
PORT SAN LUIS TRAILER BOAT LAUNCHING FACILITY FEASIBILITY REPORT



Port San Luis Trailer Boat Launching Facility

Aerial View of Port San Luis Boat Launch

Port San Luis Harbor District

\$442,358 Grant

SUMMARY

The Boating and Waterways Commission (Commission) is being asked to provide Advice and Comment on Port San Luis Harbor District's (District) request for a \$442,358 and construction grant from the Harbors and Watercraft Revolving Fund (HWRF) for improvements to the Port San Luis Trailer Boat Launching Facility (BLF) at Port San Luis.

The proposed grant would complete the design, permits, and construction of the BLF project. Project improvements include demolishing the existing boarding floats and gangway, reconfiguring and installing new longer boarding floats for motorized vessels, installing a low-freeboard float for non-motorized vessels, ADA compliant gangways, and new project signage.

There are no expected problematic financial, engineering, permitting, stakeholder, or public access issues associated with this project.

The Department of Parks and Recreation, Division of Boating and Waterways (DBW) seeks Commission Advice and Comment on this proposed \$442,358 Harbors and Watercraft Revolving Fund planning and construction grant to Port San Luis Harbor District for the Port San Luis Trailer BLF improvements described in this August 13, 2020 Feasibility Report.

GRANT APPLICANT AND PREVIOUS COMMISSION ACTION

Grant Applicant

The grant applicant for this project is the Port San Luis Harbor District, which is responsible for operating and maintaining the proposed boat launching facility for 20 years after construction. Per the District, the BLF operation and maintenance are contracted to a concessionaire which operates the boat hoist and maintains the boater restroom.

Commission Site Visit

Due to the COVID-19 Pandemic, the Boating and Waterways Commission will be conducting a virtual tour of the site during its scheduled Commission Meeting on August 13, 2020 in lieu of an in-person site visit.

Previous Commission Action and DBW Grant Awards at Port San Luis Harbor

The Commission has approved the following grants to provide boating access at the Port San Luis.

In FY 1985/86, the Commission approved a grant of \$238,000 to fund improvements at Port San Luis, Olde Port Beach BLF.

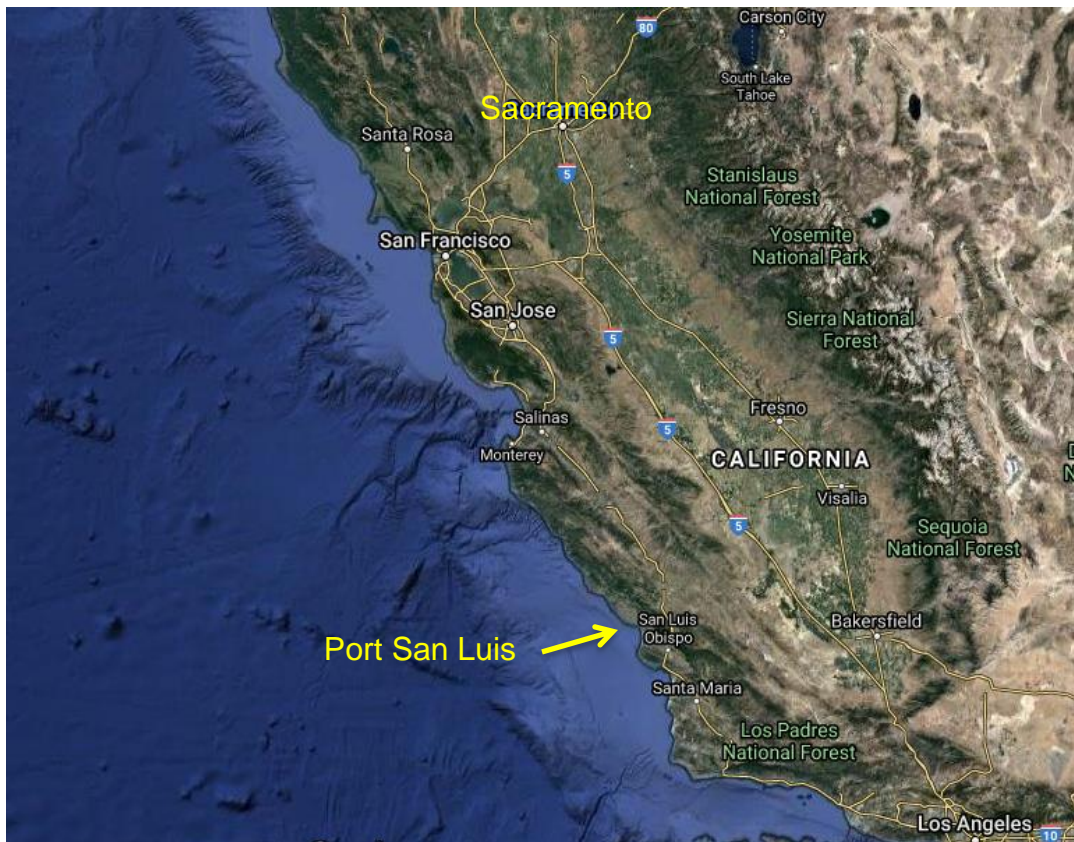
In FY 2004/05, the Commission approved a grant of \$1,400,000 to construct a boat hoist, parking area, and restroom at the Port San Luis Trailer BLF.

In FY 2012/13, the District received a Ramp Repair and Modification grant of \$96,000 to repair the restroom at Port San Luis, Olde Port Beach BLF.

GENERAL LOCATION AND AREA

Location

Port San Luis is located approximately 2 miles west of the town of Avila Beach and about 12 miles southwest from the City of San Luis Obispo, the largest city in San Luis Obispo County.



Source: Google Maps

The BLF is located approximately 300 miles south of Sacramento. Access to the boat launch is via Interstate 5 South to US-101 S in Paso Robles. Follow US-101 to San Luis Bay Drive in Avila Beach. From US-101 S, turn right onto San Luis Bay Drive and turn right on Avila Beach Drive. The Port San Luis Trailer Boat Launch is at the end of Avila Beach Drive on the left.



Source: Bing Maps

Area

San Luis Obispo County (SLO) has a residential population of approximately 285,000, surging annually with 20,000 students attending California Polytechnic State University. Agriculture is the largest industry in the County with strawberries as the largest crop followed by wine grapes. SLO is the third largest producer of wine in California. Recreation and tourism are the second largest economic driver, a major component of which is recreation along its 100 miles of coastline. The economies of the communities in Morro Bay, Avila Beach, Pismo Beach, and Grover Beach rely heavily on coastal tourism.

Port San Luis (Port), located about two miles from Avila Beach, also contributes to SLO's coastal tourism and economy through its two recreational boat launching facilities (Olde Port and Trailer BLFs), the Harford Pier, RV and tent camping, picnicking, 267 permanent and seasonal moorings, 10 transient moorings, marine supply store, repair shop, boatyard, dry boat storage, restaurants, commercial fishing, and ocean tours.

Local commercial fishing depends on the Harford Pier for its ability to offload, store, and transport fish. About 500,000 pounds of various rockfish, salmon, and hagfish are offloaded from commercial fishing vessels at Harford Pier annually. Harford Pier has three commercial public hoists, an ice facility, live fish storage, skiff tie-ups/racks, a diesel fueling facility, and sewer and bilge pump outs.

The Port is owned by the District which operates and maintains the Harford Pier, manages the Port's commercial components, and provides security for the Port and outlying waters. The District's Harbor Patrol is responsible for ocean patrol north to Morro Bay and shares responsibility with the Santa Barbara Harbor Patrol to the south.

Recreational boating and fishing are also large components of the Port's activities. Olde Port and Trailer BLFs are very important regionally as the next closest ocean access public recreational boat launching is at Morro Bay approximately 24 miles to the north and Goleta Beach County Park, over 100 miles to the south.

The smaller of the two boat launch facilities, Olde Port Boat Launch, which is not the subject of this report, is one-mile southeast of the BLF on Avila Beach Drive and includes a restroom, single-lane launch ramp and roadside-only parking. This launch ramp is only suitable for vessels that can launch from the beach in possible surf. For most motorized vessels, the subject of this Feasibility Report, is the only option for launching and retrieving.

Usage

The BLF is the most used boat launch at the Port and primarily serves recreational motorized vessels. It is open 24 hours per day year-round. The BLF utilizes a sling boat hoist to move motorized vessels from the shore to the water. It is operated by a concessionaire contracted with the District. The concessionaire also manages a vessel fueling station at the BLF. Both hoist and fueling station are only available during the concessionaire's business hours. Business hours are 7 days a week from 5:30 a.m. to 4:00 p.m. during fishing season and from 6:30 a.m. to 4:00 p.m. in the offseason. Fishing season is from April through December.

The hoist's capacity is 15,000 pounds or vessels up to 28 feet in length. During peak season, the line at the boat hoist is congested as the hoist operator waits for boaters to load and move their boats from the boarding floats before it can hoist the next boat into the water, creating a bottleneck for launching.

The BLF is busy (particularly during fishing season) serving recreational boaters with motorized vessels. Non-motorized boaters with stand-up paddle boards and kayaks have also significantly increased usage of the BLF. The concessionaire offers kayak rentals at the marine supply store adjacent to the BLF.

In 2006, due to limited parking the Port requested and DBW approved flexible use of the DBW funded vehicle-boat trailer parking. The agreement allows overnight RV camping and RV boater camping at the DBW funded parking area while ensuring that day-use boaters have priority to the parking area constructed with boater funds. In turn, the District made available additional vehicle-trailer parking spaces during fishing hours at the parking area closest to the BLF, which is preferred by boaters.

The BLF boarding floats are also used by the District to offer free water-taxi service for mooring patrons and transient guests providing easy access to the shore and occasionally by the Harbor Patrol as a safe dockage during extreme weather and while transporting civilians landside.

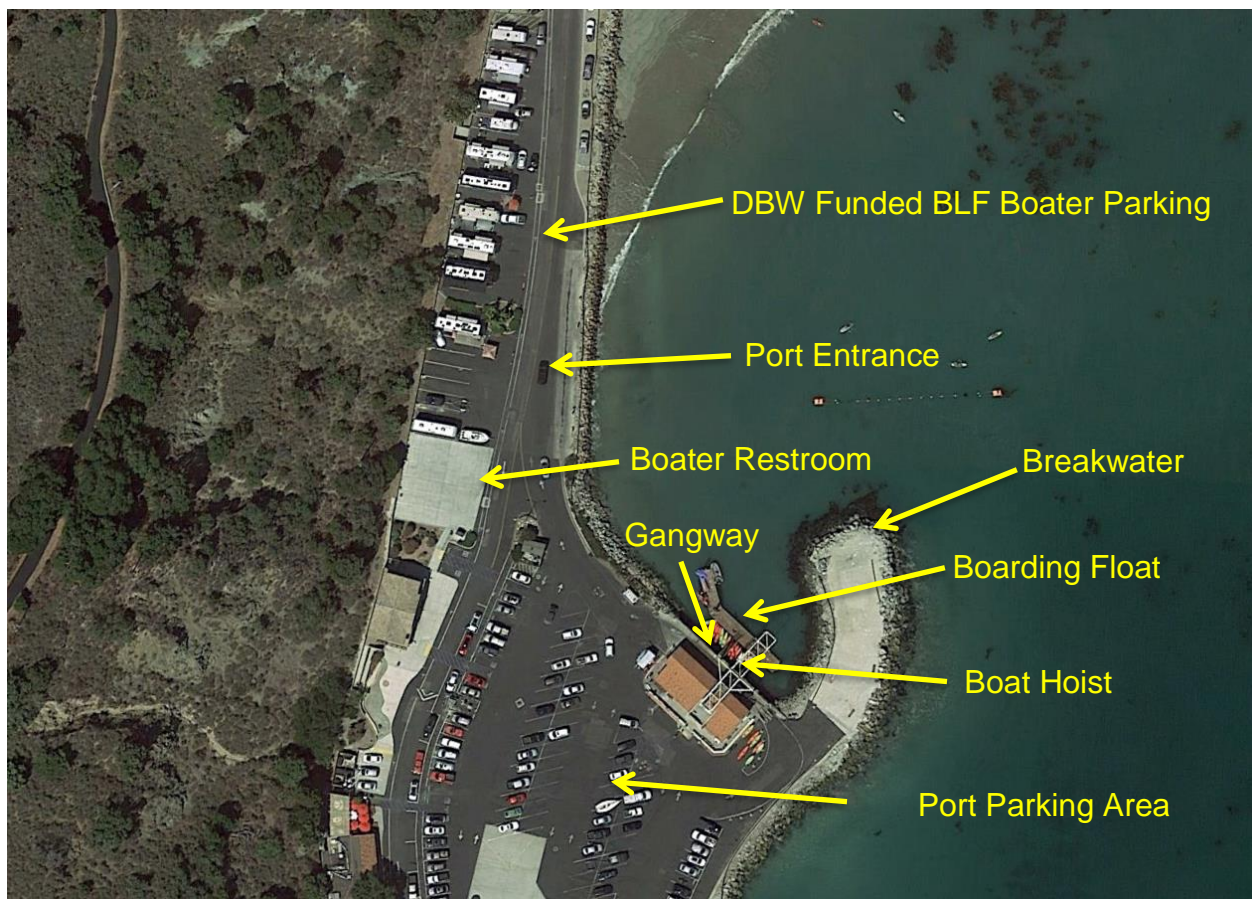
Existing Conditions

The BLF was originally constructed in 1967 and consists of a protective breakwater, pile-guided boarding floats, hoist, gangway, boater restroom, and vehicle-trailer parking area. The hoist, boater restroom, and parking area were rehabilitated by the FY 2004/05 DBW grant and remain in good working condition.

The breakwater protecting the BLF is still serviceable, but the District indicated that it may seek a future grant to make improvements. The existing piles are in good condition and the District's fueling system was replaced in the spring of 2020. The existing piles and new fuel line will be utilized by the new boarding floats if the grant is approved.

The existing wooden boarding floats provide approximately 95 lineal feet of usable dock space for vessel tie-ups and have reached the end of their useful life, requiring frequent and costly repairs. Approximately two motorized vessels can be tied up at any one time while the hoist is in use. The limited capacity of the boarding floats causes the longest delays in launching and retrieving. The floats are accessed by a single gangway, which no longer meets code.

The launching basin is plagued annually with a large amount of siltation that can sometimes build to the point that deep draft vessels cannot tie-up at the dogleg section of boarding floats. The District, with an ongoing dredge permit, dredges the BLF basin annually from March through June and moves approximately 10,000 to 15,000 cubic feet of material down coast so it can continue in the littoral cell transport.



Source: Google Maps

PROJECT DESCRIPTION

The proposed grant would complete the design, permits, and construction to increase, reconfigure and replace the boarding floats at the Port San Luis Trailer Boat Launching Facility.

Proposed Project Scope

Pile-Guided Boarding Floats for Motorized Vessels

Install new pile guided boarding floats that are 10-foot wide by approximately 116-foot long with a dogleg configuration, see Exhibit A for reference. The additional 20 feet of dock space will increase capacity by approximately 50 percent, from dockage space for two motorized vessels to at least three on the east edge of the boarding floats and space for the District's water taxi on the north western edge of the motorized float's dog-leg section. The calculated usable space dedicated to the water taxi is approximately nine percent. Therefore, the District will pay for nine percent of the total project cost.

Low-Freeboard Boarding Float

With the increase of non-motorized vessel use at the BLF, the District proposes the installation of a new low-freeboard boarding float that will be approximately 10-foot wide by 22-foot long and connected to the end of the motorized boarding float, see Exhibit A.

Gangways

Replace the existing single gangway with two new 5-foot wide by 30-foot long ADA compliant aluminum gangways. Gangways will have rollers and transition plates connecting the seawall to the boarding float landing. Two gangways will limit potential conflict between motorized and non-motorized boaters.

Project Signage

Replace the existing signage with a project credit sign giving credit to the Harbors and Watercraft Revolving Fund for funding the project.

Construction Variance

Due to recent escalation in construction costs in the region, it is difficult to establish an accurate estimate of construction costs. Therefore, DBW has added a line item (added to the non-construction section of Table 1) to mitigate this uncertainty. This funding will only be available upon concurrence by DBW of method, scope, and associated costs.

Cost Estimate

The total estimated project cost for engineering, permits, and construction is \$486,108. See Table 1: Port San Luis Trailer BLF Project Cost Estimate for the project cost breakdown. This estimate includes a 10 percent construction contingency allocation reserved for any unforeseen overages affecting the approved scope items that may occur during the construction process.

Table 1: Port San Luis Trailer BLF Project Cost Estimate			
CONSTRUCTION SCOPE	DBW GRANT	DISTRICT'S 9% MATCH	COST ESTIMATE
Demolition	\$ 43,680	\$ 4,320	\$ 48,000
Delivery and Installation	14,560	1,440	16,000
Pile-Guided Boarding Floats & Low Freeboard Float	156,975	15,525	172,500
Gangways	68,250	6,750	75,000
Signage	9,100	900	10,000
*Construction Subtotal	\$ 292,565	\$ 28,935	\$ 321,500
NON-CONSTRUCTION SCOPE			
***Construction Variance 15%	\$ 43,885	\$ 4,340	\$ 48,225
*Escalation **6.2%	18,139	1,794	19,933
*DBW Contingency 10%	29,257	2,894	32,150
*Engineering 12%	35,108	3,472	38,580
*Inspection 5%	14,628	1,447	16,075
*Permits 3%	8,777	868	9,645
Non-Construction Subtotal	\$ 149,793	\$ 14,815	\$ 164,608
TOTAL ESTIMATED PROJECT COST	\$ 442,358	\$ 43,750	\$ 486,108
Source = Meeco Sullivan Estimate 5.3.2019			
*Percentages are of the Construction Subtotal			
**3.1% per year for 2 years = 6.2% escalation			
***DBW option - due to recent escalation in construction cost in the region.			

Project Status

The proposed project preliminary site plan is attached, see Exhibit A on page 10.

Timeline

The District estimates that project construction would be completed approximately two years from execution of the proposed grant agreement.

Engineering Feasibility

There are no particularly difficult or unusual problems associated with the proposed project.

Environmental Impact and Permits

The District plans to apply for permits at the 60 percent design level. The District filed a CEQA Notice of Exemption for Ongoing Maintenance in 2012.

Required Permits:

- No County permits will be required.
 - United States Army Corps Engineers Nationwide Permit for Operation and Maintenance.
 - California Coastal Commission, Coastal Development Permit for Operations and Maintenance.
 - Central Coast Regional Water Quality Control Board, Water Quality Certificate for Operations and Maintenance.
-

PROJECT METRICS

Annual Launches

Current: According to the District's grant application, the annual number of motorized boat launches at the existing facility is 4,000. The number of non-motorized boat launches at the existing facility is 15,000.

Future: The District estimates the annual number of motorized boats launches at the improved facility will have a substantial increase of 25 percent to 5,000 launches per year with the number of non-motorized launches also increasing by 25 percent to 20,000 launches per year. For this analysis, staff assumes a more modest 20 percent increase for motorized and non-motorized launches, to 4,800 motorized and 18,000 non-motorized.

Annual User Days

Current: Based on the California Boating Needs Assessment study published in 2002, the average number of users per boat (motorized) at the Central Coast is 3.26. Therefore, the current estimated annual number of user days at BLF is 13,040 motorized and 15,000 non-motorized for a combined total of 28,040 annual user days (annual launches x users per boat).

Future: DBW estimates that the number of annual user days for this facility will increase by 20 percent for motorized to 15,648 and increase by 20 percent for non-motorized to 18,000 for a combined total of 33,648 annual user days.

User Day Value

Current: The 2002 Boating Needs Assessment Study estimated a base user day value. This value, adjusted by the Consumer Price Index, is now \$26.03 per user. The total current annual user day value for the facility is \$729,881 (user day value x annual user days).

Future: DBW estimates that the total annual user day value for the proposed facility would increase after the facility is improved to \$875,857 (user day value x projected annual user days).

Benefit-Cost Ratio

A common method used in the analysis of investments is to establish net present value of the benefits and costs associated with a project. If the Benefit/Cost ratio exceeds "1" then the investment, weighed against available investment alternatives, is worthy of consideration from a financial perspective. The results of this analysis are as follows:

Benefit: The total benefits over the 20-year life of the project are estimated to be \$13,906,800.

Cost: Net costs over the 20-year grant period are estimated to be \$2,750,838.

Ratio: Assuming a total project cost of \$486,108 to complete designs, acquire permits, and complete construction, the Benefit-Cost Ratio is 5.06.

User Fees

The FY 2004/05 Grant Agreement, allowed the District to charge the following combination of fees for vessel launch and retrieval:

- \$13.00 for vessels less than 15 foot in length;
- \$15.00 for vessels between 15 foot and 19 foot in length;
- \$18.00 for vessels between 19 foot and 24 foot in length; and
- \$20.00 for vessels between 24 foot and 27 foot in length.

Per the Agreement, fees can be increased annually in accordance with percentage changes in the United States Bureau of Labor Statistics Consumer Price Index (CPI). The District's concessionaire currently charges a launch and retrieval fee of:

- \$20.00 for boats up to 19 foot in length;
- \$30.00 for boats over 24 foot in length.

Per DBW's calculation, the fee increase for vessels over 24 foot in length should be no more than \$26.50. The District is out of compliance with the FY 2004/05 Grant Agreement. The District will reduce the boat launch and retrieval fees after a formal meeting with the concessionaire in August.

CONCLUSION

The Department's analysis indicates that this project, as proposed, makes needed improvements, is feasible from an engineering perspective, is cost effective, and increases public access.

COMMISSION ADVICE AND COMMENT

The Department of Parks and Recreation, Division of Boating and Waterways seeks Commission Advice and Comment on this proposed \$442,358 Harbors and Watercraft Revolving Fund planning and construction grant to Port San Luis Harbor District for the Port San Luis Trailer Boat Launching Facility improvements described in this August 13, 2020 Feasibility Report.

CONDITIONS:

- The District shall contribute nine percent of the total project cost for improvements to the Port San Luis Boat Launching Facility for water taxi use on the northwest dogleg section of the motorized boarding floats.
- The District shall reduce the boat launching and retrieval fees for boats over 24 foot to \$26.50 by August 31, 2020.

Exhibit A - PROPOSED PRELIMINARY DESIGN

