" and "Priority 3" projects) totaling **$3,466,318**. Although it is unlikely that most of these medium and lower priority projects will be undertaken in the near term, they should be addressed as soon as funding permits so that higher deferred maintenance costs may be avoided in future. Potential additional funding sources for these Priority 2 and Priority 3 projects include the following:

- Improvements to the Port's bottom line via rate/fee increases;
- Special Assessments not yet levied (e.g., Industrial Development District); and
- Grant sources not yet identified or secured.

This Plan will continue to evolve, as the future will undoubtedly bring new and unexpected challenges. Port staff hopes that recent efforts to strengthen the Port's balance sheet will enable it to tackle the capital challenges we face in the years ahead.

FIGURE #4



II. Background & Strategic Outlook

Introduction

The Port of Port Townsend provides many important services to the residents of Jefferson County: facilities and services that support the local marine trades industry; public recreational opportunities in the form of marinas, boat ramps and an RV park; and air and water transportation links to the Puget Sound region. Maintaining and replacing the public infrastructure that supports these services is a huge challenge. During periods of economic and fiscal stress, it can be difficult to adequately fund both Port operations and necessary capital maintenance and replacement projects. In the past, the Port has at times delayed capital maintenance and replacement projects in order to fund daily services, keep rates and fees affordable, or build new or expanded Port facilities.

This report presents the Port of Port Townsend's 6-Year Capital Repair & Replacement Plan (CRRP) for fiscal years 2016-2021. It will be updated annually to provide the public with accurate information about the Port's facilities, current conditions and capital repair needs, and available and projected resources over the next 6 years to undertake necessary projects. It is an important reference document, supporting and guiding capital expenditure decisions by the Port Commission and staff.

In the past, the Port has produced planning documents outlining capital needs, for instance: the 2003 Comprehensive Scheme of Harbor Improvements; and, 2013 Capital Improvement Plan. However, this Plan is different: instead of outlining capital improvements and new development, it focuses narrowly upon repairing, replacing and protecting existing infrastructure. Despite the difference in focus, the property and facility inventories and condition analyses contained in these earlier planning documents continue to remain useful.

By concentrating on capital repair and replacement costs for existing infrastructure and buildings, together with a reporting of the various existing and anticipated sources of project funding, this CRRP will enable the public and decision-makers to more fully grasp the magnitude of Port capital needs, and the modest resources available to the Port to address them. While existing and projected funding falls short of the overall needs, this CRRP succeeds in identifying funding to address the most critically necessary repair and replacement projects ("Priority 1 Projects"), representing some 79% of the cost of all identified needs.

Each year, the Port will update this CRRP to incorporate new or refined information and maintain the best estimates for the Port's capital repair and replacement requirements. Like the Port's annual operating and capital budgets, it will be subject to revised cost-estimates, and emergent capital repair and replacement issues.

What's Our Situation – Big Picture?

The Port has undertaken a number of important capital maintenance investments in recent years: the Point Hudson Marina renovation; Boat Haven Commercial Basin renovation; Boat Haven A/B Dock replacement; and Airport Runway Improvements. Still, there are difficult fiscal and economic realities hindering our efforts going forward. Construction costs have increased significantly over the last 10 years, far outpacing the rate of inflation. As a result, future capital expenditures will not repair as much Port infrastructure as they once did because the Port's available revenues have simply not kept pace with increasing costs. If the Port was running an infrastructure race, we could accurately say that we started out behind and continue to lose ground. Imagine the "Red Queen" from Alice and Wonderland, running faster and faster simply to remain in the same place.

To help the Port get a better fix on what needs to be repaired or replaced and when, the Port hired a part-time temporary Engineer in 2015 to conduct a Port-wide Facility Condition Assessment (see Appendix A). The purpose of the assessment was to identify capital repair and renewal work necessary to maintain a "state of good repair" for all existing Port facilities. As noted earlier, the scope of the engineer's review was intentionally narrow, and excluded new capital projects and enhancements. Moreover, the study does not include projects that fall below an estimated cost threshold of $25,000 (the Port Executive Director's spending limit). This assessment detailed some $5,233,200 million in necessary capital replacement projects, and approximately $10,918,169 million in capital repair and renovation projects required at Port facilities throughout the county.

Some of these projects are urgent (e.g., the Point Hudson Jetty) or non-discretionary (e.g., JCIA Runway Resurfacing), and must be undertaken over the next 1-6 years. And, though the Port Engineer prepared the Facility Condition Assessment that underpins this CRRP, additional and more specialized engineering support will be necessary to further define the scope and cost of upcoming projects. For example, the original section of the Boat Haven Breakwater requires investigation by a coastal engineer with specific expertise in breakwater construction and renovation.[3]

Are the Port's Issues Unique?

The Port of Port Townsend's situation mirrors that of the nation, and many state and local governments: underfunded legacy infrastructure. Many of our facilities, like those of the nation as a whole, were built during a "golden age" of infrastructure construction and subsequent economic growth between the 1930s and late 1960s (e.g., Point Hudson and the Boat Haven were constructed during this period). The challenge is easily stated,

[3] Such an investigation is anticipated to reveal the need to plan and budget for an additional $3 million in near-term repairs to the Boat Haven Breakwater. Hence, $3,000,000 has been included within the estimated total cost for financial planning purposes.

but difficult to remedy: we lack sufficient resources to fully repair, restore, or replace aging infrastructure. Obviously, this aging infrastructure is the backbone of the Port and enables us to generate the revenues we depend upon to fund ongoing operations, and in theory, to renovate and replace infrastructure over time.

Like any fixed assets, our facilities need constant care to keep up with the demands placed on them. We cannot neglect the repair and replacement of these vital facilities. Port Maintenance Staff have done an admirable job over the years in conducting routine and ordinary maintenance and repairs to preserve and extend the useful life of our assets. For instance, we estimate that more than 1.5 million showers have been taken at the Boat Haven Restroom facility since its original construction in 1985. The longevity of Port facilities in the context of such heavy routine use is a testament to the hard work and resourcefulness of maintenance staff.

At a certain juncture, however, routine maintenance and "duct tape and bailing wire" fixes are insufficient. Today, the Port finds itself in a situation where some of its infrastructure (e.g., Point Hudson Jetty) is well past its useful life, in a substantially degraded condition, and in need of near-term replacement or major repair. It is an unfortunate fact that these limits are arriving at a moment in our history with significant fiscal constraints.

What Will This Plan Accomplish?

If the Port fails to make significant investments in critical components of its core infrastructure now, our community and local economy will lose ground. This is not an abstract concern. Investment shortfalls will mean that much needed repair and replacement projects are not being done, and our infrastructure systems are deteriorating further. This is not something that is dramatic and noticeable overnight, but an incremental decay of facilities over time. However, the catastrophic failure of a critical component of infrastructure like the Point Hudson Jetty is not purely hypothetical, and would come at an incredible direct and indirect cost to the Port and community. In sum, the Port must invest now in the highest priority projects that shore up "core" functions, in order to avoid using limited funding to address deferred, and much costlier, maintenance emergencies as they arise.

This 2016-2021 CRRP is an important first step to begin addressing these mounting infrastructure maintenance and replacement issues. At its heart, this CRRP seeks to accomplish the following:

- Identify the Port's capital repair and replacement needs – not "wants";
- Accurately estimate the cost to undertake the necessary projects;
- Prioritize identified projects in a manner consistent with the Port Commission's adopted policies (i.e., the 2011 Port Strategic Plan); and
- Identify, to the extent possible, potential funding sources and strategies necessary to implement the Plan.

Can We Afford These Projects?

To the extent possible, this Draft Plan attempts to balance capital priorities with fiscal constraints. However, it is clear that current revenue streams and tax receipts are inadequate to fund the long-term maintenance, repair, and replacement of the full suite of facilities presently operated by the Port. In other words, neither the Port's present nor future appears to be entirely affordable. Hence, the Port Commission faces difficult choices, and will likely be required to undertake a combination of management responses that include all of the following:

- Critically evaluating and where possible cutting expenses, as well as implementing cost efficiencies throughout the Port;
- Significantly increasing rates and fees to recover costs;
- Surplusing non-performing assets that do not advance the Port's central mission of economic development;
- Focusing the majority of future capital spending on projects that maintain core Port functions and safeguard existing revenue streams;
- Considering enactment of a special district-wide property assessment to fund necessary renovation projects (i.e., formation of an Industrial Development District under RCW 53.25.090); and
- Continuing to undertake "duct tape and bailing wire" fixes in lieu of funding major capital rehabilitation.

Communicating this message to Port users and the wider public may prove challenging. However, aligning public expectations with fiscal realities can be a positive byproduct of the capital planning process. Over time, Port users and the public should prepare for incrementally lower levels of service, and facilities that are clean and functional, but not necessarily first class.

A Note of Caution: Port Facilities & Climate Change Vulnerabilities

The Port of Port Townsend, and the businesses that benefit from the infrastructure provided by the Port, substantially contribute to the economy of Jefferson County. However, with the exception of the Jefferson County International Airport, nearly all of the Port's facilities and infrastructure lies adjacent to the inland marine waters of Puget Sound. Consequently, most Port properties are highly vulnerable to future sea level rise (SLR) and increased storm intensity occasioned by man-made ("anthropogenic") climate change. Much is at stake, as some 150 businesses and nearly 500 jobs in Jefferson County depend upon Port land and infrastructure.

The best available science suggests that recurrent storm surge damage and inundation due to sea level rise (SLR), will likely degrade, severely compromise, or even destroy significant components of low-lying Port infrastructure over the coming century. Moreover, a recent study prepared as part of the North Olympic Peninsula Resource

Conservation and Development Council's project, "*Planning for Climate Change on the North Olympic Peninsula*" (September 2015), concluded that many Port facilities may be threatened by annual coastal flooding events by as soon as 2030. See Figures #5 and #6, on the following pages.[4] By mid-century, many Port facilities are likely to suffer from periodic inundation due to SLR coupled with storm surge and coastal flooding. By century's end (a mere 85 years in future), some Port properties are likely to be permanently inundated.

Although the precise timing of the arrival of severe impacts is difficult to predict, anthropogenic climate change will threaten the financial viability of the Port over the coming decades. In time, it will severely undermine our community's natural environment, public health, and economic wellbeing. Over coming decades, SLR and storm-related flooding will undoubtedly result in the closure of a number of businesses and key components of Port infrastructure (e.g., Boat Haven Storm Water System), either permanently or for significant periods of time.

Moreover, anticipated effects upon ecosystems will also impact Port tenants and facility users. These include: changes in ocean chemistry likely to affect Coast Seafoods in Quilcene, as well as the health of the Alaska fishery that indirectly contributes to businesses located at the Boat Haven Shipyard. Over the coming decades these changes may negatively impact Port leaseholders, as well as the Port's anticipated future revenue streams and financial health.

Although recovery from a single storm surge event may be possible and within the Port's financial capabilities, the longer-term concern is that the mounting costs of repairing and recovering from repeated storm surge events that inundate low lying areas could rapidly exhaust the Port's financial ability to mount an effective and coherent response. Longer-term, the questions are as follows:

- *At what point do the costs of repairing Port infrastructure after such shocks outweigh the benefits derived from such expenditures?*
- *At what point is it most prudent to turn away from "sunk" infrastructure costs and entirely re-imagine and reshape the nature, character, and level of complexity of Port operations?*

In sum, inevitable future physical changes suggest that continuing to "double" down on current facilities and infrastructure may be unwise in the coming years, and that the

[4] Maps drawn from the North Olympic Peninsula Resource Conservation and Development Council's preliminary report (January 2015), "*Planning for Climate Change on the North Olympic Peninsula*". The maps graphically presents "low" and "high" severity scenarios for sea level rise and coastal flooding risk over the coming century. The mapped scenarios are based principally on the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report. The data indicate that the Port is likely to face escalating challenges as we seek to defend, retreat, and reimagine our relationship with the shoreline over the coming decades. Whether these changes become obvious during the next few decades, or later in the 21st century, the mounting costs and consequences of adapting to climate disruption will be substantial and unrelenting. The long-term implications for some of the Port's principal facilities (e.g., Point Hudson and Boat Haven) and the community's economy (e.g., maritime manufacturing areas, Port Townsend's historic downtown core, Fort Worden State Park) are profound.

Port should begin to anticipate and prepare for the impacts of the environmental and economic damage expected from climate change.

The Port would benefit greatly from the development and consistent use of an analytical decision-making framework for climate change adaptation. This decision-making methodology would factor risks based on the best available science, and provide a quantitative cost-benefit analysis structure to support future capital expenditures. Development and use of such a tool would help the Commission and public to quantify and evaluate the estimated magnitude of costs, versus benefits, likely to be derived from repairing and rebuilding exiting infrastructure, versus retreating.

FIGURE #5: "LOW SEVERITY" SEA LEVEL RISE & COASTAL FLOOD RISK

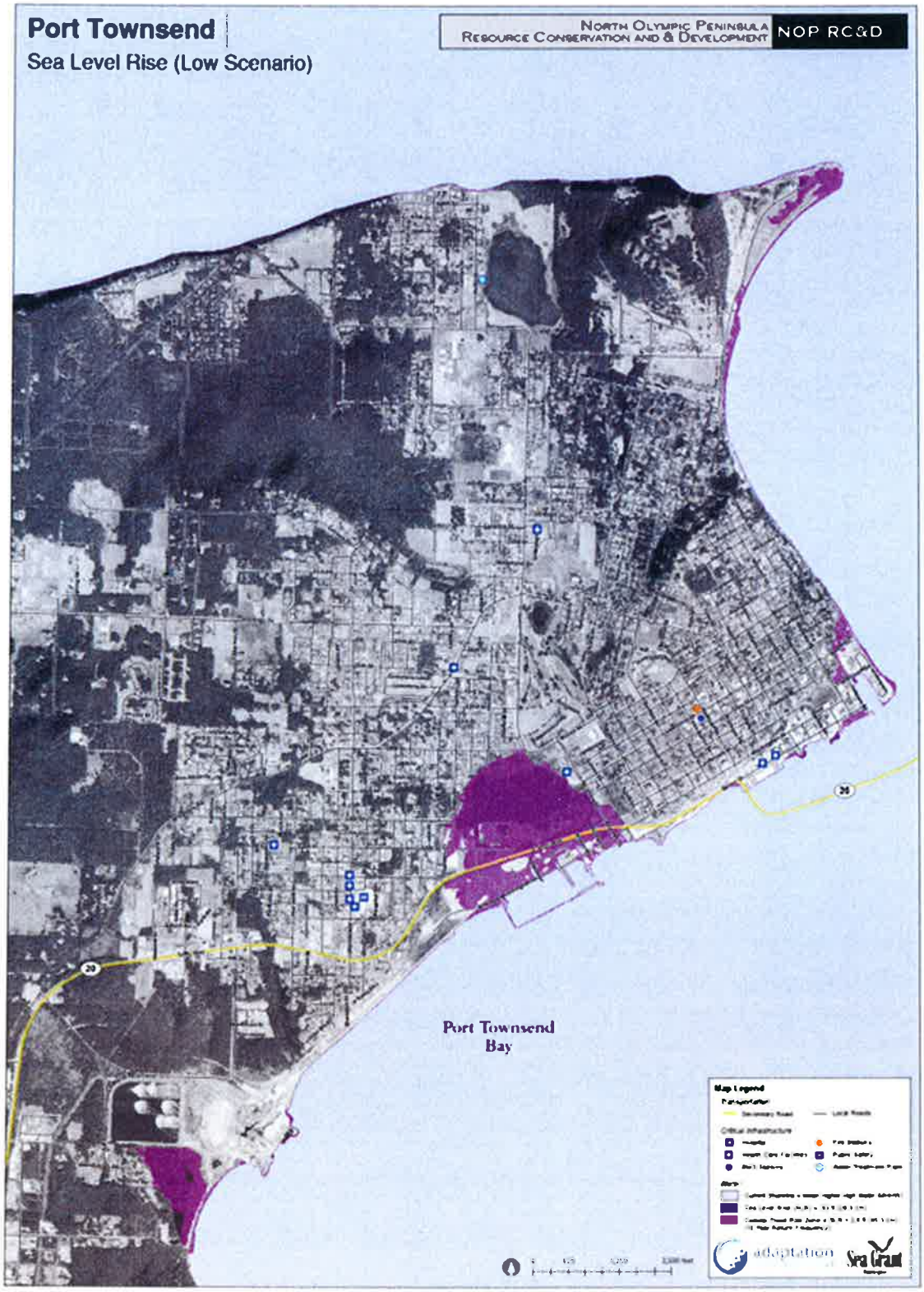
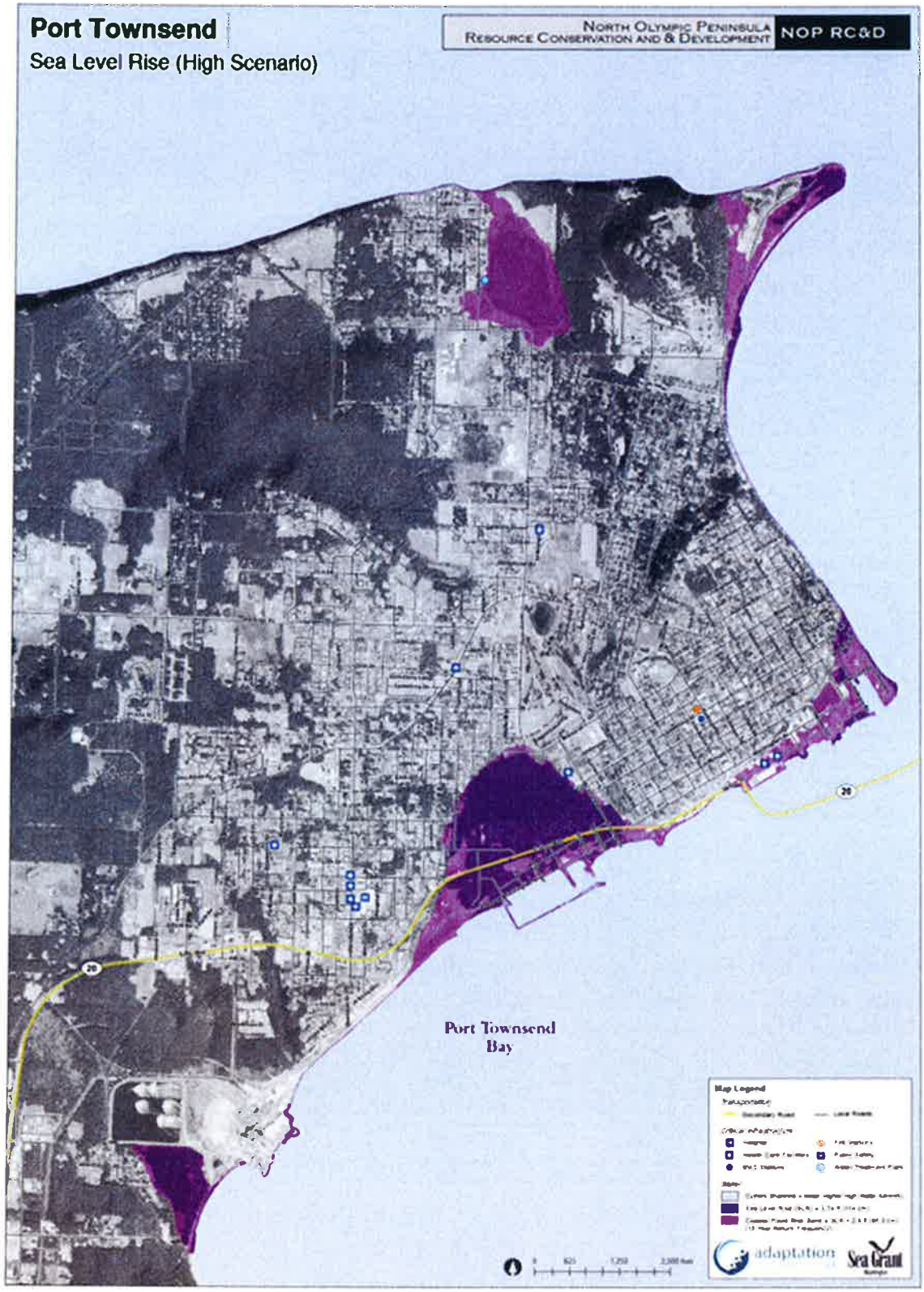


FIGURE #6: "HIGH SEVERITY" SEA LEVEL RISE & COASTAL FLOOD RISK



III. Design Criteria & Levels of Service

Design Life of Improvements

The "design life" of a component of infrastructure is the period of time during which the component is expected by its designers to work within its specified parameters; in other words, the life expectancy of the component of infrastructure. It is the length of time between placement into service of infrastructure, and the onset of it being worn out.

The design life of the Port's infrastructure components is sometimes referred to as its useful life or service life. The selection of a design life is a matter of judgment based on such factors as the type and intensity of use, type and quality of materials used in construction, and the quality of workmanship during installation. The estimated and actual design life for any particular component may vary depending on the above factors. The establishment of a design life provides a realistic projection of service upon which to base a financial analysis of new capital improvements. The typical design life for system components is discussed below.

Basalt/Timber Breakwaters & Jetties: This primary weakness of basalt/timber breakwaters and jetties is deterioration of the wood components, particularly when wooden components are supporting rock components. From breakwater observations and industry experience, a typical design life of such structures is 35 to 50 years. For example, the Point Hudson breakwater was originally constructed in 1934 and successfully repaired and modified several times thereafter to extend its lifespan. It is now 80 years old, beyond the point of further repair, and requires total replacement. Similarly, the oldest (east) portion of the breakwater at the Boat Haven (circa 1934) is well past its anticipated useful life span, and is showing signs of damage and deterioration.

Floating Docks: Modern concrete floating docks are estimated to have a useful life of 35 to 50 years. Lightweight dock systems, such as timber, aluminum and steel typically have a life of 20 to 30 years. In early 2011, the Port completed replacement of the 45-year old A/B Dock moorage system at the Boat Haven. However, C/D Dock and the Linear Dock at Boat Haven have exceeded their anticipated life spans and are in need of substantial rehabilitation. Likewise, the docks at the Quilcene Marina (constructed in the late 1960s) have exceeded their projected useful lives, and are in need of substantial capital renovation to remain usable into the future. By contrast, the entire Point Hudson moorage system was renovated in 2007. These Point Hudson docks have 12-13 years of life expectancy remaining before significant capital maintenance would be anticipated.

Piling Supported Docks/Piers: On average, industry experts estimate that a galvanized, epoxy coated or galvanic protected steel pile has 8 – 10 years before it will require

constant maintenance and upkeep. With routine maintenance, these piles typically have a lifespan of 30 years. Steel pile lifespan can be significantly extended with the use of HDPE sleeves and caps. The service life of timber pile in a marine environment is dictated by the type of wood used and treatment. The life span of treated timber piles in a marine setting ranges from 30-50 years. The disadvantage of timber piles is the limited diameter choices and the toxicity of wood preservation treatments.

Buildings & Upland Structures: Major structures and buildings have a design life of approximately 50 years. Nearly all of the historic Point Hudson Station Buildings were constructed by the US Military between 1934 and 1939, and have now exceeded their life expectancy. However, with ongoing basic capital repairs (e.g., roofs, windows, periodic painting, etc.), these structures can last almost indefinitely. Similarly, a number of structures at the Boat Haven (particularly the "Sperry Buildings") are nearing their expected life of 50 years and will likely require capital investments in the near-term in order to remain leaseable.

Asphalt Surfaced Roads/Parking Areas: Asphalt surfaces for parking and storage areas typically have practical service lives of 15-20 years in our mild coastal climate. With the absence of base material failures (as typically represented by extensive cracking or "alligatoring" asphalt surface life may be extended an additional 5-10 years through seal coating. The roadway at Point Hudson (i.e., Jefferson Street and Hudson Streets, as well as the RV loop) has not been resurfaced since the late 1930s. It has been patched repeatedly over the decades, but will likely require complete resurfacing in the relatively near-term.

Levels of Service

Level of service (LOS) is usually a quantifiable measure of the amount or capacity of public facilities provided to the community. In some instances, LOS may also measure the quality of some public facilities. Typically, LOS is expressed as a ratio of facility capacity to demand (i.e., actual, or potential users). For example, the number of moorage slips provided by the Port in relation to the number of registered boaters within our geographic area.

However, in the context of this CRRP, LOS is used as a qualitative term, rather than a measure of the numeric capacity of Port infrastructure. Thus, LOS in this CRRP relates to whether or not the infrastructure serves its intended purpose, and how it provides for tenant wellbeing.

Accordingly, a somewhat different and higher standard has been applied to Point Hudson as compared with the Boat Haven. Point Hudson is a unique facility with historical significance that provides an array of visitor-serving uses. Maintaining and improving the quality of Point Hudson's facilities is to the benefit of the community as a whole. By contrast, the Boat Haven is an asset that is important to the community

principally because of the maritime industrial jobs it supports, rather than its aesthetic or historical charm.

These qualitative considerations have been factored in this CRRP when identifying capital repairs and rehabilitation necessary for Point Hudson and Boat Haven buildings. For example, new roofs, windows, insulation, and heating systems have been determined to be more important needs at Point Hudson, than the Boat Haven. However, both locations have been evaluated in the same manner with regard to fire, electrical, structural and other potential life/safety issues.

In principle, incrementally bringing the structures at Point Hudson to a higher standard would command higher lease rates, with tenants accepting increased costs in return for more attractive and energy efficient space and enhanced building safety. It is recognized, however, that there is an upper limit as to the lease rates that might be commanded: the combination of expensive to maintain historic structures, along with City of Port Townsend zoning and shoreline use restrictions, likely preclude Point Hudson (as a cost center) from being net revenue positive for the foreseeable future.

IV. Basis for Cost Estimates

The cost estimates presented in this Plan typically include four components: construction, engineering, contingency, and legal/administrative. Each of the cost components is discussed in this section. The estimates presented are preliminary, and are based on the level and detail of planning discussed in this CRRP. As projects proceed, and as additional site-specific information becomes available, the precise scope of work will be more precisely defined, and all cost estimates will require refinement.

Construction Costs

The estimated construction costs in this Plan are based on actual construction bidding results from similar work, published cost guides, and professional engineering experience. All estimates are based on approximate quantities obtained from field measurements, record drawings, and from conceptual designs for the proposed improvement.

Generally, estimated resources used for buildings were developed using proprietary software published by RS Means, bids for re-roofing officer houses at Fort Worden, and estimates prepared by Roen Associates for Building 202 at Fort Worden.

Dock estimates are based on bids previously submitted to the Port of Port Townsend for Point Hudson reconstruction, Boat Haven A&B dock redevelopment, C&D dock repair, Commercial Basin float repair, bids for a recent Port of Everett project, and from conversations with staff at Bellingham Marine.

Quilcene dredging estimates are based on bids previously submitted to the Port of Port Townsend in 2010, updated for inflation.

Similarly, estimates for asbestos remediation at Point Hudson (i.e., Main, Duplex and Commander's Beach House buildings) are based on bids previously submitted to the Port (2010 for the Main Building and 2013 for the Duplex and Commander's Beach House Buildings), updated for inflation.

Pavement estimates use unit prices available at the WSDOT web site, Unit Bid History.

All estimates are in 2015 dollars. Dock costs, for instance, are made current by using 3% per year inflation from the date of bid to now. All estimates are in Appendix A and may be reviewed to see specifically what is included in the bottom line cost. These numbers are shown in this report to the nearest one dollar. This does not imply a degree of accuracy. Instead, numbers to the nearest dollar are used to be consistent throughout the report.

Future changes in the cost of labor, equipment, and materials will require comparable changes in the estimates presented herein. The Engineering News Record (ENR) construction cost index is most commonly used to quantify long-term changes in the national economy.

It is anticipated that construction of needed projects will start by the summer of 2016. *For planning purposes, cost estimates presented in this CFP for construction performed in later years should be increased at 3% per year, or with the ENR index, as appropriate.* (Emphasis added). The cost estimates provided within this Plan assume that all projects are constructed under public contract. Port construction projects or "in-house" projects can often be performed at a lower cost than the contracted rates represented herein. This would allow the Port to do more with available funding. Unfortunately, however, limitations on Port staff preclude in-house work on larger projects.

It is also recommended that in the event other public works projects are being performed in the same location (e.g., stormwater improvements, asphalt replacement), planning priority be given to combining these water projects with the projects at hand. The Port can save money in doing this by eliminating repetitive mobilization, demolition, and road patching in the same locations.

Contingencies

A 15% or 25% contingency factor, to account for unknowns, is included in all estimates. Fifteen percent (15%) is considered an appropriate number for the level of information present in most instances. The 25% contingency has been used for buildings known to contain asbestos.

In recognition that the cost estimates presented are based on conceptual planning, allowances must be made for variations in final quantities, bidding market conditions, adverse construction conditions, unanticipated specialized investigation and studies, and other difficulties which cannot be foreseen at this time but may tend to increase final costs.

Engineering Costs

The cost of engineering services for major projects typically includes special investigations, predesign reports, surveying, subsurface exploration, preparation of contract drawings and specifications, bidding services, construction management, inspection, construction staking, startup services, and the preparation of operation and maintenance manuals. The cost estimates in this CRRP assume 9% for engineering costs through contract bidding and award. Construction management and the preparation of operation and maintenance manuals could increase this figure.

However, additional engineering services may be required for more difficult and complex projects. This could include geotechnical, structural, electrical, mechanical, green building, or other specialized consulting activities. Due to the nature of some projects and the high skill level of current Port personnel, comprehensive engineering support may not be required for all projects. The cost for these services will depend on the individual projects and the level of support requested.

Legal and Administrative Costs

Legal and administrative costs have not been specifically factored within cost estimates set forth in this CRRP. However, for planning purposes, an allowance of four percent (4%) of construction cost for legal and administrative services would likely be prudent. This allowance would include internal project planning and budgeting, grant administration, liaison, and interest on term loan financing, legal services, review fees, legal advertising, and other related expenses associated with the project.

V. Recommended Projects

Project Evaluation & Prioritization Process

Because the Port's capital repair and replacement needs exceed available resources, the projects described in this 2016-2021 CRRP have been prioritized by the policy guidance provided by the Port's 2010 Strategic Plan. Specifically, each potential repair and replacement project has been evaluated to determine the degree to which it advances the relevant policy direction of the Strategic Plan (see Appendix C). By evaluating all potential projects in this way, it is possible to identify those that protect core Port functions, maintain critical and high value Port assets, and serve the broadest cross-section of the public. The applicable policy considerations are as follows:

- ***Community Access:***
  - Does the project maintain or expand physical access to, or the affordability of, Port facilities and services?
  - Does the project maintain or expand opportunities for recreational boat owners and/or pedestrian access to the shoreline?
- ***Sustainable Economic Development:***
  - Does the project help to stimulate countywide economic vitality?
  - Does the project support a key component of the local economy or a sector likely to expand?
  - Would the project contribute to job creation, community wellbeing and resilience?
- ***Infrastructure Maintenance & Development:***
  - Does the project help to maintain a core Port function or service?
  - Does the project preserve, replace, or repair an existing capital asset?
  - Would the project address a deferred asset maintenance issue?
  - Does the project help to preserve a "mission critical", high value asset?

In addition to the guidance provided by the Strategic Plan, repair and replacement project priorities have also been guided by the following considerations:

- ***Project Urgency/Risk Management:***
  - Does the project directly address a life/safety or public health emergency?
  - Would the project reduce the Port's potential exposure to legal liability?
  - Is the project necessary to satisfy a regulatory/legal requirement (i.e., nondiscretionary – in response to a state or federal mandate)?
- ***Volume of Use:***
  - Does the project repair or replace a facility or structure likely to be used by a high volume of public/tenants?

Overall, this CRRP seeks to focus on the basics, fix aging infrastructure, and serve the overall wellbeing of the community.

Recommended Repair & Replacement Projects

Projects identified through the Port's capital facilities planning process are listed in the table below (i.e., Figure #5). Priority 1 projects (which scored between 30 and 58.5 points using the Port's Project Evaluation Matrix (see Appendix D)) are highlighted in green; Priority 2 projects (which scored between 20 and 29.5 points) are highlighted in yellow; and Priority 3 projects (scoring below 20 points) are highlighted in orange. All Priority 1 Projects have been more thoroughly described in the text following the table. It is anticipated that the public process preceding adoption of this Draft CRPP will result in some reprioritization of projects.

FIGURE #7
Capital Repair & Replacement – Recommended Project Priorities: 2016 – 2021

Project	Project Score/Priority	Estimated Cost
Priority 1 Projects (30 – 58.5 points):		
1. Point Hudson - Jetty Demolition & Replacement	58.5	$5,053,200
2. Boat Haven - Storm Water Lift Station (Tide Gate Replacement)	49	$180,000
3. Boat Haven - Engineering Reconnaissance Survey & Recommendations: East 600' of Original (c. 1934) Breakwater	43	$60,000 (engineer's report) leading to a capital project requiring up to $3,000,000[5]
4. Point Hudson - Armory Building Life/Safety	38.5	$150,000
5. JCIA - Runway Resurfacing	38.5	$2,000,000
6. Boat Haven - C&S/Law/Johnson Roof Repairs	38.5	$163,048
7. Boat Haven – Shoreline Stabilization Study: Beach Southwest of 300-Ton Lift Station & Wash Down Pad	38.5	$25,000 (reconnaissance study & recommendations only)[6]
8. Point Hudson – Asbestos Remediation (Main, Duplex & Commander's Beach House)	38	$92,423

[5] The Engineering Reconnaissance Study is anticipated to result in a capital renovation project requiring up to $3,000,000 within the 6-year timeframe of this Plan. Accordingly, $3,000,000 has been included within the estimated cost for financial planning purposes.

[6] The scope and cost of the future capital project likely to be recommended by this study is presently unknown.

FIGURE #7, Continued Capital Repair & Replacement – Recommended Project Priorities: 2016 – 2021		
Project	**Project Score/Priority**	**Estimated Cost**
9. Boat Haven – Linear Float + C/D Dock Repairs/Renovation	36.5	$1,606,227
10. Boat Haven – Public Restroom Renovation	32.5	$58,191
11. Boat Haven - D-Dock Commercial Basin Repairs	32.5	$47,710
12. Quilcene - Public Restroom Renovation	32.5	$54,177
13. Quilcene - Marina Entrance Maintenance Dredging	30	$195,075
	SUBTOTAL – PRIORITY 1 PROJECTS =	**$12,685,051**
Priority 2 Projects (20 – 29.5 points):		
14. Point Hudson - Paving Overlay	29	$129,852
15. Quilcene - Dock Repairs/ Renovation	26.5	$200,298
16. Point Hudson - Cupola House + Annex Repairs/Renovations***	26.5	$143,313
17. Point Hudson - WDFW Building Roof Replacement	26.5	$50,887
18. Mats Mats Bay - Boat Ramp & Dock Repairs	26.5	$78,263
19. Point Hudson – Main Building (i.e., Shanghai Restaurant, etc.) Repairs	26	$483,592
20. Point Hudson - Doc's Restaurant Roof Replacement	26	$57,987
21. Boat Haven - Gold Star Marine Building Repairs (Doors & Roof Only)	23	$143,748
22. Boat Haven - Admiral Ship Supply Building Repairs	23	$68,147
23. Point Hudson - Pygmy Kayak Building Repairs	23	$114,663
24. Point Hudson - Commander's Beach House Repairs	23	$83,602

FIGURE #7, Continued Capital Repair & Replacement – Recommended Project Priorities: 2016 – 2021		
Project	**Project Score/Priority**	**Estimated Cost**
25. JCIA - Airport Building "A" Repairs	23	$132,432
26. JCIA - Airport Building "B" Repairs	23	$130,568
27. JCIA - Tailspin Tommie's Repairs	23	$246,881
	SUBTOTAL – PRIORITY 2 PROJECTS =	**$2,064,233**
Priority 3 Projects (less than 20 points):		
28. Point Hudson - Duplex Building Repairs	19.5	$142,083
29. Point Hudson - PS Express Building Repairs	19.5	$45,128
30. Point Hudson - SV Martha Building Repairs	19.5	$100,809
31. Boat Haven - Craftsmen United Building Repairs	19.5	$73,205
32. Boat Haven - Design Craft/Blue Moose Building Repairs	19.5	$68,147
33. Boat Haven - CJ's Restroom Renovation	19.5	$35,303
34. Boat Haven - Key City Fish Building Repairs	19.5	$39,930
35. Boat Haven - Steelhead Marine Building Repairs	19.5	$68,946
36. Boat Haven - PoPT Maintenance Buildings Repairs	19.5	$66,648
37. Boat Haven - Sunrise Coffee/PT Furniture Building Repairs	19.5	$39,930
38. Boat Haven - Peter's Marine Building Repairs	19.5	$39,930
39. Boat Haven - Taku Marine/PT Brewing Building Repairs	19.5	$39,930

FIGURE #7, Continued Capital Repair & Replacement – Recommended Project Priorities: 2016 – 2021		
Project	**Project Score/Priority**	**Estimated Cost**
40. Boat Haven – PT Brewing Building Repairs	19.5	$49,247
41. Boat Haven - Net Float Replacement (Concrete)	19.5	$467,849
42. JCIA - Fuel Tank Replacement w/Above Ground Tank + Containment	19.5	$125,000
	SUBTOTAL – PRIORITY 3 PROJECTS =	**$1,402,085**
TOTAL ESTIMATED COST – PRIORITY 1, 2 & 3 PROJECTS		**$16,151,369**

Project 1: Point Hudson - Jetty Demolition & Replacement

FIGURE #8: Point Hudson Jetty Demolition & Replacement Project

Existing Jetty — Proposed Replacement Jetty

Project Description & Need: The project involves the demolition and replacement of this severely compromised breakwater before it suffers a catastrophic failure, thereby ensuring that the 66 recreational and 10 commercial moorage slips in the marina are safeguarded from the damaging wind and wave action of Port Townsend Bay. Replacement of the breakwater will ensure that the public's existing investment in Port Townsend's only marina devoted primarily to transient recreational boaters will be maintained into the future.

A 2014 engineer's assessment of both the north and south jetties concluded that they are severely compromised, and that their failure is likely, if not replaced in the near term. Such a failure could jeopardize future public use of this historic marina facility. The engineering assessment report, prepared by Coast & Harbor Engineering, included the following key findings:

- Existing piles are near the end of their useful life, having suffered abrasion damage, marine borer attack damage and decay;
- The horizontal walers that tie the exterior piles together are highly deteriorated and no longer functional;
- Steel cable tiebacks binding the exterior pilings together are deteriorated and highly deteriorated, with a number having already failed or at the end of their useful life;
- Internal armor rock (highly friable basalt) is beyond its useful service life, with deterioration causing the quarry spalls to fracture into smaller rocks and fall through the exterior pilings;
- Overall structural system of the jetties is substantially less stable than its original condition, placing higher stresses on the breakwaters;
- Walkway stringers at the end of the south jetty arm are nearly unseated, creating a potential safety hazard for pedestrians using the walkway/viewing platform;
- The entire 60' end portion of the walkway is leaning seaward and at the end of its useful life; and
- Near-term replacement of the entirety of the breakwater structure is required.

The proposed replacement structure design will provide a functionally wider navigation channel, providing two lanes of vessel travel in and out of the marina, and permitting easier access to the facility by larger transient recreational vessels. The redesigned breakwaters are also expected to have improved performance characteristics, reducing wave refraction and turbulence both within the entrance channel, as well as the moorage basin.

The proposed project is presently in permitting with the US Army Corps of Engineers, and contains the following specific elements:

- Demolition and proper disposal of the entirety of the 258' long south and 284' north breakwaters (shoreward and seaward legs);
- Replacement of both breakwaters with new structures combining elements of closed steel pipe pile cell (shorward leg of south jetty) and vertical steel pipe pile combi-wall (concrete capped) construction (shoreward leg of north jetty, and seaward legs of both jetties);
- Reduction of impacts to juvenile salmonids and benthic habitat by replacing the facility with a design that has a smaller footprint and is less conducive to sheltering species of predator fish; and

- Widening and deepening of the entrance channel to the marina enabling larger vessels easier access to the facility.

This vital project will ensure that Point Hudson and vicinity remain a vital locus of economic activity anchoring the east end of Port Townsend's commercial historic district, while safeguarding the public's existing investment in one of north Puget Sound's few marinas devoted principally to transient recreational vessel use. This project is proposed for completion prior to closure of the "fish window" in February 2019.

Estimated Project Cost & Proposed Funding: $5,503,200

Figure #9 – Point Hudson Jetty Demolition & Replacement: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Construction	$100,000	$2,476,600	$2,476,600	$0	$0	$0	$5,053,200
TOTAL SPENDING	**$100,000**	**$2,476,600**	**$2,476,600**	**$0**	**$0**	**$0**	**$5,053,200**
FUNDING SOURCES & PLAN:							
Revenue Bond Proceeds	$0	$1,975,194	$1,975,195	$0	$0	$0	$3,950,389
Boating Infrastructure Grant	$100,000	$501,405	$501,406	$0	$0	$0	$1,102,811
TOTAL FUNDING	**$100,000**	**$2,476,599**	**$2,476,601**	**$0**	**$0**	**$0**	**$5,053,200**
ADDITIONAL SOURCES SOUGHT: Boating Infrastructure Grant (#2) for up to $680,521; if awarded, this could reduce the amount of the revenue bond issue to $3,269,868							

Project 2: Boat Haven - Storm Water Lift Station (Tide Gate Replacement)

[RESERVED - INSERT FIGURE #10: EXISTING STORMWATER OUTFALL/TIDEGATE; PROPOSED LOCATION OF LIFT STATION]

Project Description & Need: Recent attempts to repair the tide gate outfall for the Boat Haven Storm Water System have not been successful, and a long-term solution is required. Installation of a replacement tide gate has been considered (estimated cost $90,000), but is not recommended due to the location of the outfall, which is presently at sea level at a 0 tide. Projected sea-level rise over the coming decades will only magnify the outfall issues associated with the Port's gravity flow storm water system. Installation of a storm water lift station has been determined by staff and the Port's Engineer to be the most reliable long-term solution to this problem, and will safeguard the 450 jobs in the yard that depend upon the system.

Estimated Project Cost & Proposed Funding: $180,000

Figure #11 – Boat Haven Stormwater Lift Station: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (Permitting, A&E)	$16,200	$0	$0	$0	$0	$0	$16,200
Construction	$0	$163,800	$0	$0	$0	$0	$163,800
TOTAL SPENDING	**$16,200**	**$163,800**	**$0**	**$0**	**$0**	**$0**	**$180,000**
FUNDING SOURCES & PLAN:							
Property Taxes + Operating Revenues	$16,200	$163,800	$0	$0	$0	$0	$180,000
TOTAL FUNDING	**$16,200**	**$163,800**	**$0**	**$0**	**$0**	**$0**	**$180,000**
ADDITIONAL SOURCES SOUGHT: None identified							

Project 3: Boat Haven – Engineering Reconnaissance Survey & Recommendations - East 600' of Original Breakwater

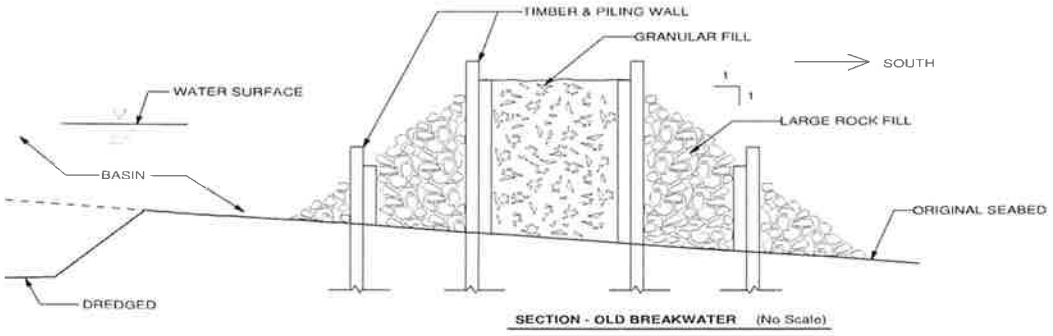
FIGURE #12: Boat Haven Engineering Reconnaissance Project – Study Area

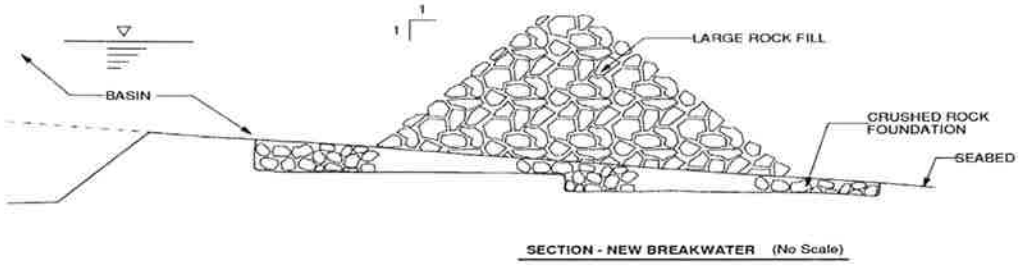
Project Description & Need: The east 600 feet (approximately) of the Boat Haven Breakwater is part of the marina originally constructed in 1934. It has been damaged by wind driven wave events twice during the past decade, with emergency repairs being completed each time. Because of the age and deteriorated state of the structure, a future storm-caused failure could be more serious, and would potentially jeopardize marina entrance channel navigation and use of the Commercial Basin.

Because of its design, this original length of breakwater is far more vulnerable than the newer breakwater (c. 1964) protecting the Recreational Basin lying to the west. The original breakwater section was constructed with an outer layer of rock spalls on each side of the structure, with granular fill between the outer armor rocks. Two rows of timber walls on wood pilings are visible on each side of the breakwater. The Port's engineer posits that that these walls were used to support large rocks being installed more or less concurrently with placement of the interior fill (which was dredged from the new harbor. The newer section of breakwater to the west is similar in appearance, but is constructed entirely from rock quarry spalls and has no internal fill.

Figure #13, below, shows the differences in construction between the old and new sections of the Boat Haven Breakwater. This original section of breakwater is particularly vulnerable because of its thin outer layer of rock armoring, and its south toe is unprotected from wind driven wave erosion occurring at low tide.

FIGURE #13: Boat Haven – Construction Schematics of Original (c. 1934) 600' Section & "New" (c. 1965) Sections of Breakwater





Accordingly, it is recommended that a coastal engineer with specific experience in breakwater construction and renovation be retained to prepare a detailed Engineering Reconnaissance Study. This study would further assess breakwater condition and identify repair options and recommendations. This study would likely necessitate near-term CFP revisions to reflect recommended repairs and renovations to the facility. For planning purposes, it is assumed that future repairs and renovations to this facility may require capital expenditures of up to $3,000,000 within the timeframe of the initial six-year CFP.

Estimated Project Cost & Proposed Funding:

- $60,000 - detailed Engineering Reconnaissance Study and recommendations
- Potential to require up to $3,000,000 for renovation within the next 6 years

Figure #14 – Boat Haven Breakwater: Potential Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (Preliminary Engineering Reconnaissance)	$60,000	$0	$0	$0	$0	$0	$60,000
Soft Costs (A&E, Permitting)	$0	$0	$135,000	$135,000	$0	$0	$270,000
Construction	$0	$0	$0	$0	$1,365,000	$1,365,000	$2,730,000
TOTAL SPENDING	**$60,000**	**$0**	**$135,000**	**$135,000**	**$1,365,000**	**$1,365,000**	**$3,060,000**
FUNDING SOURCES & PLAN:							
Property Taxes + Operating Revenue	$60,000	$0	$33,750	$33,750	$341,250	$341,250	$810,000
USACOE Direct Funding Support	$0	$0	$101,250	$101,250	$1,023,750	$1,023,750	$2,250,000
TOTAL FUNDING	**$60,000**	**$0**	**$135,000**	**$135,000**	**$1,365,000**	**$1,365,000**	**$3,060,000**
ADDITIONAL SOURCES SOUGHT: None identified; Port share of costs could be funded through proceeds from issuing additional revenue bonds, rather than property tax proceeds or operating budget revenues							

Project 4: Point Hudson - Armory Building Life/Safety Improvements

Figure #15 – Point Hudson – Armory Building

Project Description & Need: A recent inspection conducted by East Jefferson Fire Rescue and City of Port Townsend Building Department Staff revealed that the mix of current uses in this historic building necessitates installation of fire suppression and emergency egress improvements in order to meet minimum code requirements. The building has approximately 10,000 square feet on the ground floor, and 3,000 square feet on the second floor. A shipwright specializing in woodworking principally occupies the bottom floor of the structure. Other ground floor spaces include a canvas and rigging business, as well as storage space. The second floor is a sail loft. There is an unused observation tower located at the east end of the building above the second floor.

Potential responses to identified code compliance issues are presently being researched by Port staff. These potential responses include the following:

- Retaining the present mix of tenant uses and installing a sprinkler system with actuators and a second story emergency egress stairway, likely to be located on the north side of the structure; or
- Building interior fire suppression walls on the ground floor to enclose the woodworking shop along with the aforementioned second story emergency egress stairway; or
- Changing the ground floor uses to obviate the need for fire suppression/fire separation improvements, and install second story emergency egress improvements.

At the time of this writing, a definitive response to achieve code compliance has not been identified. Accordingly, it is recommended that the most costly potential compliance response (i.e., a sprinkler system with emergency egress) be anticipated and budgeted for within this CFP.

Because this project would address life/safety issues, reduce the Port's potential legal liability, and is required to satisfy a regulatory mandate, it is non-discretionary in nature and must be undertaken as soon as practicable.

Estimated Project Cost & Proposed Funding: Up to $150,000

Figure #16 – Point Hudson Armory Building: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$13,500	$0	$0	$0	$0	$0	$13,500
Construction	$136,500	$0	$0	$0	$0	$0	$136,500
TOTAL SPENDING	**$150,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$150,000**
FUNDING SOURCES & PLAN:							
Property Taxes + Operating Revenue	$150,000	$0	$0	$0	$0	$0	$150,000
TOTAL FUNDING	**$150,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$150,000**
ADDITIONAL SOURCES SOUGHT: None identified; costs could be partially funded through proceeds from sale of Boat Haven buildings or tenant contributions							

Project 5: Jefferson County International Airport – Runway Resurfacing

FIGURE #17: JCIA Runway Resurfacing Project (Main Runway Only)

Project Description & Need: In 2013 the FAA and WSDOT Aviation Division completed a runway condition assessment for all NIPIAS (National Plan of Integrated Airport Systems) airports in Washington State. The report identified a need to resurface the 225,000 square foot main runway at the JCIA during the next budget biennium (i.e., 2016-2017). The last major resurfacing of this runway was completed in September of 1990. This project is non-discretionary, although 90% of the funding will be federal, with a possibility that additional State WSDOT Aviation Division monies may also support the project.

Estimated Project Cost & Proposed Funding: $2,000,000

Figure #18 – JCIA Runway Resurfacing: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$0	$200,000	$0	$0	$0	$0	$200,000
Construction	$0	$0	$1,800,000	$0	$0	$0	$1,800,000
TOTAL SPENDING	**$0**	**$200,000**	**$1,800,000**	**$0**	**$0**	**$0**	**$2,000,000**

Figure #18 – JCIA Runway Resurfacing: Spending & Funding Plan, Continued

FUNDING SOURCES & PLAN:							
Property Taxes + Operating Revenue	$0	$20,000	$180,000	$0	$0	$0	$200,000
FAA & WSDOT Direct Funding Support/Grant	$0	$180,000	$1,620,000	$0	$0	$0	$1,800,000
TOTAL FUNDING	**$0**	**$200,000**	**$1,800,000**	**$0**	**$0**	**$0**	**$2,000,000**
ADDITIONAL SOURCES SOUGHT: None identified; Port share of costs may be further reduced through a WSDOT Aviation Division Grant							

Project 6: Boat Haven – C&S/Law/Johnson Building Roof Repairs

FIGURE #19: C&S/Law/Johnson Building Re-Roofing Project

Project Description & Need: This 5,700 square foot structure, the first portion of which was constructed in the late 1970s, is essentially comprised of three connected buildings that are roughly 40'x60', 30'x60', and 25'x60' in size. Because the structure evolved over time and was constructed in stages, the roof has distinctly different framing

characteristics. In 2015, the portion of the roof structure on the half of the building facing Haines Street was replaced. However, the rear of the roof is seriously compromised, and is of substandard construction (i.e., corrugated steel sheets nailed to wood rafters and trusses). This portion of the roof structure – which protects 2 marine trades businesses - has numerous leaks and appears incapable of withstanding uplift from high winds. Because the roof is compromised, further water damage is occurring to the trusses. Accordingly, this project involves reconstruction of the trusses, as well as roofing in order to ensure that the building remains safe and tenantable.

Estimated Project Cost & Proposed Funding: $163,048

Figure #20 – C&S/Law/Johnson Building Re-Roofing: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$0	$11,025	$0	$0	$0	$0	$11,025
Construction	$0	$152,023	$0	$0	$0	$0	$152,023
TOTAL SPENDING	**$0**	**$163,048**	**$0**	**$0**	**$0**	**$0**	**$163,048**
FUNDING SOURCES & PLAN:							
Proceeds from Sale of Boat Haven Buildings	$0	$163,048	$0	$0	$0	$0	$163,048
TOTAL FUNDING	**$0**	**$163,048**	**$0**	**$0**	**$0**	**$0**	**$163,048**
ADDITIONAL SOURCES SOUGHT: None identified							

Project 7: Boat Haven - Shoreline Stabilization Study – Beach Southwest of 300-Ton Lift Station & Wash Down Pad

Project Description & Need: This is the only portion of the Port's Boat Haven property that is not protected by a breakwater or shoreline armoring. Prior to its removal, the railroad "Y" in Port Townsend Bay helped to dissipate wave energy along this beach. This beach is highly vulnerable to wind and wave action at present, and projected sea-level rise over the coming decades will only increase the risk of flooding and erosion along this stretch of shoreline, especially during storm events. Immediately behind the beach on its eastern end are high value Port assets, including the wash down pad, as well as the 300-ton lift station; beyond, lies the heart of the Boat Haven Industrial area.

FIGURE #21: Shoreline Stabilization Study – Project Area

Estimated Project Cost & Proposed Funding:

- $25,000 (Shoreline Stabilization Study & Recommendations)
- Study may result in a shoreline stabilization capital project of unknown magnitude within the next 6 years

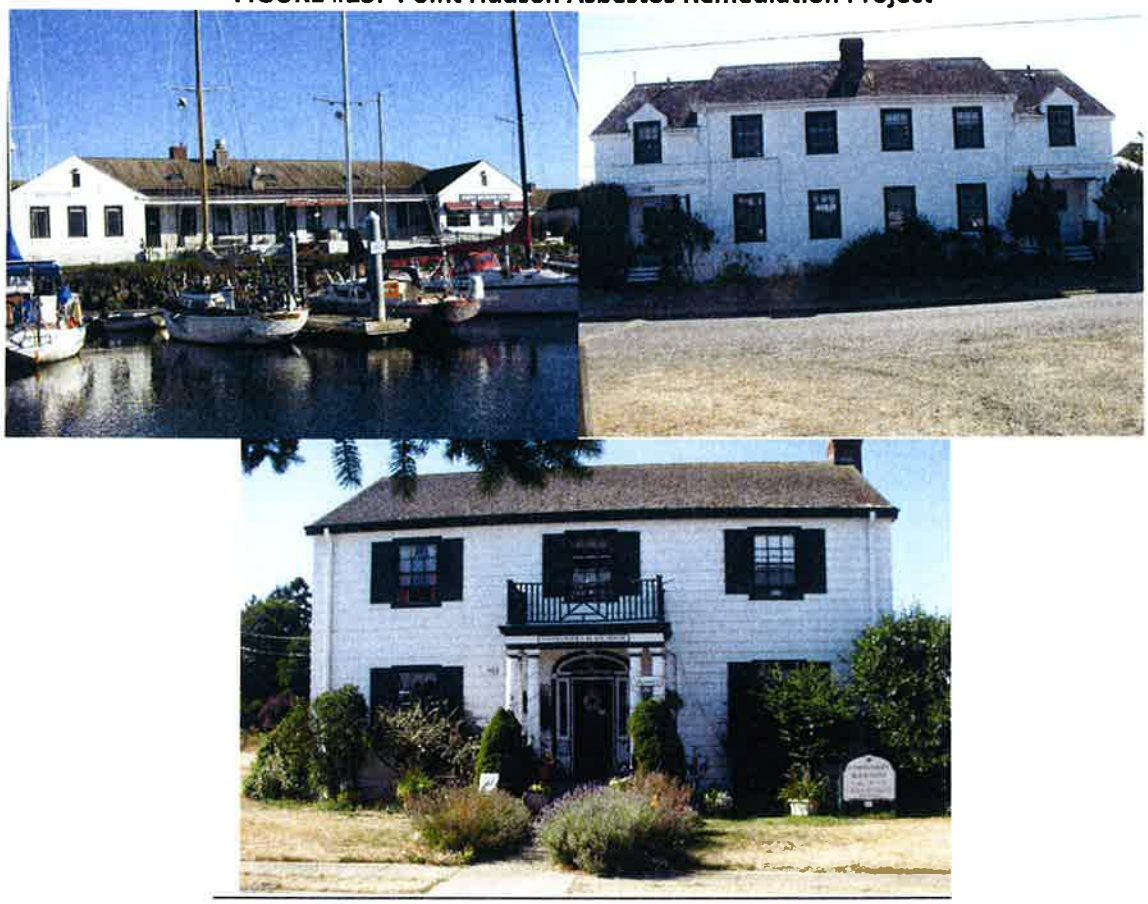
Figure #22 – Boat Haven Shoreline Stabilization Study: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (Reconnaissance Study & Recommendations)	$0	$0	$0	$25,000	$0	$0	$25,000
Construction	$0	$0	$0	$0	$0	$0	$0
TOTAL SPENDING	**$0**	**$0**	**$0**	**$25,000**	**$0**	**$0**	**$25,000**
FUNDING SOURCES & PLAN:							
Property Taxes + Operating Revenue	$0	$0	$0	$25,000	$0	$0	$25,000
TOTAL FUNDING	**$0**	**$0**	**$0**	**$25,000**	**$0**	**$0**	**$25,000**
ADDITIONAL SOURCES SOUGHT: None identified							

Project 8: Point Hudson – Asbestos Remediation

Project Description & Need: The Point Hudson Main Building (i.e., the Shanghai/Point Hudson Café building), Duplex Building (i.e., "Gathering Place"), and the Commander's Beach House, all have deteriorating ("friable") asbestos insulation protecting plumbing in under floor crawl space areas. The Port has been systematically remedying this issue throughout Point Hudson, but these three buildings have yet to be addressed. In the event of cracked pipes during a winter freeze event, Port staff would be prohibited from entering these "permit entry confined spaces" to repair broken pipes. Consequently, it is recommended that remediation be completed in the near term, rather than occasioning the likely disruption and inconvenience caused by inevitable future plumbing failures.

FIGURE #23: Point Hudson Asbestos Remediation Project



Estimated Project Cost & Proposed Funding: $92,423

Figure #24 – Point Hudson Asbestos Remediation: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Construction	$92,423	$0	$0	$0	$0	$0	$92,423
TOTAL SPENDING	**$92,423**	**$0**	**$0**	**$0**	**$0**	**$0**	**$92,423**
FUNDING SOURCES & PLAN:							
Proceeds from Sale of Boat Haven Buildings (i.e., New Day Fisheries)	$92,423	$0	$0	$0	$0	$0	$92,423
TOTAL FUNDING	**$92,423**	**$0**	**$0**	**$0**	**$0**	**$0**	**$92,423**
ADDITIONAL SOURCES SOUGHT: None identified							

Project 9: Boat Haven – Linear Float + C/D Dock Repairs/Renovation

Project Description & Need: These concrete docks were constructed in the late 1960s and are now well past their anticipated useful lives. The Port's Engineer has concluded that renovation of these facilities (similar to that completed for the Commercial Basin) can further extend the useful life of this infrastructure by 10 years or more. Included in this project would be the replacement of rub boards, whalers, associated through rods and nuts, installation of miscellaneous hardware, addition of supplemental floatation, and patching of deteriorated concrete surfaces. Due to the prohibitive cost (i.e., an estimated $7,905,767), complete replacement of these docks is not recommended at this time.

FIGURE #25(a): Boat Haven – Linear Float Project Area

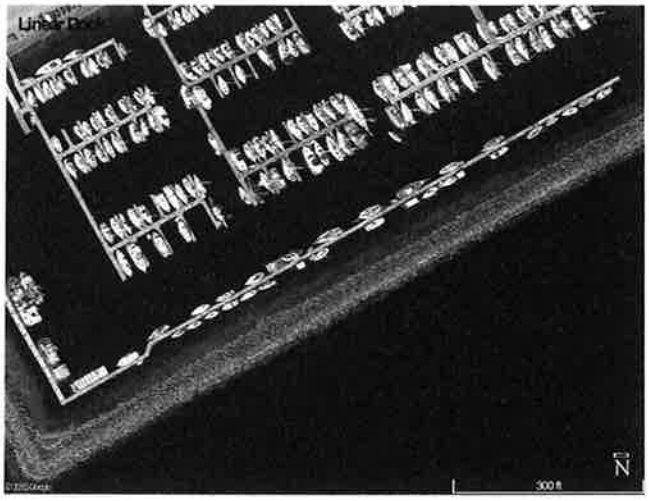
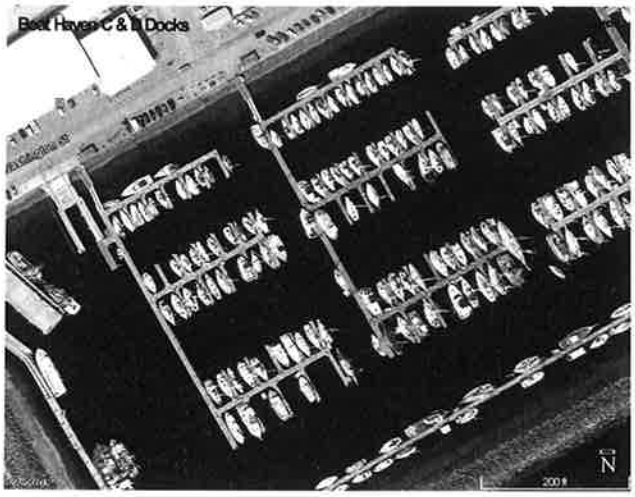


FIGURE #25(b): Boat Haven – C/D Dock Project Area



Estimated Project Cost & Proposed Funding: $1,606,227

Figure #27 – Boat Haven Linear Float + C/D Dock Renovation: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$0	$0	$0	$144,560	$0	$0	$144,560
Construction	$0	$0	$0	$0	$0	$1,461,667	$1,461,667
TOTAL SPENDING	**$0**	**$0**	**$0**	**$144,560**	**$0**	**$1,461,667**	**$1,606,227**
FUNDING SOURCES & PLAN:							
Boat Haven Reserves	$0	$0	$0	$144,560	$0	$855,440	$1,000,000
Property Taxes + Operating Revenue	$0	$0	$0	$0	$0	$117,599	$117,599
Proceeds from Sale of Boat Haven Buildings	$0	$0	$0	$0	$0	$488,628	$488,628
TOTAL FUNDING	**$0**	**$0**	**$0**	**$144,560**	**$0**	**$1,461,667**	**$1,606,227**

ADDITIONAL SOURCES SOUGHT: None identified; however, given the project timing, a significant portion of this project (e.g., $606,227) could be funded through proceeds from issuance of future revenue bonds, rather than property taxes/operating revenues and proceeds from the sale of Boat Haven buildings

Project 10: Boat Haven – Public Restroom Renovation

[RESERVED - INSERT FIGURE #28: INSERT MAP/PHOTO HERE]

Project Description & Need: These restrooms were originally constructed in the mid-1980s and have sustained consistent and heavy public use. Port Maintenance Staff has estimated that approximately 53,000 showers are taken annually at this facility. Black mold has been identified, and was addressed temporarily (i.e., through a chlorine treatment) in 2014. The facility requires complete renovation in order to maintain existing levels of service for Port users. Specifically, the project involves adding a new roof and replacing doors; windows; exterior lighting; all interior bathroom, shower and laundry fixtures, and improved ventilation.

Estimated Cost & Proposed Funding: $58,191

Figure #29 – Boat Haven Public Restroom Renovation: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$0	$0	$0	$0	$0	$3,935	$3,935
Construction	$0	$0	$0	$0	$0	$54,256	$54,256
TOTAL SPENDING	**$0**	**$0**	**$0**	**$0**	**$0**	**$58,191**	**$58,191**
FUNDING SOURCES & PLAN:							
Proceeds from Sale of Boat Haven Buildings (i.e., Gold Star)	$0	$0	$0	$0	$0	$58,191	$58,191
TOTAL FUNDING	**$0**	**$0**	**$0**	**$0**	**$0**	**$58,191**	**$58,191**
ADDITIONAL SOURCES SOUGHT: None identified							

Project 11: Boat Haven – D-Dock Commercial Basin Repairs

FIGURE #30: D-Dock Commercial Basin – Project Area

Project Description & Need: This concrete dock, primarily used by commercial fishing vessels, is one of the most deteriorated docks operated by the Port. The project outlined in this CFP would extend its useful life another 10 years or somewhat longer. Included in the project is the replacement of rub boards, whalers, associated through rods & nuts, installation of miscellaneous hardware, the addition of supplemental flotation, and the patching of deteriorated concrete surfaces. Because this facility supports both the commercial fishing industry as well as New Day Fisheries, it is important to the local economy. This combination of condition-related project urgency and economic impact is the basis for its prioritization.

Estimated Project Cost & Proposed Funding: $47,710

Figure #31 – Boat Haven D Dock Commercial Basin Repairs: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$0	$0	$0	$4,294	$0	$0	$4,294
Construction	$0	$0	$0	$43,416	$0	$0	$43,416
TOTAL SPENDING	**$0**	**$0**	**$0**	**$47,710**	**$0**	**$0**	**$47,710**
FUNDING SOURCES & PLAN:							
Proceeds from Sale of Boat Haven Buildings	$0	$0	$0	$47,710	$0	$0	$47,710
TOTAL FUNDING	**$0**	**$0**	**$0**	**$47,710**	**$0**	**$0**	**$47,710**
ADDITIONAL SOURCES SOUGHT: None identified							

Project 12: Quilcene – Public Restroom (& Laundry) Renovation

[RESERVED - INSERT FIGURE #32: INSERT MAP/PHOTO HERE]

Project Description & Need: This facility is heavily used by the Quilcene Community, and is in need of complete near-term renovation. Because of the caustic marine environment, nearly all metal fixtures and doors are heavily oxidized and are in need of replacement. The proposed project involves adding a new roof and replacing doors, windows, exterior lighting and replacing all interior bathroom, shower and laundry fixtures.

Estimated Project Cost & Proposed Funding: $54,177

Figure #33 – Quilcene Restroom Renovation: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$0	$0	$0	$3,663	$0	$0	$3,663
Construction	$0	$0	$0	$50,514	$0	$0	$50,514
TOTAL SPENDING	**$0**	**$0**	**$0**	**$54,177**	**$0**	**$0**	**$54,177**
FUNDING SOURCES & PLAN:							
Proceeds from Sale of Boat Haven Buildings	$0	$0	$0	$54,177	$0	$0	$54,177
TOTAL FUNDING	**$0**	**$0**	**$0**	**$54,177**	**$0**	**$0**	**$54,177**
ADDITIONAL SOURCES SOUGHT: None identified							

Project 13: Quilcene – Marina Entrance Dredging

FIGURE #34: Quilcene Marina Entrance Dredging – Project Area

Project Description & Need: In 2010 the Port conducted comprehensive dredging of the marina entrance channel. Due to littoral sediment drift within Quilcene Bay, Coast &

Harbor Engineering has recommended maintenance dredging be undertaken every 5-7 years to maintain minimum depths necessary for safe navigation. It has recently been observed that sediment has been accumulating within the channel, and that maintenance dredging is likely to be necessary within the next two (2) years.

Estimated Project Cost & Proposed Funding: $195,075

Figure #35 – Quilcene Marina Entrance Dredging: Spending & Funding Plan

SPENDING PLAN:							
Cost Category	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Soft Costs (A&E, Permitting)	$0	$0	$19,508	$0	$0	$0	$19,508
Construction	$0	$0	$175,567	$0	$0	$0	$175,567
TOTAL SPENDING	**$0**	**$0**	**$195,075**	**$0**	**$0**	**$0**	**$195,075**
FUNDING SOURCES & PLAN:							
Property Taxes + Operating Revenue	$0	$0	$195,075	$0	$0	$0	$195,075
TOTAL FUNDING	**$0**	**$0**	**$195,075**	**$0**	**$0**	**$0**	**$195,075**
ADDITIONAL SOURCES SOUGHT: None identified							

VI. Proposed Funding & Expenditure Schedule

Figure #20, below, Fiscal Years 2016-2021 6-Year Spending & Funding Plan, lists sources of funds for capital repairs and renovations, capital replacement projects, and detailed engineering assessments likely to result in capital projects over the next six years. The table is based upon identified and likely funding sources, rather than aspirational funding sources. However, no funding sources have been identified for priority 2 and 3 projects (i.e., projects 14 through 42), which total $3,466,318. Absent improvements to the Port's bottom line through rate or fee increases, special assessments not yet levied, or grant sources not yet identified or secured, these projects would be deferred indefinitely.

Figure #36: Fiscal Years 2016-2021 Spending & Funding Plan

SPENDING PLAN (i.e., all Priority 1 Projects)							
PROJECT CATEGORY	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Capital Repairs & Renovations	$92,423	$363,048	$2,130,075	$381,447	$1,365,000	$2,884,858	$7,216,851
Capital Repairs Needed to Avoid "Red Tag"	$150,000	$0	$0	$0	$0	$0	$150,000
Replacement of Existing Capital Infrastructure	$116,200	$2,640,400	$2,476,600	$0	$0	$0	$5,233,200
Detailed Engineering Assessments (i.e., leading to new capital projects)	$60,000	$0	$0	$25,000	$0	$0	$85,000
Spending Total	**$418,623**	**$3,003,448**	**$4,606,675**	**$406,447**	**$1,365,000**	**$2,884,858**	**$12,685,051**
						Deferred Needs (i.e., all Priority 2 & 3 Projects)	**$3,466,318**

[PARTIALLY RESERVED – TABLE REQUIRES COMPLETION/REVISION]

Figure #36: Fiscal Years 2016-2021 Spending & Funding Plan, Cont.

FUNDING PLAN (i.e., all Priority 1 Projects)							
FUNDING SOURCES	2016	2017	2018	2019	2020	2021	Total
Property Taxes & Operating Budget							$1,731,851
Revenue Bond Proceeds							$3,950,389
Secured Grants & Direct State/Federal Funding Support							$5,152,811
Sale of Boat Haven Buildings							$850,000
Boat Haven Cash Reserves							$1,000,000
Spending Total							$12,685,051

REMAINDER OF SECTION RESERVED