

Title: Sonoma Coast Doghole Port Project Research Design

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Research Design

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Research Design

Project Description

The Sonoma Coast Doghole Port Project will undertake a survey of the submerged and terrestrial archaeological resources associated with northern California's Redwood Coast lumber trade. This is a collaborate project between California State Parks (CSP) and the National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries (ONMS). The project team will document extant visible sites, features, structures, and artifacts to reveal the maritime cultural landscape of the Sonoma coast doghole ports and their role in the region's history. The project will focus on documenting the resources within the CSP system and NOAA's Greater Farallones National Marine Sanctuary (GFNMS) to facilitate resource protection and interpretation of the historical and archaeological properties under each organization's stewardship. Additionally, several shipwrecks associated with the lumber trade or the larger maritime cultural landscape of the area will be investigated for site assessment and interpretation purposes.

The story of the human interaction with the environment during the heyday of the lumber industry in Sonoma and Mendocino County, California can be viewed through the archaeological resources present today. The Redwood Coast landscape is dotted with evidence how the lumber trade adapted to the rugged marine environment allowing the business to flourish from the mid-19th century into the 20th century. The rugged coast had few roads and no long distance railroads, so the most cost effective way to move the lumber was by sea. Lumbering operations established sawmills along the shoreline at the few places where it was possible to temporarily anchor a vessel. These "doghole ports," so named because they were so small and exposed that mariners joked they were barely large enough for a dog to turn around, became centers of economic activity. Enterprising lumbermen rigged a network of chutes and cables extending from the bluffs down into small coves allowing lumber to be transferred from shore to waiting ship. A fleet of small, maneuverable schooners, steam schooners and eventually steamers carried the timber to markets as close as San Francisco and as distant as the Eastern Seaboard, Australia and Asia. The trade left not only place names, but the archaeological remains of the infrastructure and in some cases those vessels unlucky enough to be lost on these shores. Lasting communities sprang up at some of these location, Bodega Bay, Gualala, Point Arena, Mendocino and Caspar to name a few. Today, several doghole ports are part of the CSP system and within GFNMS. This allows CSP and NOAA staff, historians, archaeologists the opportunity to explore and interpret our maritime past for current and future generations.

Lumber Chute Background





Two main varieties of lumber loading apparatus were used at the doghole ports within the project's study area. Prior to 1900, trough chutes, also known as slide or apron chutes, were the most common method of loading lumber. The chute method was used when there was sufficient water depth to allow a vessel to anchor or moor relatively near a cliff or headland. Due to Sonoma County's treacherous coastline with steep cliffs and few suitable harbors, the chute became the preferred method to transport lumber out of the area. A trough chute was comprised of a wooden A-frame supporting a wooden trough held in place with cables. After the frame was a long arm that projected out over the water called a swing apron. A system of wooden pulleys and wire cables raised and lowered the apron as lumber and other products were slid down the chute from shore to ship using gravity. At the end of the chute was a movable plank or clapper that could be raised or lowered from shore or by the moored vessel. This plank regulated the speed materials moved down the chute. Trough chutes varied in size and complexity as each was adapted to the specific configuration of each doghole port.



Figure 1. Trough chute at Fisk's Mill, left (UC Berkeley, Bancroft Library) and trough chute at Signal Port, right (Tooker 1968).

During the 1870s, the wire chute came into use, eventually replacing the trough chute (Jackson 1977:14). A wire stored on a large drum stretched from shore to some type of anchor beyond where a ship was moored. This anchor could be in the water or on shore across a cove. The waiting ship would moor and pick up the wire for loading and unloading. Cargo was attached to a pulley on the wire and the load's weight would move it down to the ship. A braking system at the chute head controlled the descent. Sling ropes and pulleys attached to the traveler would return it either by a counter balance or by steam power with a donkey engine.

Lastly, wharves were built in some doghole ports where the terrain was suitable. A few doghole ports had both a chute and a wharf, but in general wharfs were rare along the Sonoma coast since they were costly to build/maintain and easily destroyed.







Figure 2.

Wire chute at Iverson Point, left (Kelley House Museum) and wire chute at Bourn's Landing, right (Tooker 1968).



Figure 3. Wire chute used to load a steam schooner (Tooker 1968).



Figure 4.

Arena Cove showing a wharf (foreground), trough chute (middle) and wire chute (cliff top) (Kelley House Museum).

Moorings were established at doghole ports in the coves and near the lumber chute's end to help facilitate the use of a chute by stabilizing the vessel. Buoys were positioned at several locations within and just outside the coves to accommodate several vessels if needed. A large anchor was





placed on the seafloor with a log at the surface. Metal eye bolts set in the cliffs were also used for mooring lines. For vessels at the chute they might even be secured by several underwater anchors as well as with lines to shore to keep them in one place as it took several days to load a cargo. Lumber was loaded and carried both in the hold and on deck with a typical three masted lumber schooner carrying 500,000 board feet in the 1880s.

Location

The Sonoma Coast Doghole Port Project will investigate portions of the northern California coastline north of Bodega Bay between Duncan's Landing at the south and Gualala to the north. This area encompasses approximately 30 miles of coastline. Project priorities will focus on the 12 doghole ports between those locations and surveys will take place within several CSP, the GFNMS and a number of California state designated marine protected areas.

There are several properties associated with the Redwood Coast lumber industry listed on the National Register of Historic Places or designated a National Historic Landmark. These listed properties include a historic district in Point Arena, the O.W. Getchell House at Anchor Bay, Fort Ross State Historic Park and the Iverson House in Point Arena. Stewart's Point, an essentially unaltered doghole port settlement, is a Sonoma County Historic District, as is Duncan's Mills. Long term goals for this project might include a National Register of Historic Places Multiple Property Submission for the Sonoma Coast doghole ports, an updated National Register/Landmark listing for Fort Ross State Historic Park, or more targeted individual National Register of Historic Places property nominations.

The CSPs included in this survey from north to south are Salt Point State Park, Fort Ross State Historic Park, and Sonoma Coast State Park. While there are other CSP located on the Sonoma coast, doghole ports were only located at these three parks. Salt Point State Park covers 5,970 acres on the Northern California coast with 6 miles of a rough rocky coast line. Fort Ross State Historic Park, established in 1909, is located on the Sonoma County Coast, 11 miles northwest of Jenner on Highway One. The park encompasses about 3,200 acres including a Russian fort compound, a visitor center with interpretive exhibits, a museum bookstore, staff offices and a research library. Sonoma Coast State Park, designated in 1934, spans 10,000+ acres including 17 miles of coastline from Bodega Head to Vista Trail. It is comprised of several beaches separated by rock bluffs and headlands. It is illegal to remove, injure, disfigure, deface, or destroy any object of archaeological or historical interest or value in a CSP.







Figure 5. The project will take place within several CSP, GFNMS, and a number of California state designated marine protected areas (CA State Park boundaries are in green).





Sonoma Coast Doghole Port Project



Figure 6. Salt Point State Park Map (California State Parks).



Figure 7. Fort Ross State Historic Park map (California State Parks).



Sonoma Coast Doghole Port Project





Figure 8. Sonoma Coast State Park (California State Parks)

The project's underwater survey components will take place within the waters of GFNMS. GFNMS is part of a system of 13 National Marine Sanctuaries and one Marine National Monument managed by NOAA's ONMS. Designated in 1981 as the Gulf of the Farallones National Marine Sanctuary, GFNMS originally encompassed 1,279-square-miles just north and west of San Francisco Bay. In 2015, the ONMS expanded GFNMS north and west of its original boundaries to encompass 3,295 square miles, changing its name from Gulf of the Farallones National Marine Sanctuary to Greater Farallones National Marine Sanctuary. The sanctuary protects open-ocean, nearshore tidal flats, rocky intertidal areas, estuarine wetlands, subtidal reefs and coastal beaches within its boundaries. Sanctuary regulations prohibit possessing, moving, removing, or injuring, or attempting to possess, move, remove or injure a sanctuary historical resource.







Figure 9. Extents of Greater Farallones National Marine Sanctuary(left) and newly expanded area encompassing the project area (right) (NOAA).

Several of the project's doghole ports have submerged components that lie within a California state designated marine protected area (MPA). California MPAs fall into three categories: State Marine Reserves (SMR), State Marine Conservation Areas (SMCA) and State Marine Parks (SMP). The California Department of Fish and Wildlife manages the marine natural heritage in these MPAs. Project goals do not conflict with MPA regulations and fieldwork will not impact the geological or biological resources protected within the MPAs.



Figure 10. California MPAs (left) and close up of Sonoma county MPAs (right) (NOAA)

Historic shipwrecks and other submerged archaeological sites are managed by the California State Historic Preservation Office and the California States Lands Commission. Archaeological resources are protected under California Public Resources Code sections 6309, 6313, and 6314. The Sonoma Coast Doghole Ports Project is a non-disturbance archaeological survey and will





not violate any state laws pertaining to the protection of cultural, historical or archaeological resources.

Research Objectives and Methodologies

The project's objectives are to conducted a non-disturbance survey of the archaeological resources associated with Sonoma coast doghole ports with a focus on those properties located within or adjacent to a CSP and within GFNMS. Both submerged and shore side resources will be surveyed by using photos/video, measured sketches and GPS positioning equipment. Data will be compiled and imported into GIS software to create a map of each the doghole port's archaeological features. Shipwreck sites included in the project include two known sites, the steamship *Pomona* located in Fort Ross SHP and freighter *Norlina* located in Salt Point SP. The project objectives also include locating and documenting the following historically-reported shipwrecks: the schooner *J. Eppinger* lost in Fort Ross Cove, the bark *Windermere* lost at Windermere Point, Fort Ross SHP, the steam schooner *Acme* lost at Kolmer Gulch, Fort Ross SHP, the ship *Joseph S. Spinney*, Sonoma Coast State Park and the steamer *Whitelaw* lost near Russian Gulch Landing off Sonoma Coast State Park.

Surveys on land will be covered by walking the cliffs, shoreline and intertidal zone to locate archeological features. Features on land expected to be encountered might include support leg holes, iron pins, eye bolts, ring bolts, chain and other fastening hardware embedded in the cliffs along with foundations, railroad beds and rails, wire rope and machinery pieces.

Surveys underwater will be conducted from the NOAA R/V *Fulmar* or its small boat. Divers will utilize swim searches to initially located doghole port resources as well as the shipwrecks sites. Submerged archaeological resources associated with doghole ports might include large anchors, logs, wire rope, and chain. Additionally, due to the repetitive anchoring in the doghole ports, concentrations of smaller artifacts from vessels might be possible such as bottles thrown overboard. The dive team will also conduct nearshore snorkeling surveys near the chute locations to determine if there are smaller artifacts present. The shipwreck sites are expected to have varying degrees of structural integrity due to the highly dynamic environment. Metal-hulled vessels like the *Pomona*, *Norlina* and *Windermere* will likely have more structure present while wooden-hulled vessels like the *J. Eppinger*, *Whitelaw*, *Joseph S. Spinney* and *Acme* will have less.

Priorities: Land Surveys (8 days)

Land priorities phase 1: Doghole port site located within Fort Ross SHP





Land priorities phase 2: Doghole port sites located in other CA State Parks. These include (from south to north):

- Duncan's Point in Sonoma Coast SP
- Rules Landing in Sonoma Coast SP
- Russian Gulch Landing in Sonoma Coast SP
- Salt Point-Gerstle Cove in Salt Point SP
- Fisk Mill in Salt Point SP

Land priorities phase 3: Doghole port sites located outside CA State Parks. These include (from south to north with the priority also from south to north):

- Timber Cove (between Fort Ross SHP and Salt Point SP)
- Stillwater Cove (between Fort Ross SHP and Salt Point SP)
- Stewarts Point (north of Salt Point SP)
- Bihler's Point Landing (north of Salt Point SP)
- Del Mar Landing (north of Salt Point SP)
- Gualala (north of Salt Point SP)

Priorities: Underwater Surveys (5 days)

Underwater priorities phase 1 (2-3 days): Shipwrecks and doghole port located within Fort Ross SHP

- Anchors and other submerged features associated with lumber chutes
- Steamship *Pomona* (lost 1908)
- Schooner J. Eppinger (lost 1901)
- Bark *Windermere* (lost 1883) at Windermere Point, south of Timber Cove

Underwater priorities phase 2 (1-2 days): Shipwrecks and doghole ports located in other CA State Parks:

- Anchors and other submerged features associated with lumber chutes
- Duncans Point in Sonoma Coast SP
- Salt Point/Gerstle's Cove in Salt Point SP and Gerstle Cove State Marine Reserve
- Fisk Mill in Salt Point SP and Stewarts Point State Marine Reserve
- Freighter Norlina (lost 1926) in Salt Point SP and Stewarts Point State Marine Reserve

Underwater priorities phase 3 (1 day if time permits): Shipwreck sites located adjacent to CA State Parks:

- Steam Schooner *Acme* (lost 1889) at Kolmer Gulch (northern Fort Ross SHP)
- Steamer Whitelaw (lost 1893) north of Russian Landing off Sonoma Coast SP
- Ship Joseph S. Spinney (lost 1892) north of Russian Landing off Sonoma Coast SP





Research Questions

The project will focus on answering several research questions to better understand the connection CSP and GFNMS have to the maritime cultural landscape of the California lumber industry as well as additional aspects of the region's connection to the sea. The evidence of the lumber industry is present along the Sonoma coast in the form of historic resources located at several doghole ports. The underwater and land surveys will focus on these locations, with an emphasis on doghole ports within or just offshore of a CSP, and will seek to answer the following questions:

- What are the physical resources still present at each doghole port both on land and underwater?
- What is the location, condition and age of those resources?
- What are the threats to those resources?
- How are the remains at one site different or the same as another site?
- How do the historical maps and photos compare with the actual remains?

The historic steamship *Pomona*, located in Fort Ross SHP and listed on the National Register of Historic Places, as well as the freighter *Norlina*, located in Salt Point SP, will be a priority for the dive time to document their condition and gather data/imagery suitable for resource management and outreach efforts. Both sites are publically known sites and are visited by divers. The project will seek to answer the following questions:

- What is the condition of the site in comparison to previous years?
- Is there any evidence of anthropogenic impacts to the site?
- What additional efforts can be taken to better protect and interpret the site?

Lastly, the dive team will conduct surveys in attempts to locate new shipwrecks to add to the area's archaeological resource inventory. Work will be conducted both in and out of CSPs, but still within GFNMS. GFNMS, as a federal agency, is required by Section 110 of the National Historic Preservation Act to inventory, assess, nominate eligible resources to the National Register of Historic Places and protect historical resources under their jurisdiction. The survey will help fulfill the mandates of Section 110 and will also be the first maritime heritage field project conducted by NOAA along the Sonoma Coast within GFNMS. The survey will try to locate the following shipwrecks, schooner *J. Eppinger*, bark *Windermere*, schooner *Joseph S. Spinney*, steamer *Whitelaw* and steamer *Acme*. Since it is unlikely that all these vessels will be located, the dive team will assess weather/sea conditions and historical documents to best determine how much time should be spent searching for each site. At each location the survey will seek to answer the following questions:





- Is there evidence of a shipwreck at the location?
- If so, what are the extent and characteristics of the remains?
- Is there evidence of salvage or other anthropogenic impacts?
- Do the remains match historical maps and accounts of its sinking?
- What is the possible identity of shipwreck?

Final Products

Project products will include a final report detailing the fieldwork's findings. Archaeological resources will be compared to historical maps and photos and placed into the larger historical context of doghole ports and the California lumber industry. Data will be imported into ArcGIS and maps generated to provide varying views of the resources found in the survey area. Further geospatial display of the project's data may also be made available to the public through an ArcGIS Story Map linked to information (narrative text, photos and video) to illustrate the breath of the Sonoma coast doghole ports' maritime cultural landscape. Additional long-term products resulting from the project may include:

- Updating the existing National Register of Historic Places nomination for Fort Ross to include updated information on its role as a doghole port
- National Register of Historic Places Multiple Property Submission for Sonoma Coast Doghole Ports including terrestrial and underwater features
- Revision of the GFNMS Maritime Cultural Landscape study
- A more focused study on GFNMS doghole ports and/or shipwrecks
- Incorporation of project data into several Sonoma State University graduate theses





Schedule

July 30	NOAA Team (Jim, Dede and Matt) arrives and spends the night at Arky Camp
July 31	Move into Arky Camp and <i>Fulmar</i> (morning) All Hands Meeting at Fort Ross SHP visitor center (afternoon- time TBD) -introductions, schedule, priorities, etc.
August 1	 Fulmar (day 1 of 5 – 12 hour boat crew day) -depart Bodega Bay 0700 arrive Fort Ross 0900 -0900-1600 field operations (diving from small boat) -doghole port features at Fort Ross (Fort Ross SHP/GFNMS) - steamship <i>Pomona</i> (Fort Ross SHP/GFNMS) -depart Fort Ross 1630 arrive Bodega Bay 1830 Land Team (all hands) -Fort Ross doghole port documentation (Fort Ross SHP) (terrestrial)
August 2	 Fulmar (day 2 of 5 – 12 hour boat crew day) -depart Bodega Bay 0700 arrive Fort Ross 0900 -0900-1600 field operations (diving from small boat) -steamship Pomona (Fort Ross SHP/GFNMS) (with observer diver: Kashia Pomo tribal rep.) - schooner J. Eppinger (Fort Ross SHP/GFNMS) -depart Fort Ross 1630 arrive Bodega Bay 1830
	Land Team (all hands) -Fort Ross doghole port documentation (Fort Ross SHP/GFNMS) (terrestrial and intertidal zone)
August 3	 Fulmar (day 3 of 5 – 12 hour boat crew day) -depart Bodega Bay 0700 arrive Gerstle Cove 0900 -11000-1200 field operations (diving from small boat) - doghole port features at Gerstle Cove (Salt Point SP/GFNMS) (terrestrial and intertidal zone) - freighter Norlina (Salt Point SP/GFNMS) -depart Gerstle Cove 1300 arrive Fisk Mill 1330 -1430-1600 field operations (diving from small boat) - doghole port features at Fisk Mill Cove (Salt Point SP/GFNMS)





	Land Team (all hands)							
	-Gerstle Cove - Salt Point Landing (Salt Pt SP/GFNMS) doghole port							
	documentation (terrestrial and intertidal zone)							
August 4	Fulmar (day 4 of 5 – 12 hour boat crew day)							
	-depart Bodega Bay 1700 arrive Fort Ross 0900							
	-1000-1600 field operations (diving from small boat)							
	-Bark Windermere (Fort Ross SHP/GFNMS)							
	-depart Fort Ross 1630 arrive Bodega Bay 1830							
	Land Team (all hands)							
	-Fisk Mill Cove (Salt Pt SP/GFNMS) doghole port documentation							
	(terrestrial and intertidal zone)							
August 5	Fulmar (day 5 of 5 – 12 hour boat crew day)							
	-depart Bodega Bay 0700 arrive Russian Landing 0800							
	-0900-1300 field operations (diving from small boat)							
	- doghole port features at Russian Landing and Rules Landing							
	(Sonoma Coast SP/GFNMS)							
	-depart Russian Landing 1330 arrive 1 mile north (approx.)							
	-1400-1600 field operations (diving from small boat)							
	- schooner Joseph S. Spinney and steamer Whitelaw (GFNMS)							
	-depart 1630 arrive Bodega Bay 1800							
	Land Team (all hands)							
	-Duncans Landing (Sonoma Coast SP/GFNMS) doghole port							
	documentation (terrestrial and intertidal zone)							
	-Rules Landing (Sonoma Coast SP/GFNMS) doghole port							
	documentation (terrestrial and intertidal zone)							
	-Russian Gulch Landing (Sonoma Coast SP/GFNMS) doghole port							
	documentation (terrestrial and intertidal zone)							
August 6	Land Team(s)							
	-Timber Cove doghole port documentation (GFNMS) (terrestrial and intertidal zone)							
	-Stillwater Cove doghole port documentation (GFNMS) (terrestrial and							
	intertidal zone)							

August 7 Land Team(s)





-Stewarts Point doghole port documentation (GFNMS) (terrestrial and intertidal zone) -Bihler Pt Landing doghole port documentation (GFNMS) (terrestrial and intertidal zone)

- August 8 Land Teams(s) -Del Mar Landing doghole port documentation (GFNMS) (terrestrial and intertidal zone) -Gualala doghole port documentation (GFNMS) (terrestrial and intertidal zone)
- August 9 Wrap up (data sharing, outstanding questions, next steps, etc)
- August 10 Clean up Arky Camp and depart





Data Sheet: Fort Ross

Associated State Park: Fort Ross State Historic Park

Maps:



Figure 11. Historic maps dated 1876, 1900, and 1905, left to right



Figure 12. Maps and orthographic aerial imagery dated 1930, present, and present, left to right

Imagery:



Figure 13.

Drawing of "Old Fort Ross" in 1877 (Thompson 1877).



Sonoma Coast Doghole Port Project





Figure 14. Trough chute 1886



Figure 15. Trough chute and wharf prior to c.1900, left (KelleyHouse Museum) and wharf prior to c.1900.

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-1 Trough: north bank, 1867 till c.1900 (blew down)

-built by James W. Dixon

-180 feet long with 100 feet long swing apron

-built out to the east-southeast from western cliffs, projects out over 12 feet of water, vessels moored by 6 lines to buoys and shore fastenings

-1 Wire: moved twice, c. 1901 till 1920 (rebuilt in 1910 and eventually dismantled and machinery used at Timber Cove)

-at one time spanned entire cove and used from which ever end was more convenient

-1 Stone Wharf: prior to 1870s (built by William Benitz)

-1 Wharf and Warehouse: 1870s-1901 (destroyed in storm)

-built by George W. Call, near the Dixon lumber chute

-3 mooring lines

Other Land Features:

-railway carved out of cliff's northern rim extending from the bluff top to the wharf

Underwater Features and Location (1889 Pacific Coast Pilot):

-3 mooring buoys

-2 in the cove in 5.5 and 8 fathoms

-1 outer buoy marks a sunken rock awash at low tide-300 yards and 10 yards south 70 degrees east from chute end)





State of CA DPR Archaeological Site Trinomials:

-CA-Son-1454/H

Previous Related Archaeological Work:

-1981 CA SP underwater magnetometer survey (swim search located 1 6 ft long anchor with 10 ft of 2 in chain wedged between 2 boulders-associated with mooring systems)
-1997-2001 Indiana University Projects

Historically Reported Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Fort Ross	Sacramento	Schooner	1844				
Fort Ross	Joseph S. Spinney	Ship	Oct 25, 1892	230.9	42.6	1874	
Fort Ross	J. Eppinger	Schooner (2 masts)	Jan 2, 1901	89	26.2	1887	
Fort Ross	Pomona	Steam Screw	March 17, 1908	225	33.5	1888	Yes
Fort Ross	Riga	Fishing Vessel	1932			1931	
Fort Ross	Monterey	Steamer	May 25, 1880	120	27.5	1869	
Fort Ross	Osceala	Schooner	Jan 1975				
Fort Ross	John Stitson		Oct 1878				
Fort Ross	Mary Deleo	Freighter					
Fort Ross	Regia	Fishing Vessel	1974	45			
Fort Ross	Arispe	Steam Screw	1854			1853	

Associated National Register of Historic Places/Landmarks:

Fort Ross - Designated NHL

Commanders House, Fort Ross - Designated NHL

S.S. Pomona (shipwreck) – Listed NRHP #07000306





Data Sheet: Gerstle Cove

Associated State Park: Salt Point State Park

Maps:



Figure 16. U.S. Coast Survey "T" sheets dated 1876, left, and 1878, right.



Figure 17. Gerstle Cove area maps and aerial imagery dated from left to right 1930, present, and present.

Imagery:



Figure 18.

Trough chute (Fort Ross Conservancy webpage).





Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-2 Troughs (1872 William R. Miller built one and Funke and Wasserman built the other one): -outer chute abandoned as of 1889

-inner chute rebuilt, changed in direction and extended out to 13 feet of water – abandoned in 1917

-6 mooring lines (1889 Pacific Coast Pilot)

-1917 Coast Pilot states there is chute there that extends eastward from the western point with 16 feet of water depth at its outer end

Other Land Features:

-Prior to 1870s cargo (sandstone and lumber) loaded using cables anchored to cliffs
-Public landing built in 1876
-Horse drawn wooden rail tramway between Miller's sawmills and chute

Underwater Features and Location (1889 Pacific Coast Pilot):

-4 mooring buoys (2 inner in 5-6 fathoms east and west of each other, 2 outer ones in 10 fathoms)

State of CA DPR Archaeological Site Trinomials:

4-SonS51 and 4-SonS52 (sawmill and living quarters 1,000 feet upstream from mouth of Miller Creek)

Previous Related Archaeological Work:

Surveys located the remnant of a horse drawn railroad with the southern terminus at the north side of Gerstle Cove along with a cut through the 30-foot high cliff. The cut is lined with sandstone blocks. There are iron pins on the rocks below this cut associated with the doghole port. These findings have been described in the report Archaeological Reconnaissance at Salt Point State Park by William Pritchard from 1969.

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Salt Point	Bianca	Schooner	Dec 6, 1861				
Salt Point	Ellen H Wood	Brig	June 29, 1859				
Salt Point	Erial		1889				
Salt Point	Mary D Pomeroy	Schooner (2 masts)	Dec 18, 1879			1879	
Salt Point	Nautilus	Schooner	Oct 1877				
Salt Point	Norlina (ex	Freighter	Sept 4, 1926	385	51.1	1909	Yes

Historically Reported Shipwrecks:





	Georgiana)					
Salt Point	Phantom	Schooner	Nov 1881		1878	

Associated National Register of Historic Places/Landmarks:

Salt Point State Park Archaeological District – Listed NRHP #71000207





Data Sheet: Fisk Mill

Associate State Park: Salt Point State Park

Maps:



Figure 19.

U.S. Coast Survey "T" sheets dated 1878, left, and 1930, right.



Figure 20. Current map and aerial imagery.

Imagery:



Figure 21. From left to right, trough chute c. 1888 (eBay), trough chute c. 1888 (eBay), Trough chute (UC Berkeley, Bancroft Library).





Chute/Wharf Location, Number, Type, Lifespan and Moring Lines:

-1 Trough (lies on the extremity of the south point of the western side of the cove) -6 mooring lines

Other Land Features:

-lumber comes from Platt's mill, 1 3/4 miles up the coast

Underwater Features and Location (1889 Pacific Coast Pilot):

-4 mooring buoys

-2 lie 100 yards from end of chute in 7 and 8 fathoms

-outer one lies in 12 fathoms 300 yards south southeast from chute

-one lies on south side and near the outer limits of the rocks west of the anchorage

State of CA DPR Archaeological Site Trinomials:

SPSP-85-3 Fisk Cemetery (burial place of Fisk family who established the mill and store)

Previous Related Archaeological Work:

A survey was done at the area in 1985 and findings included in the report, An Archaeological Survey of the Horseshow Point, Fisk Mill Cove, and Wildcat Creek Burn Components Salt Point State Park, by Cris Porter. In area 2, the report references seeing remains from the lumber chute but no other details about it are given. The map below shows the extent of the survey.







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Figure 22. Sketch map of Fisk Mill lumbering operation remains (Porter 1985)

Additional fieldwork was done in 1987/1988 but the report does not specifically mention the lumber chute, only that there were 25 historic resources documented dating to the late 19th century lumbering activities.

Historically Associated Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Fisk Mill Cove	Archie and Fontie	Schooner	March 31, 1902	76.5	25.5	1890	
Fisk Mill Cove	Carolita	Schooner	Jan 24, 1876			1867	
Fisk Mill Cove	Grace B(Belle) Richardson	Schooner	1888			1885	

Associated National Register of Historic Places/Landmarks:

Salt Point State Park Archaeological District - Listed NRHP #71000207





Duncan's Landing: Data Sheet

Associate State Park: Sonoma Coast State Park

Maps:



Figure 23. U.S. Coast Survey "T" sheet maps dated 1876, left, and 1930, right.



Figure 24. Current map of Duncan's Landing, left, and aerial image of the same, right.

Imagery: None

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-2 Trough (shown on 1876 map-no mention in 1889 Coast Pilot)
-Samuel and Alexander Duncan established lumber mill in early 1877
-by 1889 railroad replaced transport by water

Other Land Features:

-lumber brought by rail from Duncan's Mill on Russian River





Underwater Features and Location (1889 Pacific Coast Pilot):

-2 mooring buoys

State of CA DPR Archaeological Site Trinomials: None

Previous Related Archaeological Work: None

Historically Associated Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Duncan's Landing	Emma Adelia	Schooner	Apr 10, 1872				
Duncan's Landing	Soverign	Schooner	1873			1864	

Associated National Register of Historic Places/Landmarks:

Duncan's Landing Site (prehistoric) - NRHP #71000206





Rule's Landing: Data Sheet

Associate State Park: Sonoma Coast State Park

Maps:



Figure 25. U.S. Coast Survey "T" sheet maps dated 1876, left, and 1930, right.



Figure 26. Current map of Rule's Landing, left, and aerial image of the same, right.

Imagery:

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-1 wire (150 yards main bluff to rock close under extremity of the head) -abandoned by 1877, cable taken down 1884 and business moved to Russian Gulch

Landing

Other Land Features: None

Underwater Features and Location (1889 Pacific Coast Pilot):

-mooring buoys





State of CA DPR Archaeological Site Trinomials: None

Previous Related Archaeological Work:

-Robert Douglass' 1995 report, *Rule's Landing: A Lumber Shipping Focus on the Sonoma Coast*, relates that remains of the lumbering infrastructure, including railroad ties and timbers embedded in the ground next to the ties that run out to the east can be found at the bluff immediately south of Russian Gulch Beach. These timbers might be part of a railroad turntable. Further east there are additional features including a row of posts with notches at the top that could be associated with a platform alongside the tracks. Above this area, 15 meters up the hillside, there is a frayed end of a large wire cable protruding from the ground pointing to the bluff's southwest corner. At the bluff's edge there is a redwood timber and crosspiece within a bush. These are probably associated with the wire chute. Below is the location of Rule's Landing and a sketch map of Douglass's findings.



Figure 27. Maps of Rule's Landing archaeological features (Douglass 1995).

Historically Reported Shipwrecks: None

Associated National Register of Historic Places/Landmarks: None





Russian Gulch Landing: Data Sheet

Associate State Park: Sonoma Coast State Park

Maps:



Figure 28.

U.S. Coast Survey "T" sheet maps of Russian Gulch Landing dated 1876, left, and 1930, right.



Figure 29. Current map of Russian Gulch Landing, left, and aerial image of the same, right.

Imagery:



Figure 30. Trough chute and grounded steam schooner *Maggie Ross* (Sonoma Land Trust 2012).

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Figure 31. Western Railroad Lumber Company storage yard and hoist house at Russian Gulch c. 1904 (Sonoma County Library).



Figure 32. Loading railroad ties with a wire chute (Sonoma County Library).

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-1 unknown – probably trough initially then transition to a wire chute
 -steep chute built out from southeast point towards northwest point
 -depth 11 feet at base of chute

Other Land Features: None

Underwater Features and Location (1889 Pacific Coast Pilot):

-2 mooring buoys

-one in 4 fathoms under western rocks in the passage -one between outer two rocks on east side of passage

State of CA DPR Archaeological Site Trinomials:

Previous Related Archaeological Work: None





Historically Reported Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Russian Landing	D.C. Haskins	Schooner	Aug 24, 1885				
Russian Landing	Maggie Ross	Steam Screw	Aug 23, 1892	115	32	1878	Possibly
Russian Landing	Joseph S. Spinney	Ship	Oct 25, 1892	230.9	42.6	1874	Possibly
Russian Landing	Whitelaw	Steam Screw	Feb 2, 1893	98.6	25	1882	Possibly

Associated National Register of Historic Places/Landmarks: None





Timber Cove: Data Sheet

Associate State Park: none (between Fort Ross SHP and Salt Point SP)

Maps:



Figure 33. U.S. Coast Survey "T" sheet maps of Timber Cove dated 1876, left, and 1930, right.



Figure 34. Current map of Timber Cove, left, and aerial image of the same, right.

Imagery:



Figure 35.

Trough chute, left, and steam schooner *Unimak*, loading on August 19, 1920, right, at Timber Cove (both Kelly House Museum).







Figure 36. The steam schooner *Coquille River* loading lumber by wire chute c. 1900 (Kelley House Museum).

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-1 Trough (400 yards inside the point and in the northwest part of the cove) (out to 16 feet of water)

- -1 Wire (depicted in above photo)
- -5 mooring lines

Other Land Features: None

Underwater Features and Location (1889 Pacific Coast Pilot):

-2 mooring buoys (in 4 and 7 $\frac{1}{2}$ fathoms 200 yards apart and nearly northwest and southeast from each other)

State of CA DPR Archaeological Site Trinomials: None

Previous Related Archaeological Work: None

Historically Associated Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Timber Cove	<i>Acme</i> (#1)	Steam Schooner	June 28, 1889	72	22	1888	Possibly
Timber Cove	Ester Cobos	Schooner	April 1891	72	22	1878	
Timber Cove	Golden Rule	Schooner	1882			1867	
Timber Cove	Liberty	Schooner	Feb 27, 1872				
Timber Cove	Windermere	Bark (4 masts)	Sept 7, 1883	224.7	36.2	1878	Possibly

Associated National Register of Historic Places/Landmarks: None







Stillwater Cove: Data Sheet

Associate State Park: none (between Fort Ross SHP and Salt Point SP)

Maps:



Figure 37. U.S. Coast Survey "T" sheet maps of Stillwater Cove dated 1876, left, and 1930, right.



Figure 38.

Current map of Stillwater Cove, left, and aerial image of the same, right.

Imagery: None

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-1 chute running from cliff to beyond the outer rocks with 11 ft water under its extremity (owned by Mrs. Ruoff in 1880)

-6 mooring lines

Other Land Features: None

Underwater Features and Location (1889 Pacific Coast Pilot):

-2 mooring buoys

-one in 5 fathoms 125 yards south of the chute

-one in 10 fathoms 400 yards south of chute





State of CA DPR Archaeological Site Trinomials: None

Previous Related Archaeological Work: None

Historically Associated Shipwrecks: None

Associated National Register of Historic Places/Landmarks: None





Stewarts Point Landing - Fisherman's Bay: Data Sheet

Associate State Park: none

Maps:



Figure 39. U.S. Coast Survey "T" sheet maps of Stewarts Point dated 1878, left, and 1929, right.



Figure 40. Current map of Stewarts Point, left, and aerial image of the same, right.

Imagery:



Figure 41. South from Fisherman Bay/Black Pt. looking toward Stewart's Point (UC Berkley, Bancroft Library).







Figure 42. Fisherman's Bay with unknown schooner loading tanbark.

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-1877 3 chutes (northwest part of the cove there is a small indentation where chutes projected)

-outer chute carried away

-middle chute obscured by kelp

-inner chute not used

-1885 1 chute (middle one) the only one used (extends from the cliff over the rocks out to 11 feet of water

-7 mooring lines (1889 Pacific Coast Pilot)

-1917 Coast Pilot states there is a wire chute there with mooring buoys in 5-6 fathoms

Other Land Features:

-3 abandoned mills with one close to shipping point and others back in the forest

Underwater Features and Location (1889 Pacific Coast Pilot):

-1 buoy placed in northern kelp patch between two sunken rocks

-2 mooring buoys inside the entrance and a 3rd 100 yards outside towards the northern kelp patch

State of CA DPR Archaeological Site Trinomials:

Previous Related Archaeological Work:

Historically Associated Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Stewarts Point	Abraham Lincoln	Schooner (2 masts)	1881			1864	
Stewarts Point	Albion	Steam Schooner	March 21, 1913	120	31	1892	Possibly
Stewarts Point	Charles T. Winslow	Schooner (2 masts)	Feb 15, 1885			1864	





Stewarts Point	D W Tietjen	Schooner	March 1878			
Stewarts Point	Fanny Piper	Schooner	Feb 1871			
Stewarts Point	George Henrich	Schooner	March 28, 1871			
Stewarts Point	Gina Reed	Schooner	Nov 1861			
Stewarts Point	Huichica	Schooner	Feb 1871			
Stewarts Point	J Mora Moss	Schooner	1874			
Stewarts Point	Jennie Reed	Schooner	1861			
Stewarts Point	Kate Piper	Schooner	1871		1868	
Stewarts Point	Mary Etta	Schooner	Feb 26, 1905		1891	
Stewarts Point	Matilda Heron	Schooner	Jan 10, 1875			
Stewarts Point	Minerva	Schooner	March 28, 1871			
Stewarts Point	Pet	Schooner	April 1866		1865	
Stewarts Point	Pinol	Schooner	Nov 14, 1873			
Stewarts Point	Portia	Schooner	Oct 15, 1894			
Stewarts Point	Susie	Schooner	Feb 15, 1876		1872	
Stewarts Point	Wild Pigeon	Steamer	Nov 18, 1870		1853	
Stewarts Point	William	Schooner	Feb 20, 1871			

Associated National Register of Historic Places/Landmarks: None





Bihler Landing: Data Sheet

Associated State Park: none

Maps:



Figure 43.

U.S. Coast Survey "T" sheet maps of Bihler Landing dated 1878, left, and 1929, right.



Figure 44.

Current map of Bihler Landing, left, and aerial image of the same, right.

Imagery:



Figure 45. Bihler Landing or Black Point (UC Berkley, Bancroft Library).







Figure 46. Schooner at Bihler Landing with a wire chute 1890s (Clark 2016).

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-1889: 2 trough chutes built by William Bihler and D.L.B. Ross

-inner one not used

-outer one fair place to load at (extends from bluff to 23-foot water depth)

-1 wire chute built later on

-1917 Coast Pilot states there is a wire chute used there (shipping ended in 1917) -6 mooring lines

Other Land Features: None

Underwater Features and Location:

-3 mooring buoys

-inner one 100 yards southeast of outer chute and lies in 5-6 fathoms with a rock above water 30 yards northeast and a suken rock with 11 ft upon it 70 yards southeast -outer one lies in 10 fathoms 220 yards south by east from inner one -third one lies between outer one and cove's northwest point

State of CA DPR Archaeological Site Trinomials: None

Previous Related Archaeological Work: None

Historically Associated Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Bihler Point	Ruth	Schooner	1903			1898	
Bihler Point	Ruth		1893				

Associated National Register of Historic Places/Landmarks: None





Del Mar Landing: Data Sheet

Associated State Park: none

Maps:



Figure 47. U.S. Coast Survey "T" sheet maps of Del Mar Landing dated 1880, left, and 1929, right.



Figure 48. Current map of Del Marr Landing, left, and aerial image of the same, right.

Imagery: None

Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-William and Geroge Bender established the landing around 1898 -wire chute (to the north, at trail post 58, a beam remnant reaching out to sea marks the site of the Del Mar landing: 280 Del Mar Point Sea Ranch, CA)

-1917 Coast Pilot states there is a wire chute there

Other Land Features:

-William and George Bender established a mill around 1898 across the cove where homes now stand – mill burned between 1903 and 1910





Underwater Features and Location: None

State of CA DPR Archaeological Site Trinomials: None

Previous Related Archaeological Work: None

Historically Associated Shipwrecks:

Location	Name	Located	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date
Del Mar	Klamath	Possibly	Steam Schooner	Feb 5, 1921	207.5	41.6	1909

Associated National Register of Historic Places/Landmarks: None





Gualala-Walalla-Robinsons Landing: Data Sheet

Associate State Park: none

Maps:



Figure 49. U.S. Coast Survey "T" sheet maps of Gualala Landing dated 1880, left, and 1929, right.



Figure 50. Current map of Gualala Landing, left, and aerial image of the same, right.

Imagery:



HOIST-CONVEYOR at Gualala Mills, California, for loading vessels in open roadstead.

Figure 51. Wire chute at Gualala (Hewitt 1901).





Chute/Wharf Location, Number, Type, Lifespan and Mooring Lines:

-2 wire chutes under the north bluff, broad open to the sea

-from the 60 ft high cliff, wire cables passed between schooner's masts and fastened to heavy moorings outside, and engines on shore lowered or hoisted the loads along the cable

-abandoned in 1884 and moorings taken up but 1917 Coast Pilot states there is a wire chute there

Other Land Features: None

Underwater Features and Location: None

State of CA DPR Archaeological Site Trinomials: None

Previous Related Archaeological Work: None

Historically Reported Shipwrecks:

Location	Name	Vessel Type	Date Lost	Length (ft)	Width (ft)	Build Date	Located
Gualala	Skylark	Schooner	Nov 18, 1876			1869	
Gualala	Three Sisters	Schooner (2 masts)	Oct 1, 1880				

Associated National Register of Historic Places/Landmarks:

Milano Hotel – Listed NRHP #78000720 (burned down in 2001)





Steamship Pomona (CA-SON-1704H): Data Sheet

Location: 100 yards off Fort Ross Point in Fort Ross Cove (Fort Ross SHP) N 38° 30' 37.3" W 123° 14' 16.3"



Figure 52. Aerial image of Fort Ross Cove.



Figure 53. U. S. Coast Survey "T" sheet map of Fort Ross Cove from 1930 and a current map of the cove. Arrows point to the wash rock on both maps around which the *Pomona*'s remains lie.

Depth: stern-27 feet and bow-40 feet Visibility: 6-20 feet Temperatures: mid to upper 50s Orientation: northwest-southeast axis with bow pointing out to sea

History:

The steamship *Pomona* was built in 1888 by the Union Iron Works of San Francisco, for the Oregon Improvement Company. It was 225-feet long, 33.5-feet at the beam and had a draft of 16-feet. *Pomona* was a single-screw, steel-hulled passenger and freight steamer powered by a single triple expansion marine steam engine. From 1891 to 1895, a businessman named Knowles operated the ship under his name. In 1897, the vessel was sold to the Pacific Steamship Company to traverse the San Francisco-Vancouver route with passengers and freight.



Sonoma Coast Doghole Port Project





Figure 54. Historic photographs of the *Pomona*.

Wrecking:

On 17 March 1908, the *Pomona* was steaming northward from Sam Francisco to Eureka on a routine voyage in heavy seas. The ship struck Monterey Rock, so named for the *Monterey* that had collided and sank on the rock previously. The *Pomona*'s Captain, Charles Swansen, tried to run her aground in Fort Ross cove, but impacted the fringing wash rocks where the ship foundered. Over the subsequent months, salvage efforts were conducted on the ship, and eventually she was dynamited as a navigational hazard.



Figure 55. Historic photographs of the *Pomona* sunk off Fort Ross.

Archaeological Surveys:

In 1984, a team of CA Dept. of Parks and Recreation divers surveyed the *Pomona* for the first time and they continued their efforts throughout the 1980s and 1990s. Beginning in 1998 Indiana University conducted several projects to map and document the steamship which also included marking the site with a surface buoy in 1999. In 1999, the *Pomona* was also the subject of Marianne Simoulin's master's thesis at San Jose State University. She also wrote the National Register of Historic Places nomination that resulted in its eventual listing in 2008.





Figure 56. Original *Pomona* 1999 marker buoy, left, and temporary buoys marking its drive shaft, right (Indiana University).







Figure 57. 1998 Indiana University site plan (Indiana University).

The *Pomona* lies with its bow broken over the wash rock where she ran aground. The disarticulated bow section includes her stempost, hull structure, hawse holes and a hatch cover. Beyond the wash rock, the hull retains an outline of its original shape, as the decking slopes downward from the shallow rock to the midship area. The starboard Scotch boiler remains in its approximate original location, while the port boiler has moved past the stern. Large I-beams and sections of the masts lie strewn about the site as well as disarticulated debris and smaller artifacts.



Figure 58. One of the *Pomona*'s connecting rods, left, a fire brick, center, and the stempost, right (CA Dept. of Parks and Recreation, Indiana University, and Deborah Marx)

Videos:

SS Pomona Marker Expedition - Marin Scuba Club 2014 https://www.youtube.com/watch?v=iN_IYwDgnXk





Schooner J. Eppinger (Data Sheet)

Location: Fort Ross Cove (Fort Ross SHP) - vessel has not been located yes

Depth: unknown Visibility: 6-20 feet Temperatures: mid to upper 50s Orientation: unknown





History:

The 89 foot long, 26.2 foot wide 2 masted schooner *J. Eppinger* was built in 1887 by Charles G. White, of San Francisco, and launched on 28 January 1888. Its official number was 76710 and it was engaged in the lumber trade in the late 1880s and the pelagic sealing trade in the North Pacific Ocean, Bearing Sea and Japanese waters during the 1890s. During the last few years of its career it was again part of the Redwood Coast lumber trade visiting several doghole ports along California such as Stewarts Point and Bowens Landing.



Figure 60. 2-masted lumber schooner *Abbie* is similar to what the *J. Eppinger* might have looked like (UC Berkeley, Bancroft Library - https://calisphere.org/item/ark:/13030/ft767nb4f9/)

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Wrecking:

J. Eppinger left San Francisco on 30 December 1901 and arrived at Fort Ross a few days later. Since there was no good place to anchor in Fort Ross Cove, the schooner picked up one of the lumber chute's moorings. A gale developed offshore and the schooner was unable to head out to sea to ride out the storm. Seas began to break over the *J. Eppinger* and the 6 man crew (including Captain Jensen) abandoned ship assisted by a line thrown from shore to the main mast. The schooner parted its mooring lines on 2 January 1901 and wrecked, taking out a small wharf in the cove (*San Francisco Call* 4 January 1901).

Archaeological Surveys:

The *J. Eppinger* has not been located yet. The account of its wrecking states it went ashore and destroyed the wharf at Fort Ross Cove. Historical photos showing that wharf will allow the project team to approximate the location of *J. Eppinger* and swim searches in that area might find wreckage associated with the schooner. If a hand held underwater magnetometer is available that will also be useful in locating the site.



Figure 61.

Two photos showing the wharf in Fort Ross Cove that the *J. Eppinger* ran into during its loss (Kelley House Museum).

In 1981 the CA Department of Parks and Recreation conducted a magnetometer survey of Fort Ross Cove to inventory submerged historical resources within the park. The survey located 55 significant magnetic anomalies clustered in 6 groups. No resources associated with the *J*. *Eppinger* were positively identified, but it is possible that the schooner's remains are closer to shore than the survey was able to cover. Swim searches did locate metal fragments within the mooring area that may be from the *Pomona* or others vessels lost in the area such as the *J*. *Eppinger*. This cluster was number 6 noted on the map below.







Figure 62. Location of cluster 6 from the magnetometer survey within the red box (Foster 1984).





Freighter Norlina: Data Sheet

Location: south Gerstle Cove (Salt Point SP)

Depth: 30-40 ft (bow visible at low tide) Visibility: average 15 ft Temperatures: mid to upper 50s Orientation: bow points towards shore



Figure 63. Aerial view of Gerstle Cove.



Figure 64. U. S. Coast Survey "T" sheet map of Gerstle Cove from 1930 and a current map of the cove both showing *Norlina*'s location

History:

The 385-foot long 4,596 ton steel-hulled steam freighter *Norlina* began its career in 1909 as the British vessel S.S. *Harfleur*. She was transferred to American registry and renamed *Georgiana* in 1915. In the following year she changed owners and became *Norlina*. She was commissioned in the U.S. Navy in early May 1918 as USS *Norlina* (ID # 1597). For the next year the freighter moved supplies to Europe to support the Allied war effort in World War I. In May 1919, it was delivered to the U.S. Shipping Board and returned to her owners, the Garland Steamship Company.







Figure 65.

Norlina as the USS Norlina (Navy History and Heritage Command photo #NH 65108).

Wrecking:

Norlina was en-route from San Francisco to Puget Sound, WA with general cargo when it ran aground in the fog on 4 August 1926 near Horseshoe Point. There were efforts to refloat the freighter and pull it off the rocks but they were unsuccessful and the ship broke in half and came to rest on a nearby reef where it sits today. *Norlina* was eventually salvaged and its hull dynamited.



Figure 66. Norlina aground in August 1926 (White 2014:27; eBay)

Archaeological Surveys:

There have been no archaeological surveys of the *Norlina*. Online dive reports state that the hull is broken up but there are identifiable pieces of the frames and hull plating. The drive shaft is still in place as well as two of its boilers in 8-12 feet of water.

Videos:

DiverDave and AbDiver Paul Dive the *Norlina* 2012 <u>https://www.youtube.com/watch?v=zzo0FuBYtPU</u>





Bark Windermere: Data Sheet

Location: unknown - south of Timber Cove at Windermere Point (Fort Ross SHP)

Depth: unknown

-when the steamer Acme salvaged the Windermere accounts state that it put down 4

moorings in 8 fathoms (48 ft) of water close under a cliff and surrounded by sunken rocks Visibility: unknown

Temperatures: mid to upper 50s

Orientation: unknown



Figure 67. Aerial view, left, and present map, right, of Timber Cove and Windermere Point.

History:

The bark *Windermere* was launched 21 February 1878 by W.H. Potter and Sons of Liverpool, England. It had 2 decks, 4 masts, measured 1,193 tons (net) and 1,240 tons (gross), was 224.7 foot long, 36.4 feet wide and had a 21.9 foot depth of hold. Its official number was 78765. The vessel history is unknown prior to its loss other than frequent trips between Liverpool and Australia. Its rig has been referenced as a clipper ship, ship or bark/barque.

Wrecking:

The *Windermere* departed Newcastle, New South Wales (Australia) and was sailing to San Francisco with a cargo of Wallsend coal when it went ashore on 7 September 1883. All hands were saved, but the vessel was a total loss (*Los Angeles Herald* 8 September 1883). On 10 September 1883, the vessel and its 1,500 tons of coal cargo were listed for sale by auction in the newspapers. It was sold the next day for \$600 with the cargo going for an additional \$25 (*San Francisco Chronicle* 1 January 1884). On 15 June 1889, The *Daily Alta* reported that A. J. Moisant purchased the *Windermere* from Lorentz Foard and W. J. Ray and the steamer *Acme* would be going to the wreck in a week with a diver named Baker to conduct salvage activities.





Later in September 1889, the schooner *Albion* made at least two trips from San Francisco to recover additional iron from the wrecked *Windermere* (*Daily Alta* 28 September 1889).



Figure 68. While longer than the *Windermere*, the 259-foot long 4-masted iron bark *Lucipara* had the same rig (http://www.wrecksite.eu/img/wrecks/lucipara_sv_1885.jpg).

Archaeological Surveys:

The *Windermere* has not been located yet. While the wreck was salvaged and possibly dynamited, the vessel's large iron hull and its coal cargo are likely to persist at Windermere Point. Swim searches in the 30-50 foot depth range along with a hand held metal detector are expected to locate the *Windermere*'s remains. Due to the exposed location dives will only be conducted if weather and sea conditions are favorable.





Steamer Schooner Acme: Data Sheet

Location: unknown – south of Timber Cove at Coleman/Kolman Gulch Beach (Fort Ross SHP)

Depth: unknown –possible on the beach or surf zone Visibility: unknown Temperatures: mid to upper 50s Orientation: unknown



Figure 69. Aerial view, left, and present map, right, showing Timber Cove and Coleman Gulch.



Figure 70. 1898 map indicating the location of Kolmer Gulch.

History:

The wooden hulled steam schooner *Acme* was built in Siuslaw, Oregon in 1888 for the lumber trade by Captain C. J. Jorgensen. It was 77.51 gross tons and measured 72 feet long by 22 feet wide by 7.4 feet deep. At its launch it was an unpowered schooner, but it later received an engine making it a steam schooner. Fulton Iron Works of San Francisco installed its 25 nominal horsepower steam engine. *Acme*'s official number was 106607 (*San Francisco Chronicle* 2 December 1888 and 3 July 1889).





Wrecking:

On 25 June 1889, the Acme left San Francisco, its homeport, for Fisk Mill. While headed north it stopped at the site of the *Winderemere* to salvage some iron. Reportedly, the *Acme* was going to Fisk Mill to move a number of anchors and moorings that needed to be re-laid and recover several lost anchors (San Francisco Chronicle 13 June 1889). Other newspaper reports suggest that it was bound for Timber Cove for a load of cordwood when it struck an uncharted rock (San Francisco Chronicle 3 July 1889). These conflicting accounts of the steamer's intentions as seems that it may have been not directly headed to Fisk Mill or Timber Cove, in was in fact chartered to go to the Winderemere. On 15 June 1889, the San Francisco Chronicle carried a story that A. J. Moissant (Acme's principle owner) purchased the Winderemere from Lorentz Foard and W. J. Rey and he engaged diver George Baker and the Acme to go to the wrecksite to recover iron. While at anchor on 28 June, the steamer struck something, probably the Windermere, and began taking on water. Captain Ole Jensen cut its lines and beached the vessel on a sandy beach $\frac{1}{2}$ mile south of where it struck. At that time there was 4 feet of water in the hold. The Acme broke up in the heavy weather and was soon after salved by the wrecking steamer Whitelaw. It was valued at \$16,000 (Daily Alta California 6 July 1889; San Francisco Chronicle 15 June 1889 and 7 August 1889).

Archaeological Surveys:

The *Acme* has not been located. Since the wreck was beached and salvaged, it was probably heavily damaged and broken up. A beach survey or snorkeling searches in the surf zone along with a hand held metal detector might locate the *Acme*'s remains.





Ship Joseph S. Spinney: Data Sheet

Location: unknown - ¹/₂ or 1 mile north of Russian Gulch Landing (Sonoma Coast SP), 500-600 feet from shore. Six miles south of Fort Ross.

Depth: approx. 30 feet – historical account state 6-7 fathoms Visibility: unknown Temperatures: mid to upper 50s Orientation: unknown



Figure 71. Present map showing Russian Gulch Landing and possible location of the *Joseph S. Spinney* based on information provided by local diver Bruce Lanham.



Figure 72.

Close up of above map with possible location of the Joseph S. Spinney

History:

The wooden hulled ship *Joseph S. Spinney* was built in Thomaston, Maine by Harvey Mills and Associates and launched in October 1874. It measured 230.9 feet long, 42.6 feet wide, 19.5 feet depth of hold and 1,988 gross tons. It had three decks and three masts. Between 1874 and its loss in 1892, the ship sailed to ports around the world. It loaded guano in South American, carried





case oil from San Francisco to Japan, sailed from San Francisco to Liverpool with wheat, and brought railroad iron to Seattle from Liverpool among other voyages.



Figure 73. Painting of the Joseph S. Spinney by Edouard Adam Sr. from 1879 (Vallejo Gallery).

Wrecking:

After making good time from New York (departed on 8 May), the *Joseph S. Spinney* arrived off California in the fog and its captain, F.F. Curling, lost his bearings. On 25 October 1892, it struck a sunken rock (later referenced as Lammermoor Rock) 5 miles north of Russian Gulch. An hour later the ship got off the rock but was leaking badly. As water filled its hold, the ship's pumps clogged signaling to the crew that it was time to abandon ship. In their haste, they left the sails set. While the captain headed for Drake's Bay the ship drifted south with people reportedly seeing it sailing along the next day. Finally, the ship smashed into nearshore rocks and broke up. The ship was carrying general cargo, consigned to Sutton and Beebe, consisting of 21 barrels of whiskey, clothes ringers, hardware, barrels of lard oil and resin, coils of barbed wire, merchant bar iron, sheets of steel, galvanized water pipe, horseshoes and steel railroad rails (*San Francisco Chronicle* 27 October 1892 and 13 October 1893; *San Francisco Call* 29 November 1892).

Shortly after the wrecking, Lorentz Ford (Foard sp?) bought the rigging and two small boats used by the crew to row to safety on 31 October 1892 for \$410. Later in November 1892 T. P. H. Whitelaw, working for the underwriters, began sending his wrecking steamers *Whitelaw* and schooners *Sampson* and *Catalina* to salvage its cargo, as that was not sold to Ford. Its cargo was valued at over \$200,000. The *Whitelaw* subsequently sank while salvaging the *Joseph S. Spinney* three months later. Newspaper accounts of the salvage reported that the divers cut away rigging and sawed through the deck and deck beams to gain access to the hold. They also recovered





sails, two anchors and cables, along with spars and masts. A grappling iron and dynamite was used during the salvage operations (*San Francisco Chronicle* 1 November 1892, 6 November 1892, 13 February 1893 and 13 October 1893).



Figure 74. Depiction of the *Joseph S. Spinney* sinking, left, and portions of its remains salvaged by Whitelaw, right (*San Francisco* Chronicle 17 October 1892 and 13 October 1893).

Archaeological Surveys:

Local diver Bruce Lanham recalls that in 1981/1982, another diver named Dave Buller located the *Joseph S. Spinney* and/or *Whitelaw* with a magnetometer, but this story has not been corroborated (Schwemmer 2013). Bruce Lanham and his brother Robert dove on a shipwreck near the historically reported sinking location of the *Joseph S. Spinney* and *Whitelaw*. Below is a page from their project notebook that locates the site with ranges from coastal features including a fence line, rockslide and distinctive rock formations.



Figure 75.

Bruce Lanham's drawings of the *Joseph S. Spinney*'s or the *Whitelaw*'s location (courtesy of Robert Schwemmer).





Steamer Whitelaw: Data Sheet

Location: unknown - ¹/₂-1 mile north of Russian Gulch Landing (Sonoma Coast SP), 500-600 feet from shore. Six miles south of Fort Ross.

Depth: approx. 30 feet – historical accounts state the *Joseph S. Spinney* was in 6-7 fathoms Visibility: unknown Temperatures: mid to upper 50s Orientation: unknown



Figure 76. Present map showing Russian Gulch Landing and possible location of the *Whitelaw* based on information provided by local diver Bruce Lanham.



Figure 77.

Close up of above map with possible location of the Whitelaw.

History:

The wooden-hulled steamer *Whitelaw* was built in San Francisco at T. H. White's shipyard and launched on 13 October 1882 specifically for the salvage industry. It measured 98.6 feet long, 25 feet wide, 9.2 feet deep, and was 80 net tons and 127 gross tons. It was substantially built, with





two masts and a 50 horsepower steam engine. Salvage equipment included steam derricks, diving apparatus and wrecking appliances. Newspapers reported that at the time of its loss in 1893 it had made a quarter of a million dollars for its owner, Thomas P. H. Whitelaw. The steamer was very active along the coast, profiting from the shipwrecks that resulted from California's rough weather and jagged coastline. The *Whitelaw* not only worked on the California coast, but ventured further north and participated in salvage activities in Oregon and Victoria, British Columbia as well (*San Francisco Chronicle* 13 February 1893; *San Francisco Call* 13 April 1893 and 15 May 1892).



Figure 78. 114-foot long salvage steamer *Greenwood*, launched in San Francisco in 1886, is similar to what the *Whitelaw* might have looked like. Captain Thomas Whitelaw, *Whitelaw*'s owners, also owned and operated the *Greenwood* (CSP).

Wrecking:

While salvaging the *Joseph S. Spinney* the wrecking steamer *Whitelaw*'s mooring lines parted during a gale around 3 o'clock A.M. on 12 February 1893 and it was pushed onto the rocks and sank. During the incident the *Whitelaw*'s propeller got fouled on some of the ropes attached to the *Joseph S. Spinney*. The wind was blowing from the south and west causing the steamer to turn broadside to the waves with its deck toward the sea. Its captain, L. T. John, and his 11-man crew managed to get into their two small boats and reached shore safely. It was insured for \$17,000. Onboard at the time of its loss was \$30,000 worth of wrecking apparatus (*San*





Francisco Chronicle 13 February 1893 and 14 February 1893; *San Francisco Call* 14 February 1893).



Figure 79. Depiction of the *Whitelaw*'s sinking (*San Francisco Call* 14 February 1893).

Archaeological Surveys:

Local diver Bruce Lanham recalls that in 1981/1982, another diver named Dave Buller located the *Joseph S. Spinney* and/or *Whitelaw* with a magnetometer, but this story has not been corroborated (Schwemmer 2013). Bruce Lanham and his brother Robert dove on a shipwreck near the historically reported sinking location of the *Joseph S. Spinney* and *Whitelaw*. Below is a page from their project notebook that locates the site with ranges from coastal features including a fence line, rockslide and distinctive rock formations.



Figure 80. Bruce Lanham's drawings of *Joseph S. Spinney* or *Whitelaw*'s location (courtesy of Robert Schwemmer).





References Cited

Clark, Susan M. 2016. History – The Sea Ranch Association Website. < http://www.tsra.org/news.php?viewStory=138>, Accessed 6 June 2016.

Davidson, George

1889 *Pacific Coast. Coast Pilot of the California, Oregon, and Washington.* 4th edition. United States Coast and Geodetic Survey. Washington, D.C.

Douglass, Robert G.

1995 Rule's Landing: A Lumber Shipping Focus on the Sonoma Coast. Report on file with California Department of Parks and Recreation.

Foster, John W.

1984 "Schooners, Steamers and Spilled Cargo: A Preliminary Underwater Survey of Ft. Ross Cove, California." In: Underwater Archaeology: The Proceedings of the 13th Conference on Underwater Archaeology, Donald H. Keith, editor. pp. 86-94.

Hewitt, William

1901 *Cable Hoist Conveyors: Laurent-Cherry Patent System*. Trenton Iron Company, Trenton, NJ.

Jackson, Walter A. 1977 The Doghole Schooners. Bear & Stebbins, Fort Bragg. CA.

Porter, Cris D.

1985 An Archaeological Survey of the Horseshow Point, Fisk Mill Cove, and Wildcat Creek Burn Components, Salt Point State Park. Report prepared for the California Department of Parks and Recreation Northern Region Headquarters, Santa Rosa, CA.

Pritchard, William E.

1969 Archaeological Reconnaissance at Salt Point State Park, Sonoma County, CA. Report prepared for the California Department of Parks and Recreation, Division of Resource Management an Protection Archaeological Resources Section.

Schwemmer, Robert

2013 Shipwreck Database. NOAA Office of National Marine Sanctuaries: West Coast Region.





Sonoma Land Trust

2012 Jenner Headlands Integrated Resource Management Plan. March, Santa Rosa, CA.

Thompson, Thomas1877 *Historical Atlas Map of Sonoma County California*. Thomas H. Thompson and Co.

Tooker, Richard H.

1968 "Loading by High-Line on the California Coast" In *Sea Letter* published by the San Francisco Maritime Museum. Volume 6, No. 1, May 1968.

White, Michael D.

2014 *Shipwrecks of the California Coast: Wood to Iron, Sail to Steam.* The History Press, Charleston, SC.