



2019 Annual Marine Facility Report



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San Juan County
Public Works Department
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I. Introduction

San Juan County is comprised entirely of islands. Travel between islands or to and from the mainland is by boat or airplane. San Juan County’s highway is the State ferry route; there are no land based state highways. Washington State Ferries (WSF) is the principal provider of marine transportation between the four main islands (San Juan, Orcas, Shaw and Lopez) and the mainland through Anacortes, Washington and through Sidney, BC, Canada (see Figure 1).

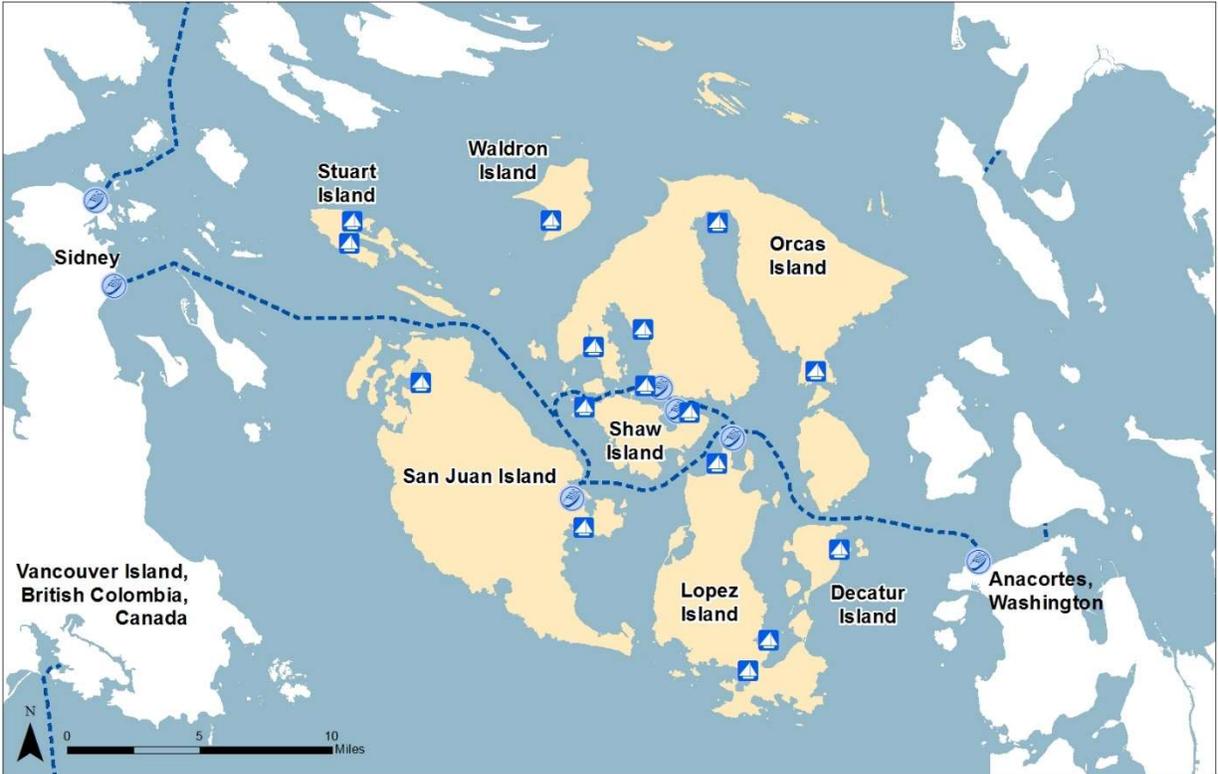


Figure 1-San Juan County Marine Facilities and the WS Ferry Route

The sixteen marine facilities, owned and maintained by San Juan County Public Works, supplement WSF operations by serving as transportation hubs between islands and the mainland to provide marine access for:

- Delivery of people, vehicles, and freight
- Commuting to Lopez, Orcas, San Juan and the mainland for business, services, work and school
- WSF Terminals for walk on passengers
- Postal service
- Emergency services and law enforcement
- Marine recreational or tourism opportunities for County residents and visitors

San Juan County Public Works owns and/or maintains marine facilities (piers, floats, and ramps) at 16 locations that connect to the 270 miles of County Roads on San Juan, Orcas, Shaw, Lopez, Decatur, Stuart, and Waldron (see Figure 2). The County marine facilities are summarized in Appendix A, which identifies

the type of marine facilities at the site, the resources and amenities available at and near the site, as well as the key transportation uses for the site. Appendix B provides details about each marine facility.

The County also has numerous inventories and non-inventoried shore access points resulting from County roads that end at the shoreline (coastal or lakes). These shore access points may provide for:

- Delivery of people, vehicles, and freight via a barge or freight ferry
- Marine recreation including shore access and small boat launching

Some shore access points are listed in County's Parks, Trails and Natural Area Plan and Nonmotorized Plan (Parks Plan) and improvements to the public right of way may be included in the County Public Works transportation improvement plans.

In addition to the marine facilities owned/maintained by Public Works, there are additional facilities owned by other county departments including:

- Small Pox Bay Ramp at the County Park on San Juan Island
- Indian Cove Ramp at the County Park on Shaw Island

Management of these two marine facilities are covered in the Parks capital improvement program.

San Juan County Comprehensive Plan establishes the goals and policies for air, marine, and land transportation facilities and services in Section B, Element 6 Transportation. The policies in the Comprehensive Plan provide direction for the development of, and investment in County operated marine transportation facilities.

The purpose of the Annual Marine Facility Report is two-fold:

- 1) Evaluate the structural integrity of the marine facilities owned and/or maintained by County Public Works Department and to identify capital improvement projects required to sustain these facilities.
- 2) Identify capital improvement projects to meet the goals and policies of the Comprehensive Plan for County Marine Facilities.

Information from this report is integrated into the County transportation improvement program.



Figure 2-San Juan County Public Works Marine Facilities

II. Maintenance Activities

San Juan County Public Works staff perform routine maintenance for the sixteen marine facilities. If maintenance tasks exceed the expertise of the San Juan County staff, repair services would be contracted to competent contractors. Most facilities require routine maintenance such as:

- Minor repairs and replacement components
- Pressure washing structures
- Clearing debris and sand from ramps

The following non-routine maintenance activities were conducted by San Juan County using County Forces and/or Contract Services:

Marine Facility	Description	Status
Orcas Landing Float	Connecting pins inspected every two to four weeks each year with frequent replacement of pins.	On-going Maintenance
Madrona Point Gangway	Gangway decking replaced in 2019.	Complete
Orcas Landing Gangway	Gangway retrofit with new metal material to prevent pedestrian falling hazard, completed in February 2019, see photographs below.	Complete
Prevost Harbor Pier, Stuart Island	Re-secured safety ladders, replaced sections of planks and bull rails	Complete
Hunter Bay Float	A storm in early 2019 disconnected the float from the pier. The float was recovered and repairs were complete in March 2019.	Complete



III. Capital Improvements

A project to improve pedestrian access at the Orcas Landing was completed in early 2019.



Constructed a retaining wall and ADA compliant walkway to observation area.



IV. Physical Assessment Results

All marine facilities were inspected to confirm that safety ladders, life rings and gangway railings are in good condition. No safety issues were identified. The current condition of each marine facility is assessed and deficiencies are identified in the Facility Summaries, Appendix B.

There are five marine facilities with physical deficiencies:

- Obstruction Pass Ramp-- Concrete logs are spalling with large cracks and exposed rebar. Ramp is still usable and expected to provide access for at least 6 years.
- West Sound Float and Gangway-- Pile hoops on seaward float are too degraded for year-round use. Seaward float is removed each winter to protect it from storm damage.
- Griffin Bay Barge Landing-- Pier is unusable.
- Reid Harbor Ramp-- Concrete logs are spalling with large cracks and exposed rebar. Large scour hole has formed beyond the end of the ramp. Ramp is still usable and expected to provide access for at least 6 years.
- Hunter Bay Float and Gangway were damaged. Repairs have been completed but replacement should be scheduled.

Physical deficiencies are typically resolved through maintenance projects to repair or replace the marine facility. The large maintenance projects are prioritized with other County road maintenance projects. In some cases, maintenance projects are combined with or upgraded to Capital Improvement Projects that change the facility design or level of service.

V. Comprehensive Plan Review

San Juan County Comprehensive Plan (Comp Plan) establishes the goals and policies for air, marine, and land transportation facilities and services in Section B, Element 6 Transportation. The following projects have been identified to meet the goals of the Comp Plan:

- Improve public barge landing access to Shaw Island.
- Increase parking at Deer Harbor Marina for outer island residents.
- Improve pedestrian access at Orcas Landing marine facility to encourage walk access to the WSF terminal.
- Increase docking capacity at Hunter Bay for outer island residents.
- Rebuild the barge landing on San Juan Island to provide emergency back-up for the WSF Ferry Service and a public barge landing site.

VI. Capital Marine Facility Project Summary

Capital projects are identified to improve level of service for the existing marine facilities and to construct new facilities to meet the goals and policies of the San Juan County Comprehensive Plan. The following projects have been identified by the annual physical inspection of the facilities and a review of the Comprehensive Plan marine transportation goals and policies:

Marine Facility	Basis for Capital Improvement	Estimated Costs (Funding)	Estimated Year
West Sound Float & Gangway	Replacement of the float and gangway will provide year-round access for outer island residents to Orcas Island.	\$225,000	2023
Orcas Landing Improvements	Construction of pedestrian access improvements along Orcas Road	\$250,000	2022
Hunter Bay Float & Gangway Replacement	Replacement of the existing float and gangway. Float and gangway were damaged in 2018. The replacement will also increase docking capacity and provide additional access to Lopez Island for outer island residents and visitors.	\$415,000	2025
Griffin Bay Marine Facility	Rebuilding the barge landing to replace the unusable pier and repair the ramp will provide public access for commercial and private delivery of people, vehicles and freight. The facility would also provide an emergency backup to the WSF terminal on San Juan Island.	\$625,000	2025+
Shaw Island Marine Facilities	Installing marine facilities on Shaw Island will improve public access to Shaw Island for commercial and private delivery of people, vehicles, and freight.	\$200,000 for new Ramp	2025+
Orcas Landing Marine Facility	Reconstruct the existing floats to provide access from both sides. Replace aging floats.	\$1,000,000	2025+

Appendices

- A-Table of Marine Facilities
- B-Marine Facility Summaries

**Table 1
County Public Works Marine Facilities located on
Ferry-Served Islands**

Island	Site Name	Marine Facilities	Outer Islands Served	Available Amenities and Resources	Key Transportation Uses
	Hunter Bay	Pier Float Ramp	Center Decatur Frost Trump	Parking Toilet	<ul style="list-style-type: none"> • Access including barge landing for delivery of people, vehicles and freight from the mainland to Lopez and from Lopez to Decatur and the other outer islands. • Access on Lopez for Decatur and other outer island residents for business, services, work, and school. • Recreational access for Lopez residents • Long term parking for Decatur and Center residents.
Lopez	MackKaye Harbor	Pier Float Ramp		Parking short-term Toilet	<ul style="list-style-type: none"> • Barge landing for delivery of people, vehicles, and freight from the mainland to southern Lopez, including delivering gravel for County road repair. • Boat launch for Lopez residents traveling to Orcas, Lopez Village, San Juan, or mainland for business, services, work and school. • Recreational access for Lopez residents
	Odlin Park	Pier Float Ramp Nearby Mooring Buoys owned by County Parks		Camping Mooring buoys Parking short-term Taxi Toilet Water-potable	<ul style="list-style-type: none"> • Emergency back up to Lopez WSF Terminal. • Barge landing for propane and gasoline delivery to Lopez. • Access including barge landing for delivery of people, vehicles and freight from the mainland to Lopez and from Lopez to outer islands. • Access to County Park camp sites. • Recreational access for Lopez residents
	Deer Harbor Marina	Leased float at Marina Private Marina Facilities available	Crane Fawn Waldron Wasp	Fuel Groceries Freight crane Lodging Parking Post Office Restaurants Retail Shops Taxi Toilet Showers Water-potable	<ul style="list-style-type: none"> • Access on Orcas for delivery of people and freight to and from outer islands. • Access for outer island residents traveling to Orcas for business, services, work, school and to pick up mail. • Limited parking for Waldron and other outer island residents.
Orcas	Obstruction Pass	Pier Float Ramp	Barnes Blakely Clark Obstruction Matia Patos Sucia	Parking Taxi Toilet	<ul style="list-style-type: none"> • Emergency back up to Orcas WSF Terminal. • Barge landing for propane and gasoline delivery to Orcas. • Access including barge landing for delivery of people, vehicles and freight from the mainland to Orcas and from Orcas to outer islands. • Boat launch for Orcas residents commuting for business, services, work and school. • Parking for outer island residents • Recreational access for Orcas residents

Island	Site Name	Marine Facilities	Outer Islands Served	Available Amenities and Resources	Key Transportation Uses
	Orcas Landing	Pier Float		Ferry Access Fuel Groceries Lodging Parking Post Office Restaurants Retail Shops Taxi Toilet Water-potable	<ul style="list-style-type: none"> Ferry passenger access to WSF Terminal Access on Orcas for delivery of people and freight from the mainland to Orcas and from Orcas to outer islands. Docking facilities for Sheriff and Coast Guard vessels.
Orcas	Madrona Point	Pier Float		Fuel Groceries Lodging Parking Post Office Restaurants Retail Shops Taxi Toilet Water-potable	<ul style="list-style-type: none"> Access to Eastsound businesses for outer island residents and visitors from the mainland.
	West Sound	Pier Float Stairway to beach	Big Double Little Double Picnic	Limited parking on street	<ul style="list-style-type: none"> Access on Orcas for delivery of people and freight to/from outer islands. Recreational access (launching kayaks) for Orcas residents
San Juan	Roche Harbor	Pier Float Private ramp nearby	Cactus Henry Johns O'Neil Pearl Satellite Spieden Stuart	Fuel Groceries Lodging Parking Post Office Restaurants Retail Shops Taxi Toilet Water-potable	<ul style="list-style-type: none"> Access for Stuart Island and other outer island residents traveling to San Juan Island for business, services, work, and school. Long term parking for Stuart, Waldron and outer island residents.
	Griffin Bay	Pier (not operational) Barge landing			<ul style="list-style-type: none"> Emergency backup for San Juan WSF Terminal Access for vehicles and freight from the mainland and to the outer islands
Shaw	Neck Point Cove	Beach Landing			<ul style="list-style-type: none"> Access on Shaw Island for delivery of people, vehicles and freight. Boat launch for access to outer islands. Boat launch for Shaw residents traveling to Lopez, Orcas, San Juan, or mainland for business, services, work, and school. Recreational access for Shaw residents.
	Shaw Landing (not operational)	Pier		Ferry Access Groceries Post Office Toilet	When operational: <ul style="list-style-type: none"> Ferry passenger access to WSF Terminal. Access for delivery of people and freight to Shaw Island.

Table 2
County Public Works Marine Facilities
Located on Outer Islands with County Roads

Island	Site Name	Marine Facilities	Available Resources and Amenities	Key Transportation Uses
Decatur	Decatur Island	Ramp	Short term parking	<ul style="list-style-type: none"> • Access for delivery of people, vehicles and freight. • Barge access for propane and gas delivery. • Boat launch for Decatur commuters traveling to Lopez, Orcas, San Juan, or mainland for business, services, work and school.
Stuart	Prevost Harbor	Pier Float	Freight crane	<ul style="list-style-type: none"> • Access for delivery of people and freight. • Access for Stuart commuters traveling to Lopez, Orcas, San Juan, or mainland for business, services, work and school. • US Mail Delivery to Stuart Island residents.
	Reid Harbor	Ramp Nearby public floats owned by State Parks	Parking Toilet Camping	<ul style="list-style-type: none"> • Access for delivery of people, vehicles and freight. • Barge access for propane and gas delivery. • Boat launch for Decatur commuters traveling to Lopez, Orcas, San Juan, or mainland for business, services, work and school. • 72 hour parking at boat ramp • Access to camping and hiking at Stuart Island Marine State Park and Turn Point Lighthouse.
Waldron	Waldron Island	Pier Float Private beach landing located nearby	Freight crane	<ul style="list-style-type: none"> • Access for delivery of vehicles and freight. • Access for Waldron commuters traveling to Lopez, Orcas, San Juan, or mainland for business, services, work and school. • US Mail Delivery to Waldron Island residents



Decatur Island Ramp

RP169



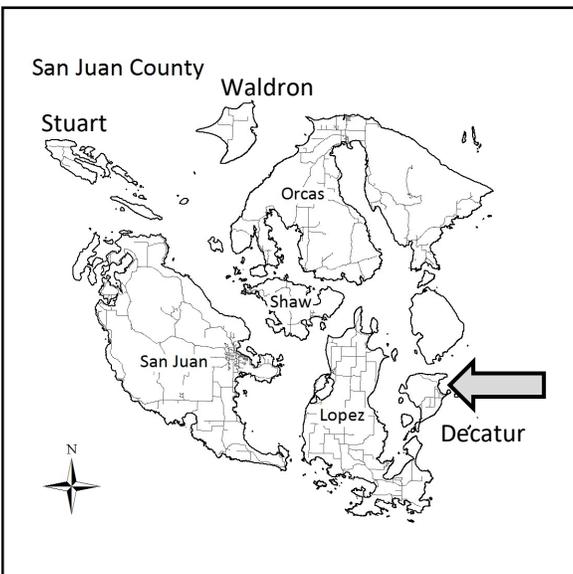
Asset	Description	Installed
Ramp	16' x 110' Precast concrete, 1-foot thick logs	2009

Facility Description: East side of Decatur Island. Accessed via Decatur Beach Rd. Ramp serves the commercial and recreational needs of residents. Fuel and propane deliveries are a regular occurrence. Facility was reconstructed in 1994 and completely replaced in 2009. There are no amenities at this facility. Limited, short term parking available.

Fees: There are no fees associated with the use of this facility.

Ownership: San Juan County Right of Way. AFN 1921-0018695, V14, P534.

Aquatic Lands Lease: Tidelands are privately owned.



Decatur Island Ramp

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Ramp	\$147,500	\$100	2034	25 year lifespan

*Average Annual Maintenance Costs 2012-2017

Regulations

There are no known restrictions on the use of this facility.

Parking: Within County road right-of-way. May only be used for launching and retrieval of vessels and delivery of vehicles, equipment and materials.

Operations and Maintenance

Annual inspections for damage and wear.

Clearing of debris and drift logs as needed.



Hunter Bay Marine Facility

DK125, FL125, RP125, BA125



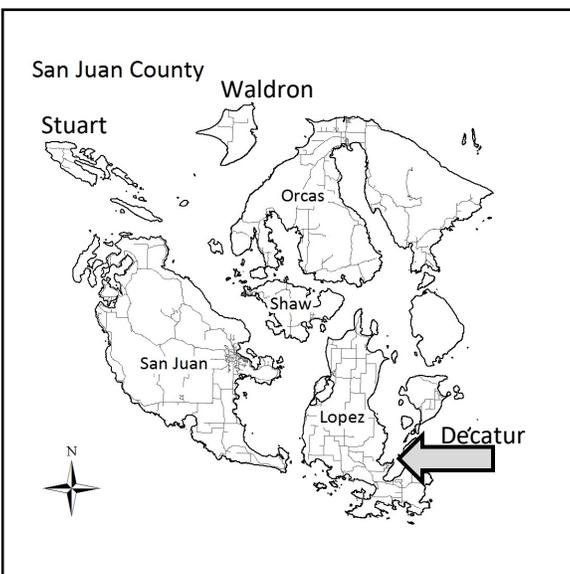
Asset	Description	Installed
Pier	12' x 81' Drive-on timber deck, railing, & bullrail; timber piles; 12' x 12' landing apron; +13.5 MLLW	1995
Gangway	3.5' x 32' Galvanized steel tube frame with timber deck	1995
Float	9.5' x 80' Monolithic timber float; timber piles	2000
Ramp	14' x 120' Precast concrete, 1-foot thick logs	2016

Facility Description: Southeast end of Lopez Island. Accessed via Crab Island Rd. Pier and float are accessed by a causeway approximately 115 feet. Facility serves important commercial and non-commercial trade and traffic from and to the outer islands, predominantly Decatur Island. Residents of outer islands use facility for transporting children to schools and commuting to work or shopping. Life ring and ladder installed. County provides a portable toilet year-round. Parking for vehicles and vehicles with trailers is available.

Fees: Parking permits issued by Public Works. The price for a permit is \$25 per year. Temporary permits may be issued for a maximum of 120 days. There is a fee of \$25 for a temporary permit. No permit is required to use the float or ramp.

Ownership: San Juan County Right-of-Way.

Aquatic Lands Lease: DNR 20-A10354. Expires 2034-12-15.



Hunter Bay Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier		\$573	2042	
Float & Gangway	\$34,500	\$619	2030	Limited tie-up space
Ramp	\$186,500	\$46	2041	25 year lifespan
Beach Access		\$39		

*Average Annual Maintenance Costs 2012-2017

Regulations

No overnight moorage, day use only and 72 hour parking limit. Posted at facility.

According to the terms of the Aquatic Lands Lease:

Mooring overnight is prohibited. Posted on float and pier.

According to the "San Juan County Public Works Department Hunter Bay Restricted Parking Zone Policy":

Permits are limited to full-time and summer-only residents of Center and Decatur Island and any Lopez resident who owns a buoy within Hunter Bay. All permits expire December 31 of each year.

Full-time residents are eligible for two permits and one guest permit. Summer residents are eligible for one permit and one guest permit.

Permitted vehicles are exempt from the 72 hour parking restriction. Vehicles must be used once every 21 days.

Parking: Parking for 12-15 vehicles is split between two areas. Parking for 6-9 single vehicles is located on the east side of Crab Island Rd. Parking for 4-6 vehicles with trailers is on the south side of Islandale Rd. Parking areas are gravel. All parking areas are within County Right-of-Way.

Operations and Maintenance

Pier

Annual inspection

Repair causeway and pier as needed

Pressure wash surface 1-2 Times per year

Float & Gangway

Only one side of float is accessible for boaters to tie up

Annual inspection

Repair components of float and gangway as needed

Pressure wash surface twice a year

2018 Float broke away from pier in storm; was recovered and secured.

Ramp

Annual inspection

Clear debris and drift logs as necessary



MackKaye Harbor Marine Facility

DK236, RP236, BA236



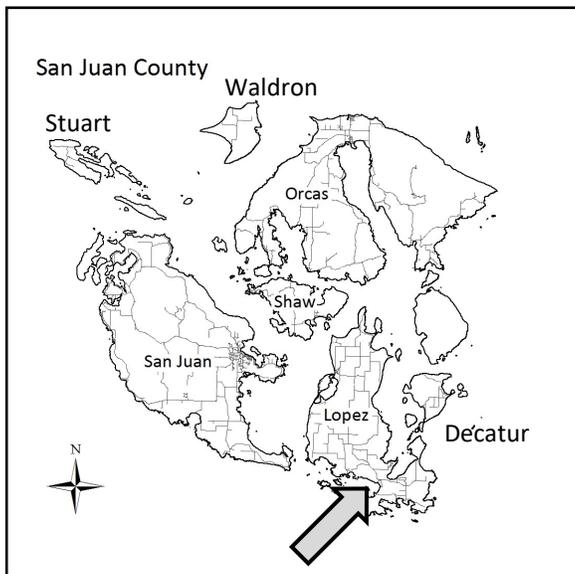
Asset	Description	Installed
Gangway	4' x 36' Aluminum, attached to concrete abutment	2000
Float	8' x 62' (3-20' sections) Grooved timber grounding floats; steel piles	2000
Ramp	16' x 100' Precast concrete, 6-inch thick logs	2007

Facility Description: Southwest side of Lopez Island. Accessed via Norman Rd. There is a short riprap breakwater to the north of the ramp. Breakwater was installed in 2003 with County forces. Facility is primarily used for recreational purposes, although the ramp is used for importing gravel by barge (via a shallower draft transition barge) for road repair. Life ring installed. County provides a portable toilet year-round. Parking for vehicles and vehicles with trailers is available.

Fees: There are no fees associated with the use of this facility.

Ownership: San Juan County Public Works. TPN 141880005.

Aquatic Lands Lease: DNR 20-A12559. Expired 2009-07-31, in holdover status.



MacKaye Harbor Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Float & Gangway		\$557	2030	
Ramp	\$112,500	\$76	2033	25 year life span
Beach Access		\$12		

*Average Annual Maintenance Costs 2012-2017

Regulations

There are no special restrictions on the use of this facility.

DNR lease is on month-to-month terms until the County or DNR renew or terminate. Improvements to the property cannot be made until the lease is renewed.

Parking: Parking area has room for approximately 30 vehicles (with trailers), and a paved road connecting the parking lot with the ramp, and turn-around area. Parking in the turn-around area is prohibited. Parking area is gravel and approximately 300 feet from the facility.

Operations and Maintenance

Float & Gangway

The MLLW line is 12.5 feet from the end of the last float. Floats ground out at low tides.

Annual inspections

Repair as necessary

Pressure wash as necessary

Ramp

End of ramp at approximately 0 foot MLLW. Can only be used at higher tides.

Annual inspection

Clear debris and drift logs as necessary



Odlin Park Marine Facility

DK128, FL128, RP128



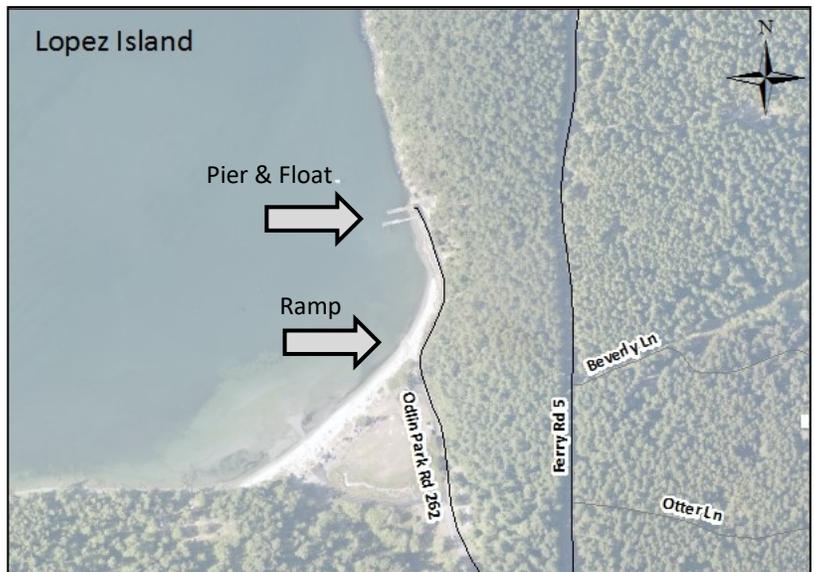
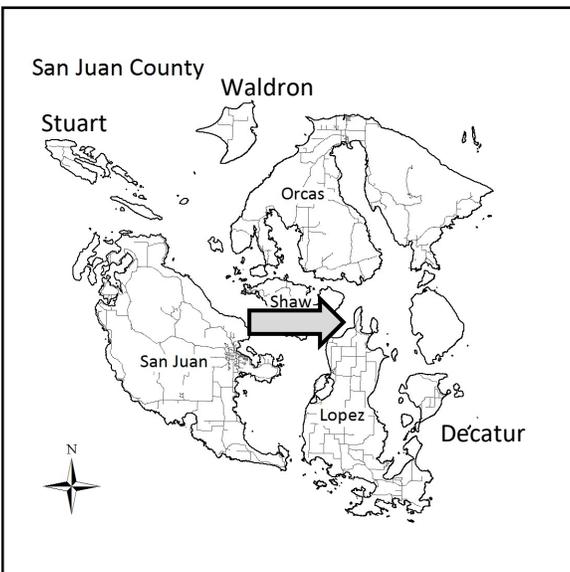
Asset	Description	Installed
Pier	22' x 25' Approach apron & 12' x 60' timber deck & railing; timber piles; bullrail; +14.3 MLLW	1992
Gangway	4' x 80' Aluminum frame and railing	2016
Float	10' x 50' Timber and Fiberglass Reinforced Plastic (FRP); steel piles	2016
Ramp	24' x 110' Precast concrete, 1-foot thick logs; steel sheet piles; 24' x 19' Poured concrete apron	2003

Facility Description: Northwest side of Lopez Island, within Odlin Park. Accessed via Odlin Park Rd. Facility is used by a wide range of users, including people using Odlin Park and by commercial and recreational vessels. The ramp plays an important role in providing commercial access to the north part of Lopez Island. Facility may be used for loading and unloading private ferries during an emergency power outage at the ferry terminal. Life ring and ladder installed. Potable water, vault toilets and camping accommodations are available within the park. Parking for 12 to 18 vehicles and trailers is available. Mooring buoys provided by Park.

Fees: There are no fees for the use of the pier and float. Commercial use of the ramp requires a permit obtained through San Juan County Parks Department. Fees for mooring buoys administered by Park.

Ownership: San Juan County Parks & Recreation. TPN 250241001.

Aquatic Lands Lease: DNR 20-073581. Expires 2045-09-30. AFN 2015-1229022.



Odlin Park Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier		\$1,268	2035	Cross braces & bolts
Float & Gangway	\$115,400	\$819	2066	
Ramp	\$165,255	\$766	2028	25 year lifespan

*Average Annual Maintenance Costs 2012-2017

Regulations

Use of dock limited to two hours. Posted on facility.

According to the terms of the Aquatic Lands Lease:

Existing pier must be replaced by 2035 in order to remove creosote piles.

“If anchoring, Tenant shall use and shall require use of anchor lines with midline floats.”

“Tenant shall not allow moorage or anchorage of vessels in water more shallow than seven (7) feet at the extreme low tide or water.”

Boat launching is not allowed at low tides to protect eel grass. Posted at facility.

According to the “2017 Policy Manual Parks Division”, use of the ramp is restricted as follows:

Commercial activity is restricted to non-holiday weekdays between 7:00 AM and 7:00 PM.

Ramp is closed to commercial use from May 15—September 15. Exceptions may be made.

Commercial permit is \$100 per event.

Parking: Area was chip sealed in 2015 by County forces and holds 12-18 vehicles and trailers. Area is located approximately 200 yards south of the pier and float.

Operations and Maintenance

Pier

Annual inspection

Repairs as needed

Pressure wash surface every 1-2 times per year

Cross bracing and bolts need to be tightened in the near future

Float & Gangway

Annual inspection

Repairs as needed

Pressure wash surface as needed

Ramp

Annual inspection

Sand removed at least monthly, usually weekly, year-round.

Remove debris and drift logs as necessary



Deer Harbor Marina Float Space

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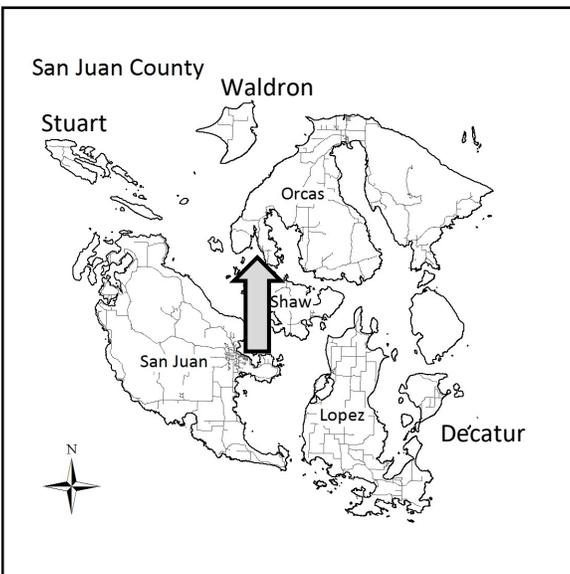
Asset	Description	Installed
Float	100' Timber float	N/A

Facility Description: South end of the west side of Orcas Island. Accessed via Deer Harbor Rd. County leases space from Deer Harbor Marina. The facility serves the private and commercial needs of outer island residents, primarily those from Waldron Island. The crane (DK042) is used for loading and unloading. Marina has bathrooms, showers and a small grocery store located on the pier.

Fees: Permits are administered by Public Works and cost \$15 per year. At this time, Public Works does not enforce permit requirements.

Ownership: Deer Harbor Marina LLC. TPN 260731013. Lease AFN 96122311. Expires 2020-05-31.

Aquatic Lands Lease: N/A



Deer Harbor Marina Float Space

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Float	N/A		N/A	
Crane				

*Average Annual Maintenance Costs 2012-2017

Regulations

There are no known restrictions on the use of this facility.

Lease with Marina has a 25 year term and expires in 2020.

Parking: There is no designated parking that goes with the public mooring. Cars for Waldron Island residents park along the south end of Upper Deer Harbor Rd but space is limited.

Operations and Maintenance

Crane is owned by Public Works. ER&R inspects crane once a year and does basic maintenance.

Rent for float space is \$925 per month, paid in a single payment for each year.

Project to improve Upper Deer Harbor Rd will increase parking for outer island residents. Construction is planned for 2018.



Obstruction Pass Marine Facility

DK066, FL066, RP066, BA066



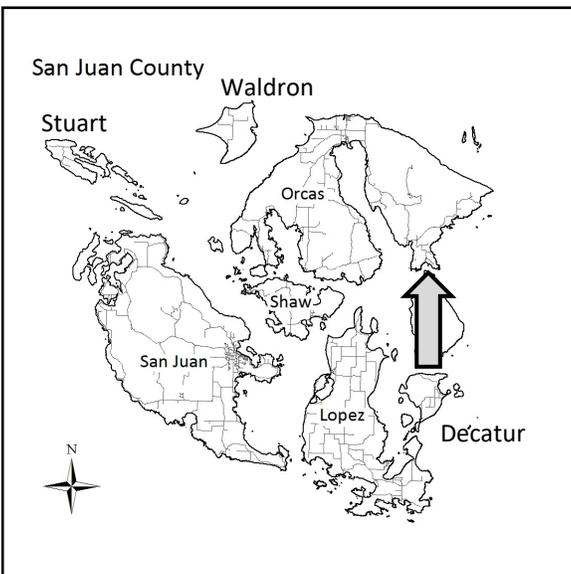
Asset	Description	Installed
Pier	12' x 107' Timber deck & railing; timber creosote piles	1982
Gangway	4' x 36' Aluminum frame & railing	1999
Float	10' x 40' Timber float; steel piles	2013
Ramp	16' x 100' Precast concrete, 6-inch thick logs overlaid on concrete slab	2004

Facility Description: South end of the eastern portion of Orcas Island. Accessed via Obstruction Pass Rd. Provides primary commercial and community linkage to Blakely and Obstruction Islands. All gasoline and propane is delivered via this ramp. The ramp serves as an alternative launch site for vehicles via barge when the state ferry service is interrupted. Life ring and ladder installed. County provides a portable toilet year-round. Parking for vehicles and trailers is available.

Fees: There are no fees associated with the use of this facility.

Ownership: San Juan County Public Works. TPN 161650110.

Aquatic Lands Lease: DNR #20-A11622. Expired 2012-12-31, in holdover status.



Obstruction Pass Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier		\$593	2039	
Float & Gangway	\$170,000	\$1,397	2043	Float piles, gangway attachments
Ramp		\$8	2014	Overdue for replacement
Beach Access		\$60		

*Average Annual Maintenance Costs 2012-2017

Regulations

Float is posted as unloading and loading only and no overnight moorage.

DNR lease is on month-to-month terms until the County or DNR renew or terminate. Improvements to the property cannot be made until the lease is renewed.

Parking: Paved lot with approximately 25 spaces. Six spots are reserved for vehicles with trailers and are day use only. The rest are signed as 72-hour parking. No permit is required.

Barge operators report that parking area is difficult to navigate when transporting critical materials.

Operations and Maintenance

Pier

Annual inspection

Float & Gangway

Annual inspection — Pilings and attachments are often exposed to high winds, wave action and strong currents. Must be closely monitored due to heavy wear and tear.

Pressure wash annually

Ramp

Overlaid with new concrete logs in July and December of 2004.

Originally scheduled to be replaced in 2012.

Concrete logs are spalling with large cracks and exposed rebar.

Inspected approximately once a month by PW crew.

Remove debris and drift logs as necessary

Project to replace ramp is included on the 20-Year TIP.

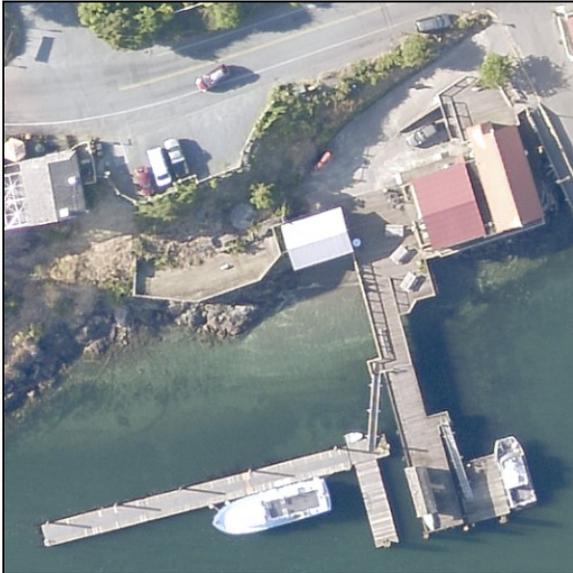
Beach Access

Parking area is swept one to three time per year and inspected approximately once a month.



Orcas Landing Marine Facility

DK004, FL004, BA004



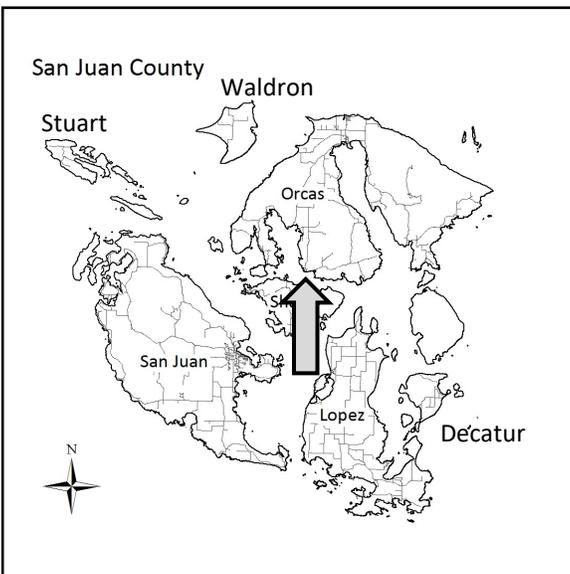
Asset	Description	Installed
Pier	32' x 134' Timber deck & railing; timber pilings (width is widest point)	2006
Gangway	Two (2) 3' x 35' Aluminum tube	2006
West Float	10' x 150' (3-50' sections) Timber & fiberglass reinforced plastic deck; steel piles; 10' x 18' & 10' x 40' timber deck; timber piles	2006
East Float	20' x 28' Timber deck; timber piles	2006

Facility Description: South side of the western portion of Orcas Island. Accessed via Orcas Rd. Facility is used for recreational and commercial uses. South end of pier and east float is reserved for U.S. Coast Guard and San Juan County Sheriff, respectively. There is a 6' x 20' shed on the south end of the pier. Limited parking is available. Life ring and ladder installed. Public restrooms, restaurants, and groceries available nearby. No amenities available on the County dock.

Fees: There are no fees associated with the use of this facility.

Ownership: San Juan County Public Works. TPN 262222014.
Purchased from private party in 2008.

Aquatic Lands Lease: DNR 20-C10227. Expires 2021-08-31.



Orcas Landing Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier		\$733	2056	
Float & Gangway		\$7,818	2036	Frequent repair/replacement for floats North side very shallow 2017 Winter storm damaged west float
Beach Access		\$507		

*Average Annual Maintenance Costs 2012-2017

Regulations

Moorage is day use only and limited to four hours. Posted on facility.

Parking: There is no dedicated parking area for the facility. Parking is available north of the facility and is provided by WSDOT Ferries.

Operations and Maintenance

Pier

Annual inspection

Pressure wash surface once a year.

Small building on pier is used by Coast Guard Annex for storage.

Float & Gangway

North side of main float is in very shallow water and is typically only used by kayaks.

Connecting pins inspected every two to four weeks. One to two pins are replaced every one to two weeks.

Pin brackets were replaced in 2016. Lifespan of brackets is approximately 10 years.

Chains and rollers around timber pilings are inspected annually. All chains were replaced in 2016. Lifespan of chains is approximately five years. Pile rollers are replaced every year.

2017 replaced 10% of decking.

Sheriff's float deck planks are uneven, split, and cracked. Anchor piles are also in poor condition.

2017 winter storm damaged pontoons on western float. Float taken to Lopez for repairs in 2018.

Project to establish pedestrian trail from Orcas Rd to pier is expected to be completed in 2018.

RCO Grant application submitted to add a new float seaward of existing float to increase capacity.



Madrona Point Marine Facility

DK054, FL054, BA054



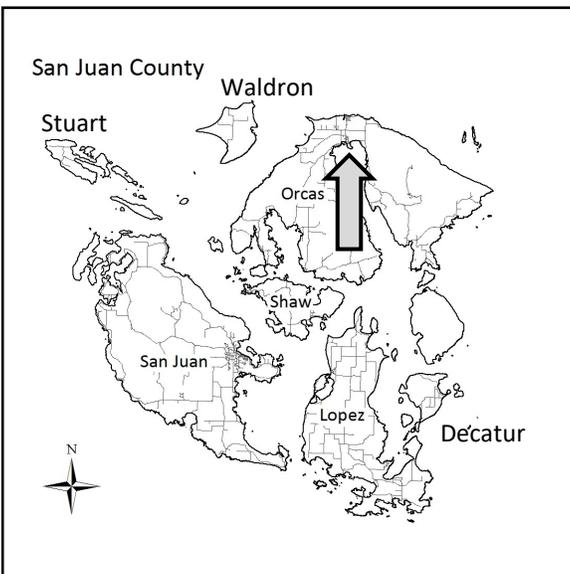
Asset	Description	Installed
Pier	14' x 112' Timber deck & railing; timber piles; +14 MLLW	1990
Gangway	4' x 36' Aluminum	1990
Float	13' x 40' Concrete deck, timber piles	1990

Facility Description: North end of East Sound, on the west side of Madrona Point. Accessed via Haven Rd. Facility is used for primarily recreational use with occasional commercial use. Life ring and ladder installed. There are no amenities at this facility. Parking is available.

Fees: There are no fees associated with the use of this facility.

Ownership: San Juan County Public Works. TPN 271460066.

Aquatic Lands Lease: DNR 20-013113. Expired 2001-05-31, in holdover status.



Madrona Point Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier		\$272	2040	
Float & Gangway		\$3,772	2020	Float removed during winter Gangway grating needs replacement
Beach Access				

*Average Annual Maintenance Costs 2012-2017

Regulations

Moorage is day use only and limited to four hours. Posted on facility.

DNR lease is on month-to-month terms until the County or DNR renew or terminate. Improvements to the property cannot be made until the lease is renewed.

Parking: Limited to the shoulder of the dead end of Haven Rd. The shoulders are also used for parking for the Madrona Point recreational area (owned by the Lummi Indian Nation). Approximately 16-20 cars can park along the road's shoulders.

Operations and Maintenance

Pier

Annual inspection

Float & Gangway

Annual inspection

Float is removed each winter from November 1 to April 1 to protect it from storm damage. Dates posted on facility. Gangway is lifted out of the water but, otherwise, left in place. While float is removed, board blocking access to gangway is inspected regularly.

Gangway grating needs replacement.



West Sound Marine Facility

DK045, FL045



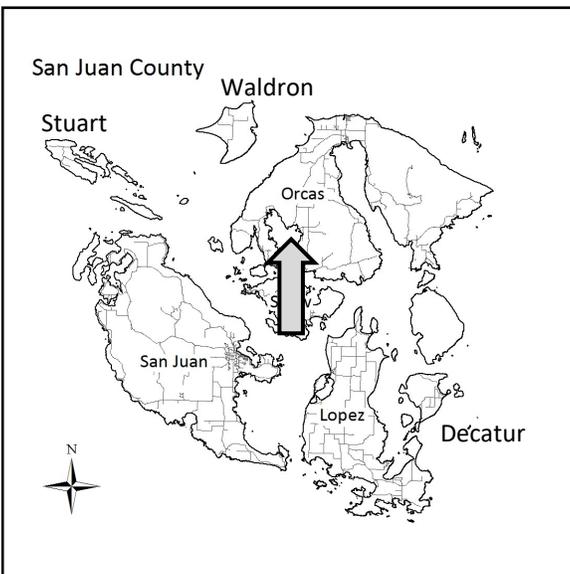
Asset	Description	Installed
Pier	7' x 142' Timber deck & railing; timber piles; +13.5 MLLW	1989
Gangway	4' x 36' Aluminum	1989
Float	8' x 76' (2-38' sections) Concrete deck, timber piles. 4' x 6' galvanized ramp connects sections.	1989
Stairway to beach	4' x 11' Galvanized steel; concrete abutment	2018

Facility Description: North end of West Sound. Accessed via Deer Harbor Rd. Facility used by recreationists and occasionally commercial fishermen who need temporary moorage during storms, emergencies, or short-term visits. Residents of Big Double, Little Double and Picnic Islands use facility as an access point. Residents of Orcas Island may occasionally use this facility, most go to Deer Harbor Marina. Steps to beach provide access for recreational kayakers. Life ring and ladder installed. There are no amenities at this facility. Limited parking is available.

Fees: There are no fees associated with the use of this facility.

Ownership: San Juan County Public Works. TPN 260434015.

Aquatic Lands Lease: DNR 20-012862. Expires 2019-03-19.



West Sound Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier		\$276	2039	
Float & Gangway	\$80,700 (1989)	\$5,624	2019	Seaward float removed during winter
Stairway			2017	Stairs corroded

*Average Annual Maintenance Costs 2012-2017

Regulations

Facility is day use only. Posted on facility.

Commercial use shall not restrict use by the general public. Posted on facility.

Parking: There is no dedicated parking area for the facility. Parking is available along Deer Harbor Rd.

Operations and Maintenance

Seaward float is removed each winter from November 1 to April 1 to protect it from storm damage. Pile hoops on seaward float are too degraded for year-round use.

Bottom three steps were badly corroded. In 2018 stairway was replaced.

2017 winter storm damaged the gangway. Gangway reinstalled in early 2018.

Project to replace floats is included on the 6-Year TIP.

Whole facility is inspected annually.



Griffin Bay Barge Landing

BA252



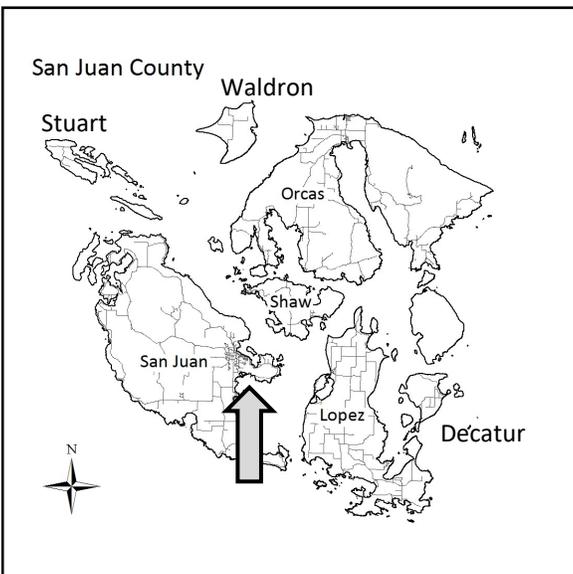
Asset	Description	Installed
Barge Landing	Timber stringers, timber pilings	

Facility Description: East side of San Juan Island. Accessed via Jacksons Beach Rd. Access road to facility is controlled by a locked gate. Facility is unusable in its current state. Vault toilets are available at the end of Jacksons Beach Rd.

Fees: There are no fees associated with the use of this facility.

Ownership: San Juan County Public Works. TPN 352412001.

Aquatic Lands Lease: DNR #20-012244. Expired 1997-10-31, in holdover status.



Griffin Bay Barge Landing

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Barge Landing		\$2,036		Unusable

*Average Annual Maintenance Costs 2012-2017

Regulations

DNR lease is on month-to-month terms until the County or DNR renew or terminate. Improvements to the property cannot be made until the lease is renewed.

Operates in accordance with Policy & Procedure Directive 2006-03 (interim):

Three landings per year are allowed. Each barge constitutes a landing.

County reserves any and all landings in a given year.

Public Works Director, or their designee determines use of barge landings.

DNR lease is on month-to-month terms until the County or DNR renew or terminate. Improvements to the property cannot be made until the lease is renewed.

Parking: There is no dedicated parking area. However, there is public parking available along Jacksons Beach Rd.

Operations and Maintenance

Landing has not been used since 2012.

Timber rail and decking was removed in early 2017.

Structural stability of dolphins is unknown.

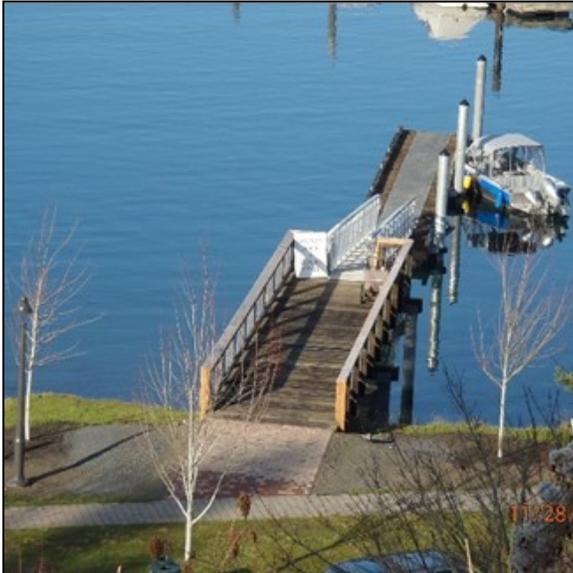
Ramp is obstructed by driftwood and needs grading to be functional.

Access road is graded annually.



Roche Harbor Marine Facility

DK270, FL270



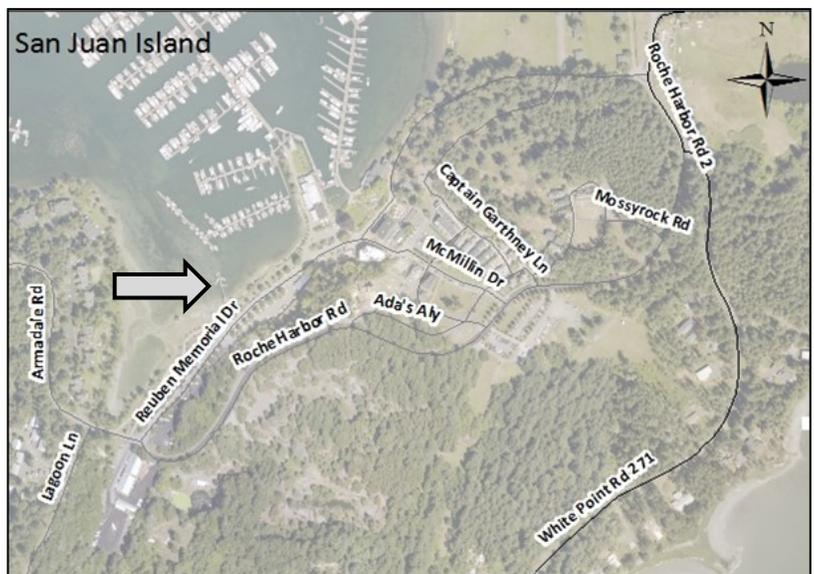
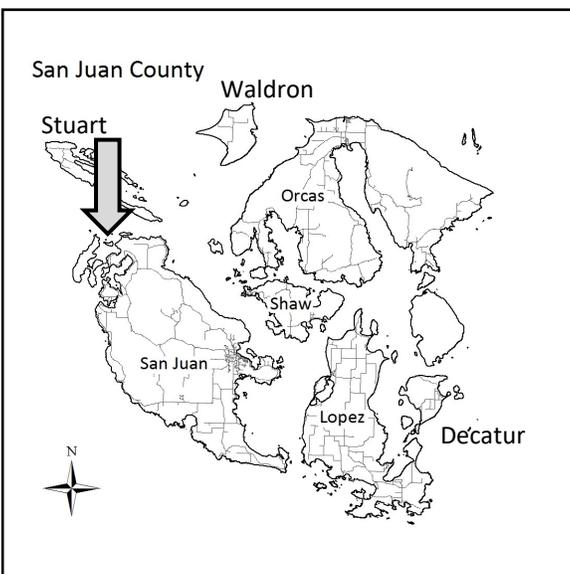
Asset	Description	Installed
Pier	10' x 47' Timber deck & railing; steel piles	2011
Gangway	4' x 50' Aluminum frame & railing	2011
Float	8' x 60' GLULAM Frame, ADA & WDFW Fibergrate deck; steel piles	2011

Facility Description: North end of San Juan Island. Accessed via Reuben Memorial Dr., a private road. Provides temporary moorage for residents of the outer islands (primarily Henry, John, and Stuart). Numerous private docks and a public access dock are available nearby. Ladder is installed. No life ring installed. Parking is available. No amenities available on the County dock. Water, fuel, power, public restrooms, restaurants, groceries available nearby at the Roche Harbor Resort.

Fees: Moorage and parking permits issued by Public Works. If bought simultaneously, the price for a moorage permit and a parking permit is \$25 per year. Price is \$25 per year, per permit, if bought separately.

Ownership: New RH LLC (Roche Harbor Resort). TPN 462353124. Dock Easement AFN 2010-0924006.

Aquatic Lands Lease: DNR #20-085419. Expires 2022-08-31.



Roche Harbor Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier	\$41,000	\$641		
Float & Gangway	\$66,000	\$760		

*Average Annual Maintenance Costs 2012-2017

Regulations

According to San Juan County Code Chapter 10.28.015, moorage is only allowed with the issuance of a permit issued by the County Engineer.

According to the "San Juan County Public Works Department Roche Harbor Restricted Parking & Moorage Zone Policy":

Parking and mooring permits are limited to residents of Henry, Pearl, Satellite, Johns, and Spieden Islands. Permits will not be issued for commercial operations. All permits expire December 31 of each year.

Only permitted vehicles are allowed in County parking. Vehicles must be moved once every 21 days.

Mooring is bow tie only. Vessels too big to bow tie will not be permitted. Vessels cannot be moored for longer than six hours. Overnight Mooring is not allowed.

Float shall not be used for launching small boats, including kayaks and canoes.

Parking: Public parking for 2 hours is available adjacent to the dock but is crowded during tourist season. Load and unload parking is also available. Permit parking for outer island residents is located 350 yards east of the dock. Parking area holds 25 vehicles.

Operations and Maintenance

Whole facility is inspected annually.

Maintenance and repair as needed.

Installed parking stops in permit parking area in 2016.



Neck Point Cove Beach Landing

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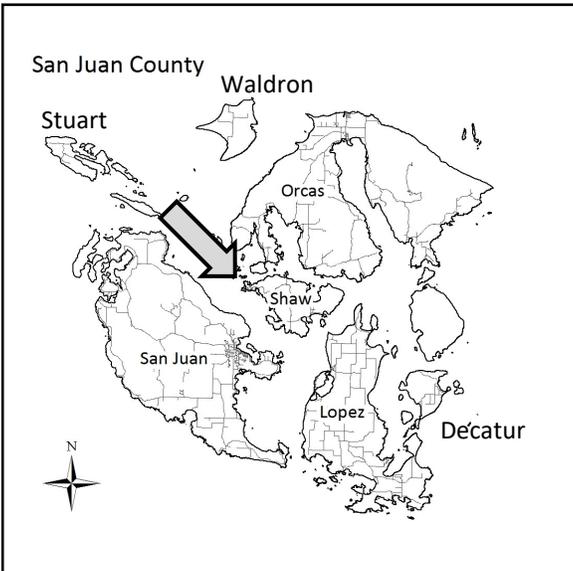
Asset	Description	Installed
Ramp	Gravel beach	N/A

Facility Description: Northwest side of Shaw Island. Located at the end of Harbor Way. At high tides, barges are able to deliver supplies, fuel and materials. There is no structure built as a boat ramp. There are no amenities at this facility. Limited parking available. Area is considered a road end and is not an “official” Public Works facility.

Fees: There are no fees to use this facility.

Ownership: San Juan County Right-of-Way.

Aquatic Lands Lease: N/A



Neck Point Cove Beach Landing

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Ramp	Unknown	—		Usability is limited

*Average Annual Maintenance Costs 2012-2017

Regulations

There are no known restrictions on the use of this facility.

Parking: Small area within County road right-of-way.

Operations and Maintenance

Landings are subject to tides. Freight landings limited to high tides.

Project to build boat ramp is included on the 20-Year TIP.



Shaw Landing Pier

DK096



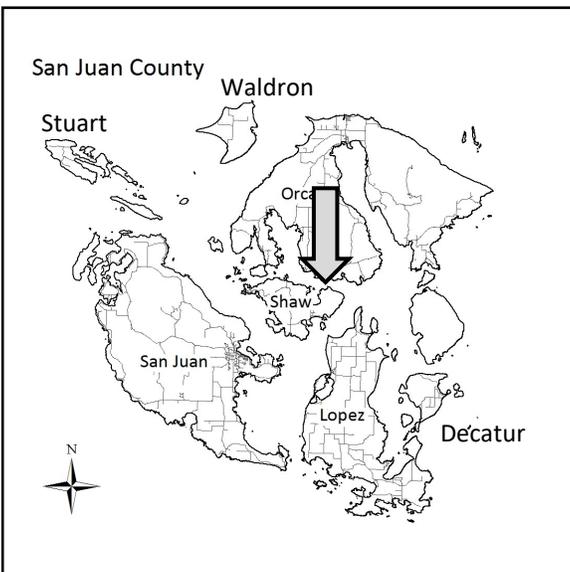
Asset	Description	Installed
Pier	5' x 40' Timber deck & railing	Unknown

Facility Description: Northern shore of Shaw Island. Accessed via Blind Bay Rd, adjacent to the ferry landing. Facility is used by residents and visitors. No life ring or ladder is installed. There is a small grocery store and public bathrooms available nearby.

Fees: There are no fees to use this facility.

Ownership: San Juan County Right-of-Way.

Aquatic Lands Lease: N/A



SHAW LANDING PIER

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier	Unknown			

*Average Annual Maintenance Costs 2012-2017

Regulations

There are no known restrictions on the use of this facility.

Has been recognized as a potential site for a public float for boater access.

Parking: The parking area is just south of the facility and holds approximately 10 vehicles.

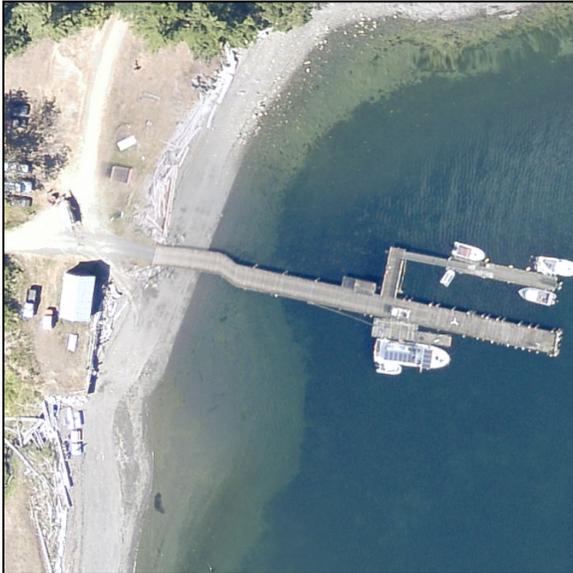
Operations and Maintenance

Re-Decked in late 2000's



Prevost Harbor Marine Facility

DK143, FL143



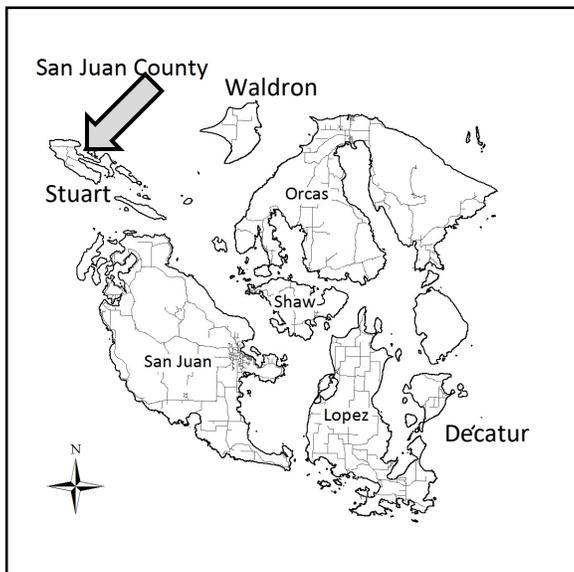
Asset	Description	Installed
Pier	12' x 235'; 8' x 28' extension; timber deck, railing, & bullrail; timber piles; +13 MLLW	1950s
Gangway	3'8" x 36' Painted aluminum	2005
Float	8' x 60' Timber deck, steel piles	2005

Facility Description: Northern harbor located on the east side of Stuart Island. Accessed via Lighthouse Rd. Extension was added to pier when gangway and float were installed. Residents, school children and visitors use the facility to access the island and to load and unload supplies. A crane is installed at the southeast corner of the main pier. Life ring and ladder installed. There are no amenities at this facility.

Fees: There are no fees to use this facility.

Ownership: San Juan County Road Right-of-Way.

Aquatic Lands Lease: DNR 20-071922. See Regulations.



PREVOST HARBOR MARINE FACILITY

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier			2024	Planks, pile
Float & Gangway		\$94	2035	

*Average Annual Maintenance Costs 2012-2017

Regulations

Moorage is limited to two hours. Posted on facility.

Commercial use shall not restrict use by general public. Posted on facility.

DNR sent letter dated February 14, 2000 acknowledging receipt of lease application. Letter states application is in process.

Parking: There is no dedicated parking area at the facility. However, there is a small, unimproved, area at the end of the road near the bulkhead. Area is located on private property.

Operations and Maintenance

Pier

Annual inspection

Small number of planks and bull rails are replaced every two to three years.

Pile near head of pier is out of alignment. Secured with hurricane tape approximately 10 years ago.

Float & Gangway

Annual inspection

Float ladder and life ring replaced in early 2017.



Reid Harbor Ramp

RP450



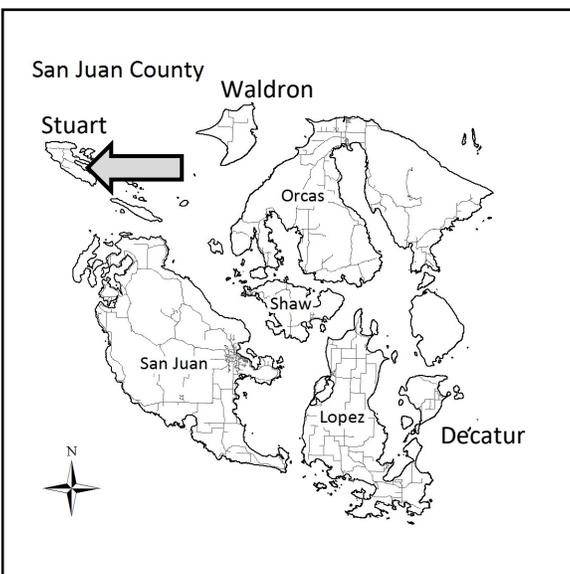
Asset	Description	Installed
Ramp	16' x 75' Precast concrete, 6-inch thick logs	1993

Facility Description: Southern harbor located on the east side of Stuart Island. Accessed via Reid Harbor Rd, within Stuart Island Marine State Park. Facility used to deliver bulk materials (building and road), fuel, and small boat launching. Vault toilets are available at the State Park. Nearby floats are owned by State Parks.

Fees: There are no fees to use this facility.

Ownership: State of Washington Parks & Recreation. TPN 472813001.

Aquatic Lands Lease: Unknown



Reid Harbor Ramp

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Ramp			2018	25 year lifespan

*Average Annual Maintenance Costs 2012-2017

Regulations

There are no known restrictions on the use of this facility.

Parking: Parking is available in a small gravel area at the end of the county road. Lot holds approximately 12 vehicles.

Operations and Maintenance

Ramp has evidence of spalling and has been repaired by local property owners.

A large scour hole beyond the end of the ramp has formed from the propeller wash of freight ferries during low and medium tides.

Whole facility is inspected annually.



Waldron Island Marine Facility

DK014, FL014



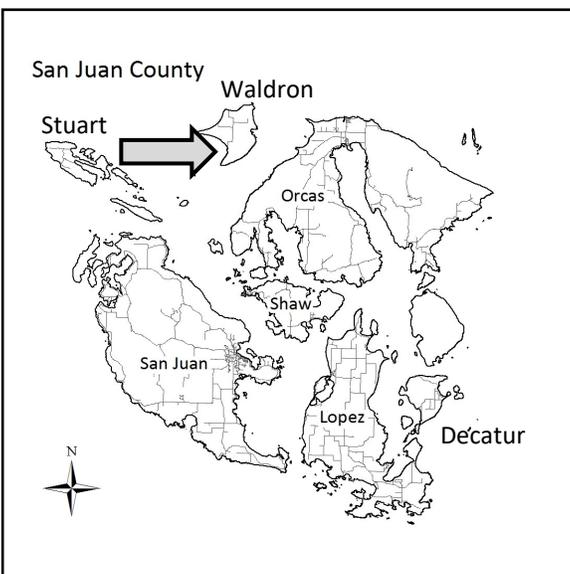
Asset	Description	Installed
Pier	12' x 184' with 27' x 58' Turning apron; timber deck & railing, steel piles	1999
Gangway	4' x 36' Aluminum	1999
Float	14' x 32' Timber, steel piles	1999
Ramp	Hard-packed earth	N/A

Facility Description: Southwest shore of Waldron Island. Accessed via Cowlitz Bay—Waldron Center Rd. Facility is primarily used by residents. Pier was designed for the equivalent of H15 loading, or 150-lbs./sq. ft. live load. There is a hand-operated jib crane used for loading and unloading supplies. The area south of the pier has road access and is used as a ramp for boat landing. Life ring and ladder installed. There are no amenities at this facility.

Fees: There are no fees to use this facility.

Ownership: San Juan County Public Works. TPN 372311006 and 372312002.

Aquatic Lands Lease: DNR 10500. Expired 2004-11-19, in holdover status.



Waldron Island Marine Facility

Asset	Original Construction Cost	Annual Maintenance Costs*	Estimated Replacement Year	Key Operations or Maintenance Concerns (Details provided below)
Pier	\$566,000	\$10,801	2049	Planks replaced annually, piles
Float & Gangway		\$613	2029	
Ramp	Private	NA	NA	Not improved

*Average Annual Maintenance Costs 2012-2017

Regulations

No private docks are allowed on Waldron Island, per the Waldron Island Subarea Plan.

DNR lease is on month-to-month terms until the County or DNR renew or terminate. Improvements to the property cannot be made until the lease is renewed.

Parking: There is no dedicated parking area at the facility. However, approximately 200 feet up the road, there is a pull-out area with room for a small number of vehicles.

Operations and Maintenance

Pier

Annual inspection

Several piles are out of alignment.

Approximately one-third of the planks and bull rail on the pier are replaced annually, replaced 120 planks and several sections of bull rail in 2017/2018.

Fabricated pier ladders and installed in 2018.

Small building on pier is maintained by residents.

Float & Gangway

Annual inspection

Upper connectors on gangway were repaired in 2015.

Ramp

No structure built. Used as landing for Waldron.

Local resident trims brush around boat ramp.