

# REVIEW OF OLYMPIC COAST VESSEL INCIDENTS FROM 1994 – 2016



U.S. Department of Commerce  
Wilbur Russ, Secretary (pending)

National Oceanic and Atmospheric  
Administration  
Benjamin Friedman, Acting Administrator

National Ocean Service  
Russell Callender, Ph.D., Assistant  
Administrator

Office of National Marine Sanctuaries  
John Armor, Director

Report Author:

George Galasso, Olympic Coast National Marine  
Sanctuary, NOS, NOAA

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**Cover Photo:** The 1951 wooden Fishing Vessel Karanna grounded on Cape Flattery on May 9, 2012. The USCG rescued the 4-man crew. The vessel broke up and was not salvaged. The accident was caused by human error.

Photo: USCG



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The Office of National Marine Sanctuaries, part of the National Oceanic and Atmospheric Administration, serves as the trustee for a system of underwater parks encompassing more than 600,000 square miles of ocean and Great Lakes waters. The 13 national marine sanctuaries and two marine national monuments within the National Marine Sanctuary System represent areas of America's ocean and Great Lakes environment that are of special national significance. Within their waters, giant humpback whales breed and calve their young, coral colonies flourish, and shipwrecks tell stories of our maritime history. Habitats include beautiful coral reefs, lush kelp forests, whale migration corridors, spectacular deep-sea canyons, and underwater archaeological sites. These special places also provide homes to thousands of unique or endangered species and are important to America's cultural heritage. Sites range in size from one square mile to almost 583,000 square miles and serve as natural classrooms, cherished recreational spots, and are home to valuable commercial industries.

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## Contact

George Galasso  
NOAA's Olympic Coast National Marine Sanctuary  
115 East Railroad Ave., Suite 301, Port Angeles, WA 98362-2925  
[George.Galasso@noaa.gov](mailto:George.Galasso@noaa.gov)



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## Introduction

Since the Olympic Coast National Marine Sanctuary (OCNMS or sanctuary) was designated in 1994, there has been an ongoing effort to track a number of different types of incidents in or in the vicinity of the sanctuary. The types of incidents that were tracked and the reasons for the collection of that information varies. One of the most obvious and consistent reasons is the tracking of violations of sanctuary regulations. The majority of these include low overflights, small oils spills, and sunken or grounded vessels. An additional category involves incidents described as near misses. These typically included, but are not limited to, large commercial vessels that had mechanical difficulties and may have called for assistance.

This report focuses on incidents that resulted in vessels being lost in or near the sanctuary. This includes vessels that have sunk, grounded or capsized regardless of whether the vessel was salvaged or remnants of the wreck remain in the marine environment. The report documents the sanctuary's Incident Database, how the data were collected, processed and summarized. Out of all incident records, 46 vessels were identified for further analysis. Data collected on those incidents was summarized to see if there were commonalities based on causes and vessel characteristics. The intended audiences are sanctuary staff, the sanctuary advisory council and partner governments and agencies.

### Database Goals

- Document incidents involving vessels lost in OCNMS
- Determine if there are areas of commonality for incidents
- Document vessel characteristics
- Determine the type and cause

## OCNMS Vessel Incident Review Project

In the 1990's when Olympic Coast National Marine Sanctuary (OCNMS or sanctuary) was undergoing its designation process, one of the most significant concerns expressed by the public was the risk of oil spills. Regulations were put in place when the sanctuary was designated prohibiting not only discharges into the sanctuary, but also abandoning any structure on the seafloor. The latter regulation puts OCNMS in a position which is unique from other agencies that regulate oil spills, e.g., U. S. Coast Guard (USCG) and Washington State Department of Ecology (ECY). While the USCG and ECY respond aggressively to oil spills and the risk they cause to the environment, once the risk to the environment has been mitigated in most cases do not have the authority to require the salvage<sup>1</sup> of any debris left behind<sup>2</sup>. As a first step in dealing with this management

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<sup>1</sup> Salvage is often defined as the rescue of a wrecked or disabled vessel or its cargo from loss at sea. For the purposes of this report it also includes the recovery of any material or debris associated with the loss of a vessel.

<sup>2</sup> The USCG and U.S. Army Corps of Engineers have responsibilities to mitigate obstructions to navigation, including the removal of sunken vessels. In most cases this does not apply to incidents in the sanctuary.

challenge, sanctuary staff has reviews vessel incidents where vessels have been reported or lost<sup>3</sup> by sinking, grounding or capsizing.

In 2015-2016 OCNMS reviewed its Incident Database, developed better defined criteria (see appendix A), updated data based on additional research, and conducted quality assurance and control on the data (QA/QC). OCNMS also reached out to the USCG District 13 and the Washington Department of Ecology Spills Program to identify additional incidents not in the database. Additional efforts were made to collect more detailed information, where it existed, for causes of the incidents. The primary purpose of this review was to provide as complete a record as possible by documenting existing data and investigating secondary sources for additional information. The information is further analyzed to see if there are any trends in the incidents that might inform policy recommendations.

## Brief Overview of Vessel Activity in OCNMS

Vessel activity in OCNMS can be described briefly in general terms. This characterization helps set the context of the vessel analysis project. OCNMS's boundary starts at on the eastern side of Cape Flattery on the Makah Reservation. From there it travels north to the international boundary with Canada, in the middle of the Strait of Juan de Fuca, a major waterway connecting international shipping to the ports of Vancouver, British Columbia, Seattle and Tacoma, Washington. The boundary travels along the international border to the edge of the continental shelf and then to the south to a point 25 nautical miles west of the Copalis River. Just to the south of the sanctuary is the Port of Grays Harbor, another important commercial port in the State of Washington. There are also three smaller harbors adjacent to the sanctuary, from north to south, Neah Bay, La Push and Westport.

Most vessel activity in the sanctuary can be characterized by four generalized categories:

- International Shipping – large commercial ships travelling mostly from Aisa, calling on inland Washington and British Columbia ports and the Port of Grays Harbor.
- Coastwise Shipping – can include both international and domestic trade between west coast ports. This includes, but need not be limited to, tug and barge traffic.
- Commerical Fishing – the sanctuary is a very active commercial fishing area, including both tribal and non-tribal fishing.
- Private Vessels – smaller vessels, largely engaged in recreational fishing.

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<sup>3</sup> For the purpose of this document, the term lost refers to vessels that have sunk, grounded or capsized, regardless of if they have been salvaged and put back in service.

This list is not exhaustive, but includes the majority of vessels plying sanctuary waters. Other examples of activities that take place include work by government and research vessels; while important they do not involve large numbers of vessels.

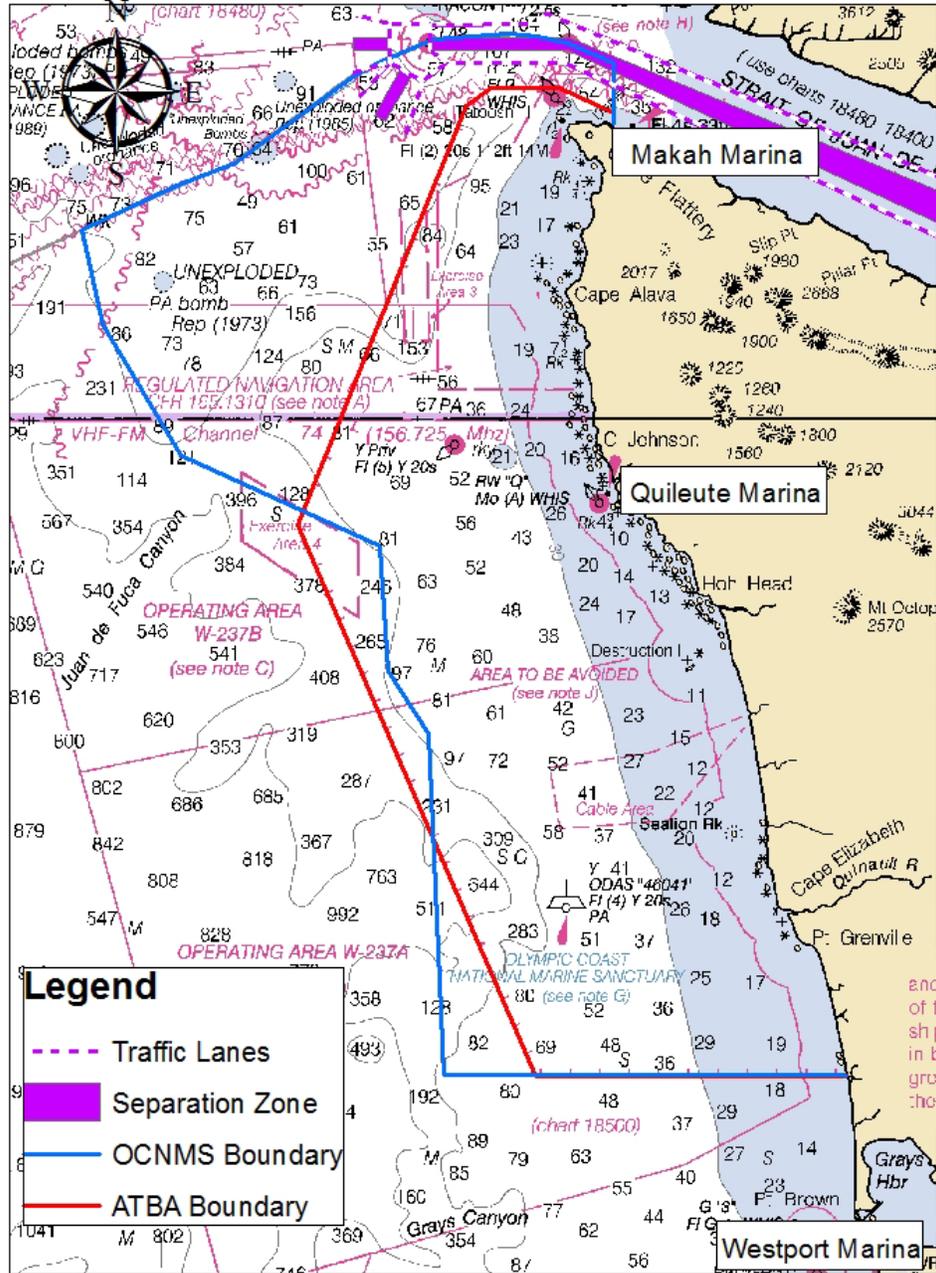


Figure 1: OCNMS boundaries, with Vessel Routing Measures

The sanctuary includes two significant International Maritime Organization (IMO) vessel traffic routing measures, a traffic separation scheme (TSS) at the entrance to the Strait of Juan de Fuca and an Area to be Avoided (ATBA). The TSS is jointly managed by the

United States and Canadian Coast Guards as a Cooperative Vessel Traffic Service. The ATBA was designated at the time of sanctuary designation to help prevent oils spills. These two measures apply mostly to larger vessels that mostly transit through the sanctuary (see Figure 1).

There is limited infrastructure to support fishing and private vessels that are active in the sanctuary. Along the 135 miles of sanctuary coastline, only the Quileute Marina is immediately adjacent to the sanctuary. The entrance through the Quillayute River, can be treacherous and is often closed due to rough sea conditions.

## OCNMS Incident Database

The current Sanctuary Incident Database is a Microsoft Access file containing a table for all sanctuary incidents which has common data for different incident types. Currently these include Vessel Incidents, Overflight Incidents, and Mammal/Wildlife Incidents. This report and project only addresses those incidents listed under the Vessel Incident category. This also includes some cases of submerged marine debris, such as known cases of lost cargo. See Appendix A for an explanation of key database fields. The database currently has 427 records. Of these, 123 are vessel related incidents. The following is a working criterion for the vessel incident section of this database:

The screenshot shows a Microsoft Access data entry form for 'SanctuaryIncidents'. The form is titled 'Vessel Incidents' and includes buttons for 'Add New', 'Save Record', and 'Delete Record'. The form fields are organized into several sections:

- Incident Information:** Incident (2016V00535), Incident ID (535), Contact ID, Contact Type.
- Vessel Information:** Vessel Name (F/V Qualay Squallum), OCNMS Type (Fishing Vessel), Tonnage - Specify GT, GRT, DWT (73 GRT), Vessel Number (939449), Year Built (1989), Call Sign (WDH2286), LOA (ft or m) (58 ft), Draft (ft or m) (9 ft), Beam (ft or m) (21 ft), Country Flag (USA).
- Weather and Hull:** Weather Condition (E wind around 8 kt. Mostly sunny. WNW swell 4 to 5 ft at 10 seconds. Wind waves around 1 ft.), Vessel Description (Steel hull fishing vessel), Hull Type (Steel).
- Incident Details:** Type Of Incident (Grounding), Incident Cause (Human Error), Incident Category (Sank or Grounded-Salvaged).
- Spill Information:** Pollutants (diesel), Spill Amount (0), Category (no spill), Potential Spill Amount (3000 gallons), Spill/slick Size.
- Additional Information:** Forwarded to OLE, Forwarded to GCES, Vessel Sank or Grounded, Seafloor Debris, Near Miss, OCNMS Damage Assessment, OCNMS Violation, Number of Fatalities (0), Salvaged, Surveyed, Located, Chartered.
- Additional Files Location:** S:\RESOURCE PROTECTION\Incidents\Vessel\_Incidents\2016\QualaySquallum

A text box at the bottom of the form contains the following narrative: "Early in the morning of December 7, 2016 the 58' steel hulled F/V Qualay Squallum had a powered grounding between Point Grenville and Moclips on a Quinault Reservation beach, in the Olympic Coast National Marine Sanctuary. The USCG removed the five-man crew by helicopter. The fishing vessel reported has less than 3,000 gallons of diesel fuel and 8,000 pounds of crab aboard. Sector Columbia River and Washington Department of Ecology worked with salvagers contracted by the responsible party to tow the vessel off the beach."

Figure 2: Screen shot of OCNMS Incident Database data entry form for vessel incidents.

### ***Incidents to be included***

- All vessels or aircraft that sink or ground in, or near, the sanctuary, regardless of whether they have been salvaged or not
- All prohibited vessel discharges in OCNMS, e.g., material dumped or discharged from vessels or aircraft
- Discharges in the vicinity of the sanctuary, particularly if they enter the sanctuary
- Near misses for large commercial vessels<sup>4</sup>
- Significant submerged marine debris, e.g., lost cargo or material from military or commercial vessels

### ***Location***

- Inside or adjacent to the sanctuary within a 10 nautical mile buffer
- Exclude incidents in marinas or outside OCNMS, unless a resulting discharge enters the sanctuary
- For large commercial vessel near misses – which may occur beyond the 10 nautical mile buffer; possibly up to 50 nm outside of the sanctuary if they are significant; for instance, if they result in a tug being dispatched

### ***Time period***

- The Incident Database includes vessels or incidents that have occurred since the sanctuary's designation in July 1994.

### ***Rules for documenting positions***

- For near misses, like a ship losing power that did not result in a sanctuary violation, report the position at the time the condition was reported
- For incidents with multiple reported positions, use the final reported position of where the vessel was abandoned. If the vessel was salvaged use the location where the salvage occurred

## **Sources of Data**

### ***OCNMS records***

Since the 1994 designation, sanctuary staff has documented incidents in the sanctuary. The types of incidents that were tracked and the reasons for the collection of that information varied. One of the most obvious and consistent reasons was the tracking of

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<sup>4</sup> For the purpose of this document, we consider a large commercial vessel to be a vessel engaged in commercial trade and is at least 400 gross tons.

violations of sanctuary regulations. The majority of these included low overflights, small oils spills, and sunken or grounded vessels. An additional category involved incidents described as near misses. These typically included, but are not limited to, large commercial vessels that had mechanical difficulties and may have called for assistance.

This information was originally stored in a series of hard files in the OCNMS office and included data from various sources including emails, newspaper articles, and correspondence, over the years. OCNMS has worked to organize this information in a series of databases. The primary purpose of the current Incident Database is to document vessels that have violated sanctuary regulations by discharging, sinking, or grounding in the sanctuary. This also includes spills of unknown sources. Other data entries include near misses and man-made bottom obstructions, such as lost cargo.

### ***USCG data***

#### **Marine Information for Safety and Law Enforcement (MISLE)**

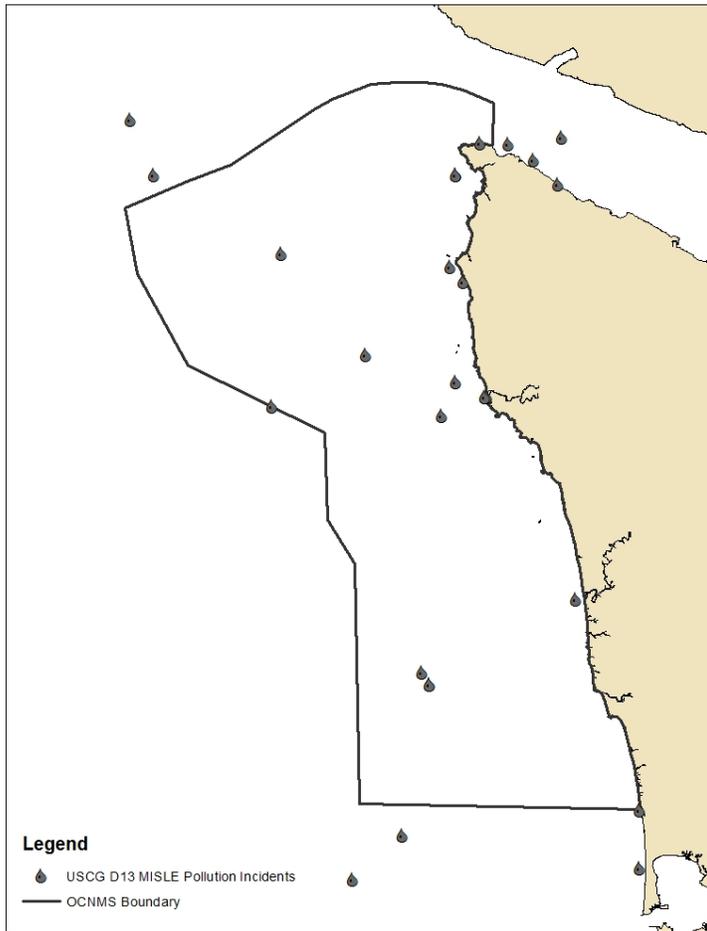
OCNMS requested that the USCG District 13 conduct a query of their Marine Information for Safety and Law Enforcement (MISLE) database. Three dataset queries were provided and reviewed. These queries included records from the entire USCG District 13 Area of Operations (AOR) for as far back as was available. The dataset had a few records from 1995 – 2000, with many more records starting in 2001. The following datasets were queried for the geographic region covering the study area:

- Pollution Incidents
- Pollution Incidents associated to Vessel
- Response Cases

The first two dataset included data on pollution incidents. An analysis of these two datasets yielded very similar results; therefore, we are only reporting on the Pollution Incident dataset. The original Pollution Incident dataset included 5,052 records with 25 fields.

The data were cleaned following a number of steps, resulting in a data set of 27 records (Figure 3). From the 27 MISLE records, 15 were already documented within existing sanctuary database entries. The remaining 12 MISLE records are potential candidates for new OCNMS data records.

The USCG District 13 MISLE Response Cases dataset is discussed later in the document.



**Figure 3: USCG MISLE Pollution Incident data**

### **Incident Investigation Reports (IIR)**

The USCG Online Incident Investigation Report (IIR) provides information regarding maritime incidents investigated by the U.S. Coast Guard under 46 U.S.C. Subtitle II, Part D: Marine Casualties. These published reports are limited to reportable marine casualties, as defined in 46 U.S.C. § 4.05, that were closed after October 2002. Additional reports closed prior to November 2002 may be added in the future (USCG 2017a). See Figure 4 for an example of an OCNMS incident investigated by the USCG.

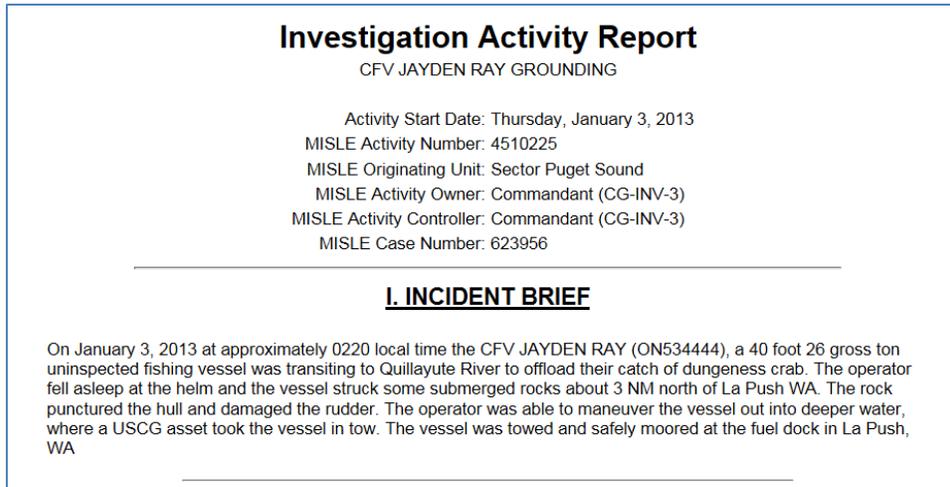


Figure 4: Excerpt from USCG Incident Investigation Report for Fishing Vessel (F/V) *Jayden Ray*

### Port State Information eXchange (PSIX)

The Port State Information eXchange (PSIX) system is a source of data on U.S. flag vessels and foreign vessels operating in U.S. waters. The sanctuary uses the PSIX vessel search function at (USCG 2017b) as a primary source of vessel information. See Figure 5 for an example of USCG PSIX vessel information.

Vessel Information:	Vessel Particulars:
<b>Vessel Name:</b> JAYDEN RAY <b>Primary Vessel Number:</b> 534444 (Official Number (U.S.)) <b>Hull Identification Number:</b> N/A <b>Manufacturer Hull Number:</b> N/A <b>IMO Number:</b> N/A <b>Vessel Flag:</b> UNITED STATES <b>Vessel Call Sign:</b> N/A	<b>Service:</b> Commercial Fishing Vessel <b>Length:</b> 40.30 ft <b>Breadth:</b> N/A <b>Depth:</b> N/A <b>Build Year:</b> 1971 <b>Alternate VINs:</b> <ul style="list-style-type: none"> <li>• CG110550 (Coast Guard Number)</li> </ul>
Service Information:	Tonnage Information:
<b>Service Status:</b> Active <b>Out Of Service Date:</b> N/A <b>Last Removed From Service By:</b> N/A	<b>Cargo Authority:</b> N/A <b>Tonnage:</b> <ul style="list-style-type: none"> <li>• 18 - Regulatory (Subpart C or D), Net Ton</li> <li>• 26 - Regulatory (Subpart C or D), Gross Ton</li> </ul>

Figure 5: Excerpt from USCG PSIX vessel search for F/V *Jayden Ray*

### *NOAA Office of Law Enforcement Investigation Reports*

The NOAA Office of Law Enforcement (OLE) has the responsibility to enforce a number of laws and their associated regulations, including the National Marine Sanctuary Act and the Olympic Coast National Marine Sanctuary regulations. Sanctuary staff coordinates with OLE agents when vessel incidents result in a sanctuary violation; this can involve a discharge of pollutants and/or the abandonment of a vessel on the sea floor. In the preparation of this report the investigative reports for closed cases were reviewed for any additional information on the cause or potential cause of the incidents.

### ***Washington State Department of Ecology Data***

Washington Department of Ecology (ECY) Spills Program tracks vessel traffic, vessel incidents, and oil spills in state waters. Two sources of information were of particular value. The Spills Program Integrated Information System captures oil and non-oil spills and vessel casualties, and it documents the incident source, material and medium (for spills), causal factors, and impacts. It is the basic source for all ECY's incident-related internal and external reports. In March 2016, the sanctuary received a data file containing 117 records with 21 fields. After narrowing the information to the study area, 37 records remained; of these 10 new incidents were identified and added to the OCNMS Incident Database. We also reviewed the ECY Environmental Report Tracking System (ERTS) reports for additional information.

### ***National Transportation Safety Board Accident Reports***

The United States National Transportation Safety Board is an independent agency with the authority to investigate and establish the probable cause of any major marine casualty or any marine casualty involving both public and nonpublic vessels. There is one such report related to this analysis the engine room fire and subsequent sinking of the recreational vessel *La Pietra* on July 4, 2014.

### ***Transportation Safety Board of Canada Marine Investigation Reports***

The Transportation Safety Board (TSB) of Canada investigates accidents and reportable incidents involving Canadian vessels. Research found two reports related to vessel incidents that were within the scope of this analysis. The first involved the capsizing, with loss of life, of the F/V *Ocean Tor* on July 26, 2005. The second involves the collision between the F/V *Viking Storm* and the F/V *Maverick* on September 28, 2012. The second case also involved the loss of life. The detailed TSB reports can be accessed online from the Transportation Safety Board of Canada (TSB 2013).

## **Spatial Analysis**

Through an iterative process, OCNMS's vessel incident data were extensively reviewed and updated. This included selecting spatial limits to the data collected. Additional information was collected from partner agencies, including the NOAA Office of Law Enforcement, USCG District 13, and the Washington Department of Ecology Spills Program. Table 1 and Figure 6 show all data that are within the geographic scope of the study area, including a 10 nautical mile buffer around OCNMS, excluding marinas.

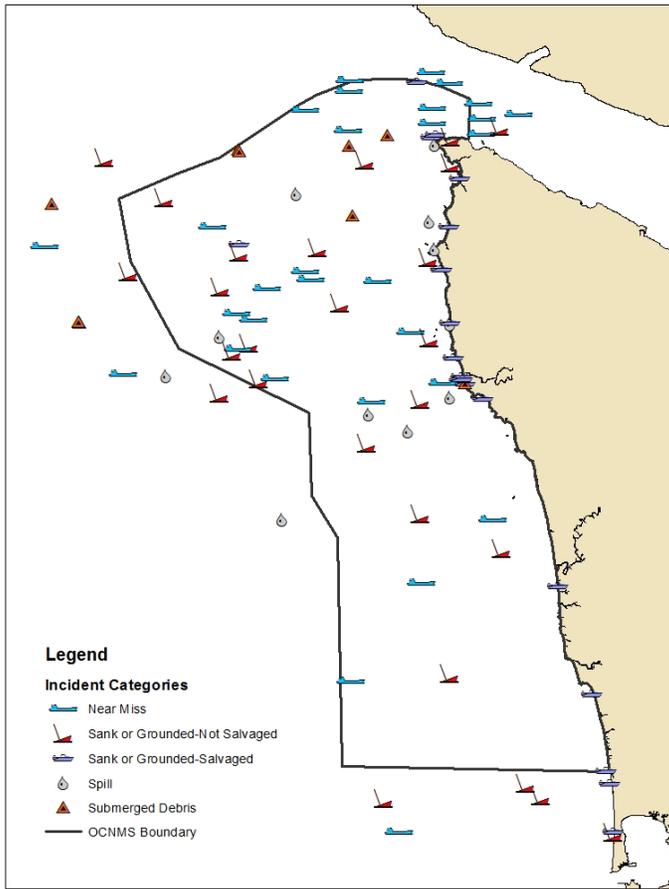


Figure 6: Map showing all 100 vessel incidents in the OCNMS database.

### *Vessel Incident Categories*

As mentioned above, for this analysis we identified 5 general categories of vessel incidents for analysis (Table 1). These five categories are:

Table 1: Table showing incident categories for all 100 vessel incidents in the OCNMS database.

Incident Category	Number of recorded incidents
Near Miss	34
Sunken or Grounded-Not Salvaged	26
Sunken or Grounded-Salvaged	20
Spill	11
Submerged Debris	9

## Near Miss

At the time of sanctuary designation there was an ongoing and active policy debate regarding marine safety in Washington's waterways. One of the most persistently proposed marine safety initiatives involved the positioning of a "rescue tug" at Neah Bay. This concept persisted through the years and included efforts by Washington State, an industry led voluntary tug of opportunity system, federal funding for a trial period, finally resulting in an industry funded system, which continues today. Under the current system an Emergency Response Towing Vessel (ERTV) is positioned at Neah Bay to ensure the availability of stand-by towing capacity for the Olympic Coast (Ecology 2016). As a result of this policy initiative much interest was paid to incidents involving primarily large commercial vessels that became disabled off the outer coast of Washington and the Strait of Juan de Fuca. As a result the sanctuary, and more consistently the Washington Office of Marine Safety<sup>5</sup>, documented near miss incidents including cases where the ERTV was deployed. From *Ecology's website*:

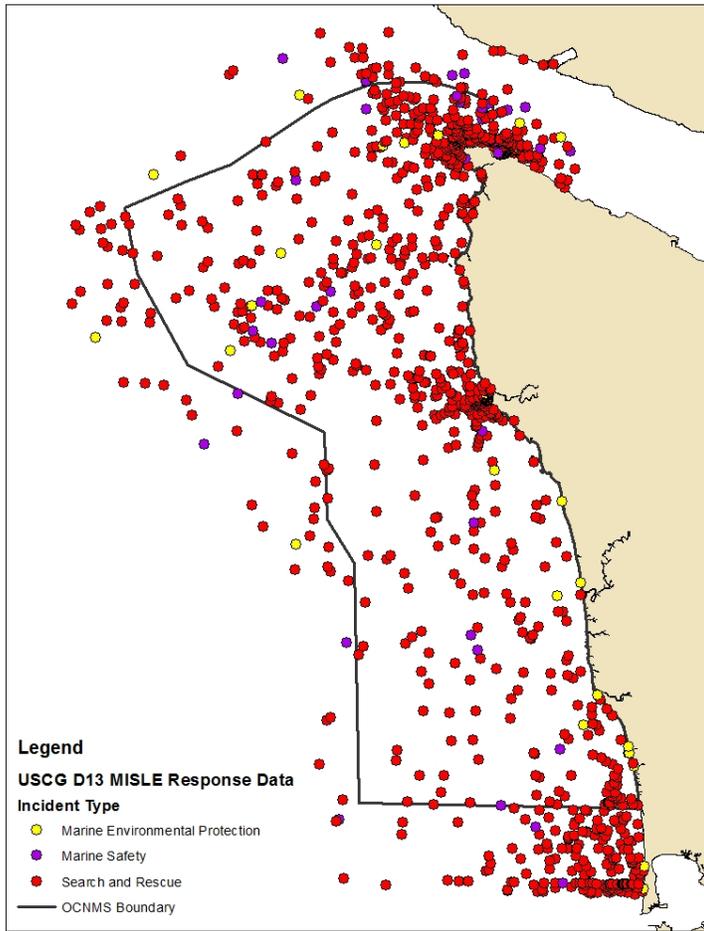
*Since 1999, the tug has deployed to stand by or directly assist 54 vessels that were either completely disabled or had reduced maneuvering ability. Vessels that have required assistance include deep draft cargo vessels, large fishing and fish processing vessels, fully laden oil and chemical tank ships, and tugs with tank barges in tow. On 14 of these responses the tug had to take the disabled vessels in tow to prevent them from drifting onto the rocks and spilling oil. The actions taken in those 14 cases helped prevent a combined spill potential of over 3 million gallons of oil. (Ecology 2016)*

There is considerable overlap between the 34 near miss incidents documented in the OCNMS database and those documented on Ecology's ERTV web page. A systematic update of the near miss vessel incident database entries was not done as part of this analysis.

Additional cases that could be considered near misses can also be illustrated by a review of the USCG MISLE data download on marine safety, search and rescue, and environmental response cases. The USCG District 13 provided OCNMS with response case data covering 2002 to 2016. This data file included 24,456 records with 78 fields. OCNMS cleaned the data using data processing routines similar to what was used with the MISLE pollution incident data. Data were limited to the study area, with an Incident Type of marine environmental pollution, marine safety, or search and rescue. The original 24,456 records were reduced to 1,244, represented in Figure 7. Additional editing and summaries of information could be accomplished through further editing of the Incident Subtype field. This information may have utility in characterizing near misses of smaller vessels in the sanctuary.

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<sup>5</sup> The Washington Office of Marine Safety merged with the Washington Department of Ecology in 1997.



**Figure 7: USCG MISLE Response data**

## Sunken or Grounded Vessels

Spills of petroleum and hazardous materials in marine waters are violations of the law both within and outside of the sanctuary. The situation is not the same for vessels that are lost, either through sinking or grounding. In these cases, once the pollution risk has been mitigated, the USCG regulations do not require the removal or salvage of the vessel. In OCNMS there are two sanctuary regulations that could apply to grounded vessels:

*15 CFR § 922.152 Prohibited or otherwise regulated activities.*

*(a) Except as specified in paragraphs (b) through (g) of this section, the following activities are prohibited and thus are unlawful for any person to conduct or to cause to be conducted: ...*

*(2)(i) Discharging or depositing, from within or into the Sanctuary, other than from a cruise ship, any material or other matter except...*

*(5) Drilling into, dredging or otherwise altering the submerged lands of the Sanctuary; or constructing, placing or abandoning any structure, material or other matter on the submerged lands of the Sanctuary...*

While these regulations are not limited to lost vessels, they clearly prohibit the abandonment of vessels within sanctuary waters. For this reason, this part of the database has received the most attention over the years. OCNMS believes the data captures the majority of related incidents in recent years; however, it is likely that in the years immediately following sanctuary designation in 1994 (Figure 8) some vessel incidents may not have been documented. Efforts have been made to update the earlier period by reviewing alternative sources of information. These efforts have had limited success.

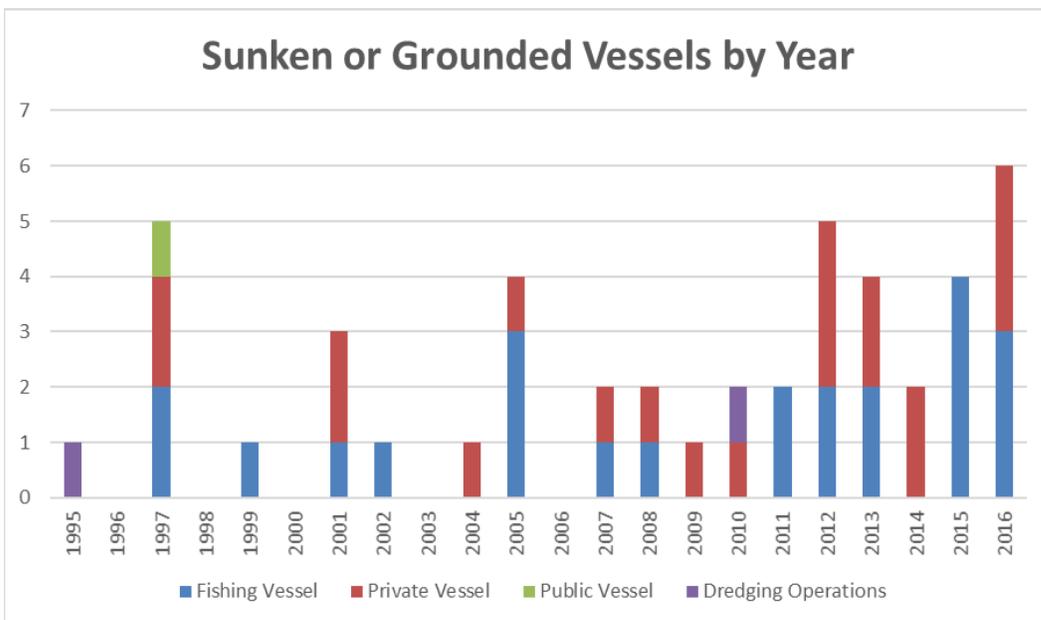


Figure 8: Number of documented lost vessels in study area by vessel type and by year.

The database has 46 records in the study area that represent vessel incidents that resulted in a vessel being lost. This includes vessels that sank, grounded or capsized regardless of if they were salvaged. Of the 46 incidents, 20 were salvaged.

### Spill

As previously mentioned spills of petroleum and hazardous materials in marine waters are violations of the law both within the sanctuary and outside of the sanctuary. When there is a spill in the sanctuary it might be pursued through a number of different state or federal statutes.

*15 CFR § 922.152 Prohibited or otherwise regulated activities.*

*(a) Except as specified in paragraphs (b) through (g) of this section, the following activities are prohibited and thus are unlawful for any person to conduct or to cause to be conducted: ...*

*(2)(i) Discharging or depositing, from within or into the Sanctuary, other than from a cruise ship, any material or other matter except...*

*(ii) Discharging or depositing, from beyond the boundary of the Sanctuary, any material or other matter, except those listed in paragraphs (a)(2)(i)(A) through (E) of this section, that subsequently enters the Sanctuary and injures a Sanctuary resource or quality.*

*(3) Discharging or depositing, from within or into the Sanctuary, any materials or other matter from a cruise ship except clean vessel engine cooling water, clean vessel generator cooling water, clean bilge water, engine exhaust, or anchor wash....*

The incident database includes 11 entries for spills that are not also listed as a lost vessel. In most cases, an incident where a vessel sinks, capsizes, or grounds will also result in a spill. Of these 11 incidents, 6 are from unknown sources. These are sometimes referred to as mystery or orphan spills. Anecdotally, it has been asserted in the past that these spills were the results of vessels illegally discharging oily ballast waters on the way into port as a cost saving measure. OCNMS believes that this has become less common, but it does still occur as evidenced by the recent guilty verdict in U.S. District Court in Seattle related to dumping of oily waste at sea (USCG 2016). While the 735-foot bulk carrier *Gallia Graeca* did transit the sanctuary on one of the days that a violation was documented, it is not included in the database due to the uncertainty of the discharge location.

### **Submerged Debris**

The 9 records identified as submerged marine debris currently fall into three general categories; vessels that were intentionally scuttled through the EPA ocean disposal general permit, military munitions possibly disposed during aircraft training operations, and cargo or other debris lost from vessels.

## **Lost Vessel Analysis**

Since the sanctuary was designated in July of 1994, staff has documented 46 vessel incidents within or near the sanctuary that resulted in vessels sinking, capsizing, or grounding (Figure 9). These incidents involved 23 fishing vessels, 20 private vessels, a USCG Motor Life Boat, and two incidents related to dredging operations on the Quillayute River.



## Incident Type

The Vessel Incident database includes a data field for type of incident (see Appendix A). Out of the eight potential incident types, the 46 incidents covered four types:

- Collision- Vessels striking each other
- Fire/Explosion- Uncontrolled ignition of gas or liquid
- Flooding - Water intrusion into areas on a vessel not intended to hold water; for the purpose of this study, this includes capsized vessels
- Grounding- Vessel striking the waterway bottom with enough force to damage the vessel

Figure 11 shows three graphs for type of incident for all vessels, for fishing vessels and for private vessels. Flooding and grounding account for 87% of all incidents. The higher degree of flooding and capsizing events for private vessels (55% v. 44% for fishing vessels), could be related to the smaller general size of some of the recreational vessels included in the analysis.

## Incident Cause

The Vessel Incident database includes a data field for incident cause (see Appendix A). Out of the six potential incident types, the 46 incidents covered four causes. Incident cause types can include both an immediate cause and contributing factors. OCNMS currently only includes one cause, which could be considered the immediate cause. The database includes a large number of incidents for which the cause is listed as unknown, limiting the value of evaluating this field. The four incident cause types are:

The Vessel Incident database includes a data field for incident cause. This field uses a pull-down menu restricting the options to facilitate analysis. Six potential incident types were selected from the Pacific States/British Columbia Oil Spill Task Force Data Dictionary (Revised 2014). The dictionary defines cause types as including both Immediate Cause and Contributing Factors. OCNMS currently includes only the immediate cause. Out of the six potential incident types, the 46 incidents covered four types. The two causes originally included as options, but not used, are Organizational/Management Failure and Other. A description of Organizational/Management Failure is included in Appendix A. The database includes a large number of incidents for which the cause is listed as unknown, limiting the value of evaluating this field. The four incident cause types are:

- Equipment Failure- A mechanical, structural, or electrical failure NOT attributable to a human- error related installation, operation, or maintenance deficiency. An example which would not be classified as “equipment failure” would be failure from normal wear and tear as a result of lack of maintenance
- External Conditions- Natural phenomenon, which occur with a magnitude outside of reasonably anticipated design or operating limits

- Human Error-The inability of an individual to safely complete a task, over which the organization has only indirect control
- Unknown

Figure 12 shows three graphs for the cause of the incident for all vessels, for fishing vessels, and for private vessels. In most cases, the information available to OCNMS did not allow the sanctuary to assign a cause. Further research interviews with responsible parties or subject matter experts could reduce the number of unknown causes. In addition, some of the recent cases are still under investigation, and a future analysis would benefit from the completion of these ongoing investigations. For fishing vessels human error was identified as the number one cause (48%). This may be due to the 4 cases where crew fatigue, e.g., falling asleep, was identified as a cause. There were also an additional 7 cases of fishing vessels groundings where fatigue may have also been a factor.

For private vessels, the number one cause of incidents was external conditions (30%). This may be due to the several documented cases where smaller recreational vessels capsized. Further analysis could evaluate if some of these cases should be characterized as human error, e.g., did the operator put their vessel at risk by not taking into account forecasted conditions and exceeded the capability of their vessel.

### **Age Lost**

The Vessel Incident database includes a data field for age lost, or the age of the vessel in the year it was lost. It is calculated from the year the vessel was lost minus the year the vessel was built. To aid in the analysis, the actual ages lost were separated into 6 categories, or placed into an unknown category:

- 0-10 Years
- 11-20 Years
- 21-30 Years
- 31-40 Years
- 41-50 Years
- >50 Years
- Unknown

Figure 13 shows three graphs for the age of all lost vessels, for fishing vessels and for private vessels. The database had the year built information for 21 of 23 of the fishing vessels, but only 10 of 20 of the private vessels. The average age for fishing vessels at the time they were lost was 38 years. The average age for private vessels at the time they were lost was 30 years.

### **Length of Vessel**

The Vessel Incident database includes a data field for “LOA”, or the length overall of the vessel. LOA is standard nautical term which is defined as the maximum length of a

vessel's hull measured parallel to the waterline. To aid in the analysis LOA was separated into 4 categories:

- $\leq 30$  feet
- 30-39 feet
- 50-64 feet
- $\geq 65$  feet
- Unknown

The database includes information on LOA for all 46 vessels in the lost vessel dataset. Figure 14 shows three graphs for LOA of all lost vessels, for fishing vessels, and for private vessels. The average length for fishing vessels is 53.8 feet and the average length for a private vessel is 37.6 feet.

### **Hull Type**

The Vessel Incident database includes a data field for the type of material the hull is made of. There are 6 possible options:

- Aluminum
- Concrete
- Fiberglass
- Steel
- Wood
- Unknown

Figure 15 shows three graphs for hull type of all lost vessels, for fishing vessels, and for private vessels. Both fishing vessels and private vessels show a similar percentage for wood hulls; in both cases this is the second most common material. Fishing vessels and Private vessels show a major difference in their most common hull type with 61% of fishing vessels having steel hulls and 45% of private vessels having fiberglass hulls.

### **Time of Year**

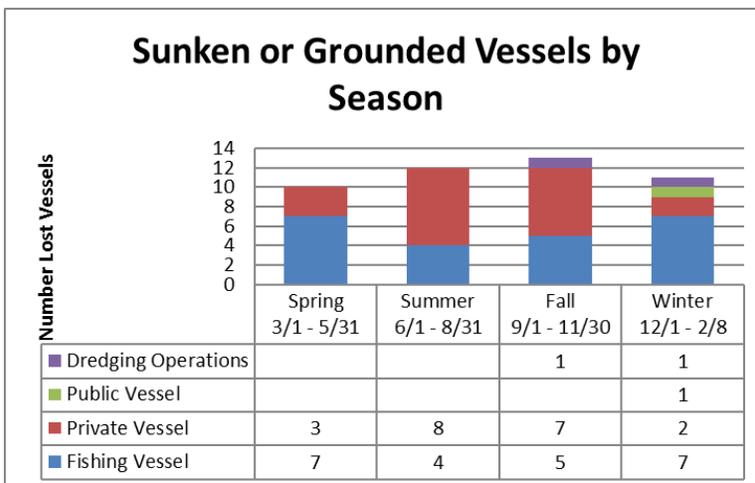
In reviewing the causes of vessel losses in the sanctuary, additional analysis on sea conditions and the role they played in the incidents was considered. Unfortunately, the database does not capture wind and sea conditions in a consistent manner, making analysis challenging. Anecdotal accounts of sea conditions are captured in the Incident Data Sheets (Appendix B), and in cases where sea conditions were the cause of the vessel being lost, the cause was recorded as external conditions.

Table 2 provides a climatological summary of conditions in the general area of the sanctuary. The occurrence percentage of winds in excess of 33 knots and wave height in excess of 9 feet are useful in showing the seasonality of sea conditions in OCNMS. Figure 10 shows the lost vessels by season.

**Table 2: Meteorological Table for the Washington Coast, from U.S. Coast Pilot 7, Appendix B (NOAA 2016).**

METEOROLOGICAL TABLE – COASTAL AREA OFF SEATTLE, WA													
Between 48°N to 50°N and 122°W to 129°W													
WEATHER ELEMENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEARS OF RECORD
Wind > 33 knots <sup>1</sup>	3.6	2.8	2.3	1.2	0.8	0.6	0.3	0.3	0.5	1.7	3.1	3.4	1.6
Wave Height > 9 feet <sup>1</sup>	17.4	18.0	16.8	15.0	6.7	6.1	1.9	2.1	4.7	16.0	24.0	30.5	12.3
Visibility < 2 nautical miles <sup>1</sup>	11.4	10.4	8.1	7.1	6.6	6.7	9.2	14.0	12.0	13.2	11.7	12.1	10.3
Precipitation <sup>1</sup>	24.4	24.4	19.6	16.7	13.5	10.8	7.5	5.8	9.2	16.6	24.0	24.9	15.6
Temperature > 69° F	0.0	0.0	0.0	0.1	0.5	1.6	3.0	2.8	1.2	0.3	0.0	0.0	0.9
Mean Temperature (°F)	44.0	45.3	46.1	48.7	52.8	56.3	58.8	59.3	58.2	53.7	48.3	45.5	52.1
Temperature < 33° F <sup>1</sup>	3.3	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.9	0.4
Mean RH (%)	84	84	82	82	82	82	84	85	84	84	83	84	83
Overcast or Obscured <sup>1</sup>	46.3	43.3	34.5	32.8	32.7	33.1	32.6	32.9	30.6	36.5	38.4	41.3	35.8
Mean Cloud Cover (8 <sup>th</sup> )	6.2	6.0	5.5	5.5	5.4	5.5	5.1	5.0	4.7	5.4	5.9	6.0	5.5
Mean SLP (mbs)	1014	1015	1014	1016	1017	1017	1018	1017	1017	1016	1014	1014	1016
Ext. Max. SLP (mbs)	1041	1057	1041	1060	1044	1042	1048	1040	1050	1041	1043	1048	1060
Ext. Min. SLP (mbs)	951	974	967	977	987	988	993	990	973	967	966	964	951
Prevailing Wind Direction	SE	SE	SE	NW	NW	NW	NW	NW	NW	SE	SE	SE	NW
Thunder and Lightning <sup>1</sup>	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.2

<sup>1</sup> Percentage Frequency  
 These data are based upon observations made by ships in transit. These ships tend to avoid bad weather when possible thus biasing the data toward good weather samples.



**Figure 10: Lost vessels, by season.**

### Salvage and Charting

The final analysis is a summary of what happened to the vessels. Questions answered include: How many vessels were partially or completely salvaged? Of those that were not salvaged, how many were surveyed and located on the sea floor? Finally, of the vessels that remain in the sanctuary and were located, how many have been located on the official NOAA navigational charts? While most sunken vessels are in depths that would preclude them from being navigational hazards, they do represent a risk for entanglement from fishing gear. For this reason, when the sanctuary surveys the location of a ship wreck, they request the Office of Coast Survey to place them on the official NOAA chart.

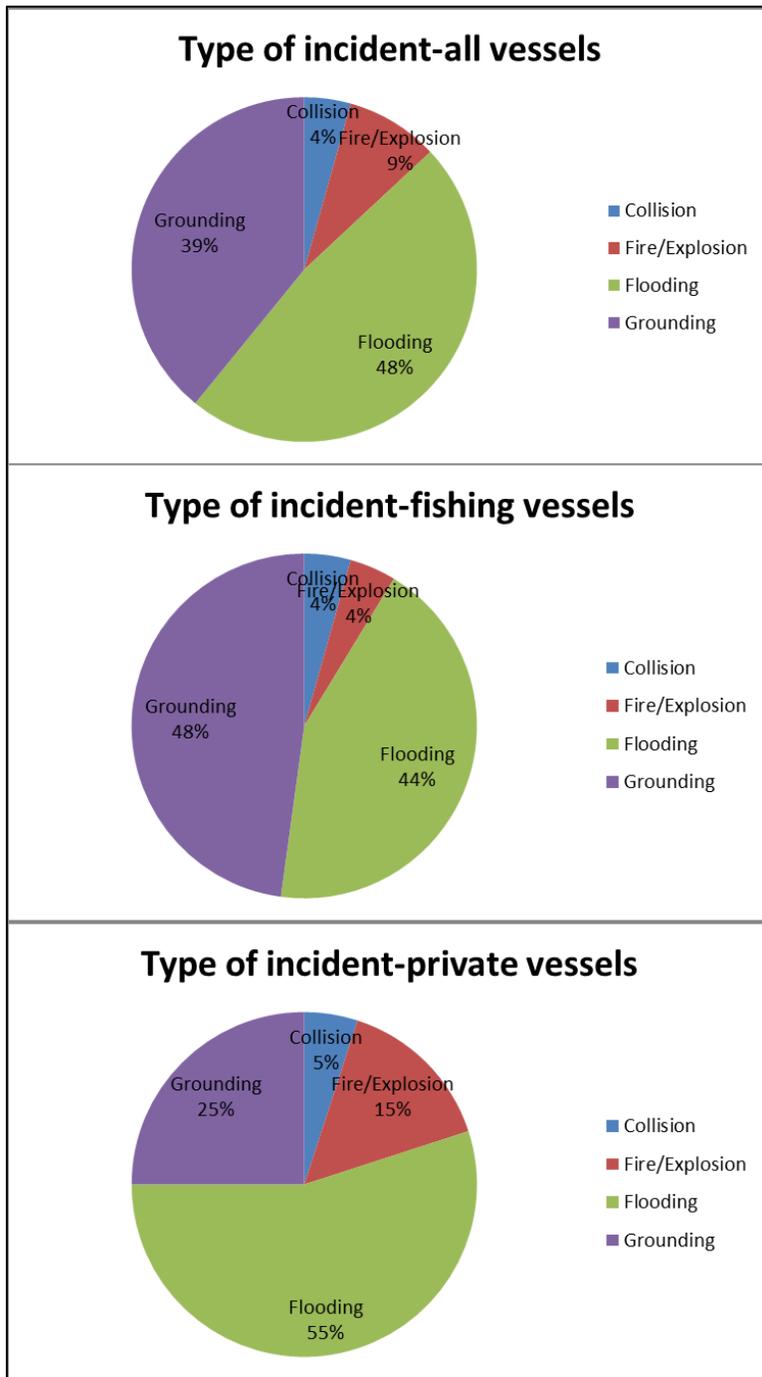


Figure 11: Type of incident: for all lost vessels, for lost fishing vessels, and lost private vessels

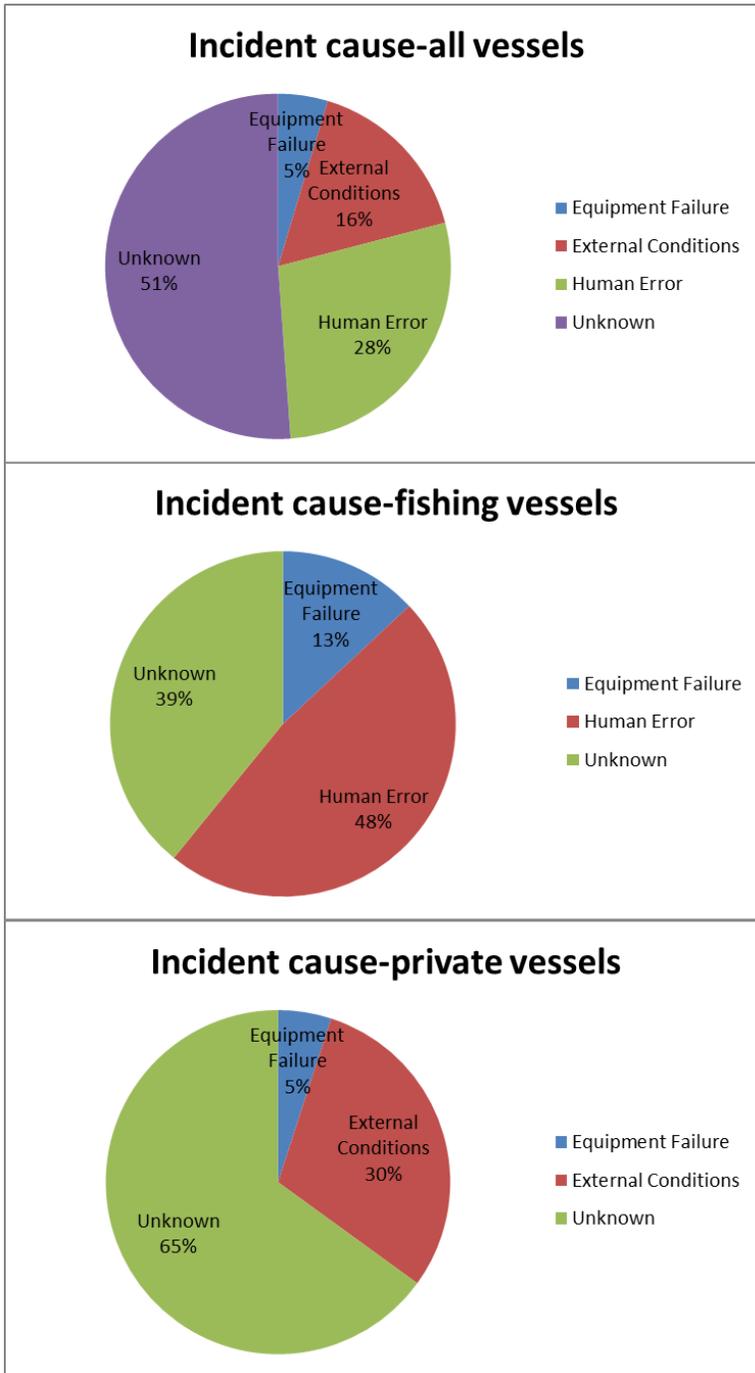


Figure 12: Incident Cause for all lost vessels, lost fishing vessels, and lost private vessels.

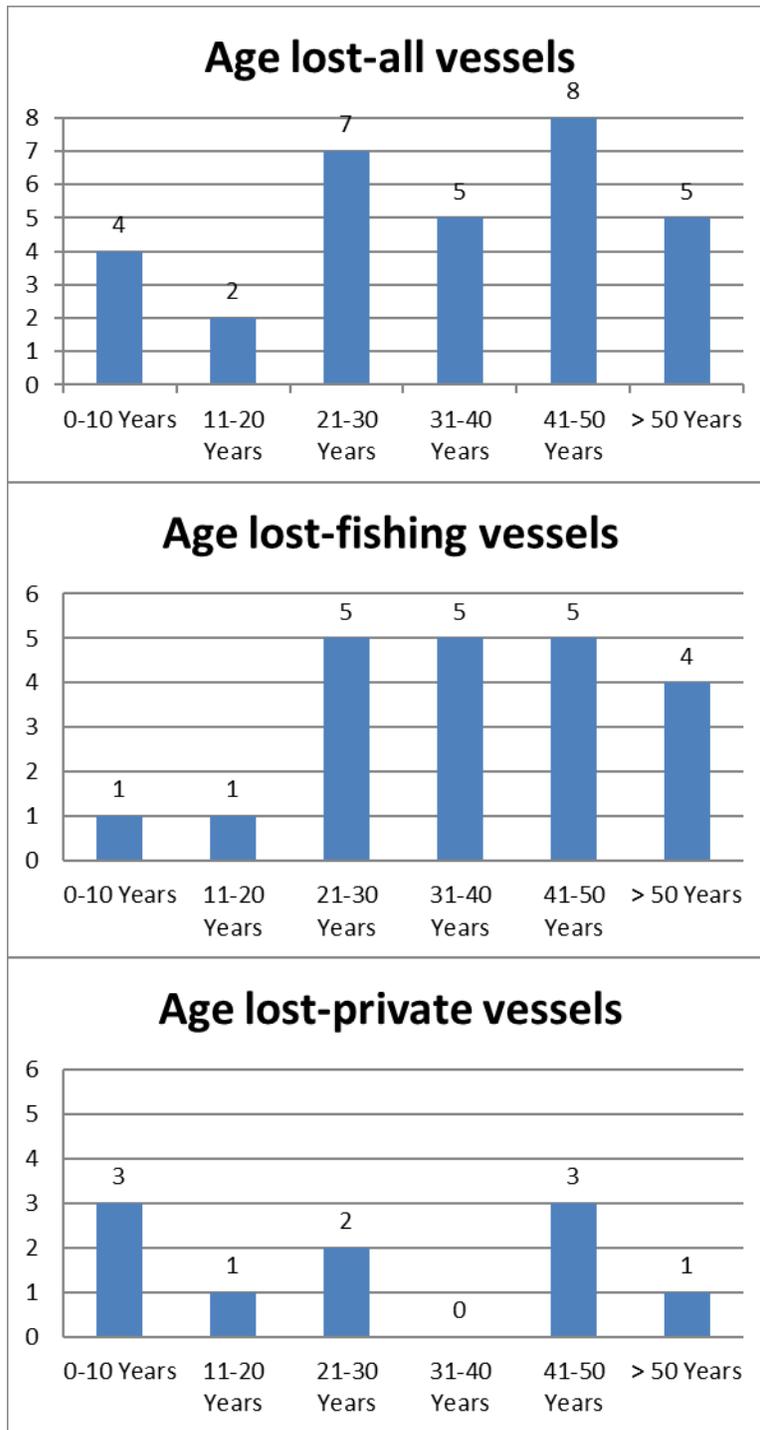


Figure 13: Age of vessel when lost for all lost vessels, lost fishing vessels, and lost private vessels. Graphs do not include the 15 vessels for which the vessel build date was unknown.

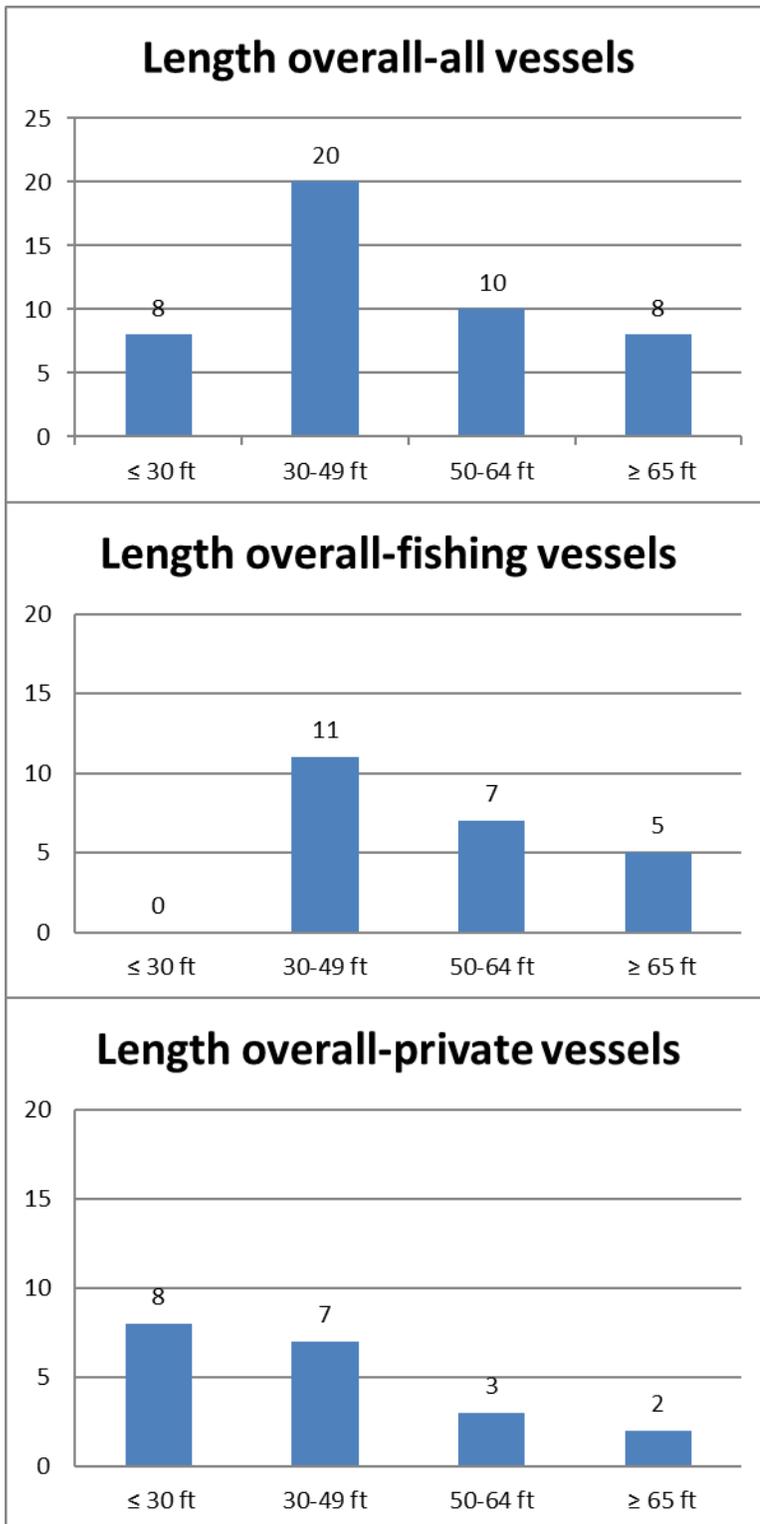


Figure 14: Length overall (LOA) for all lost vessels, lost fishing vessels, and lost private vessels.

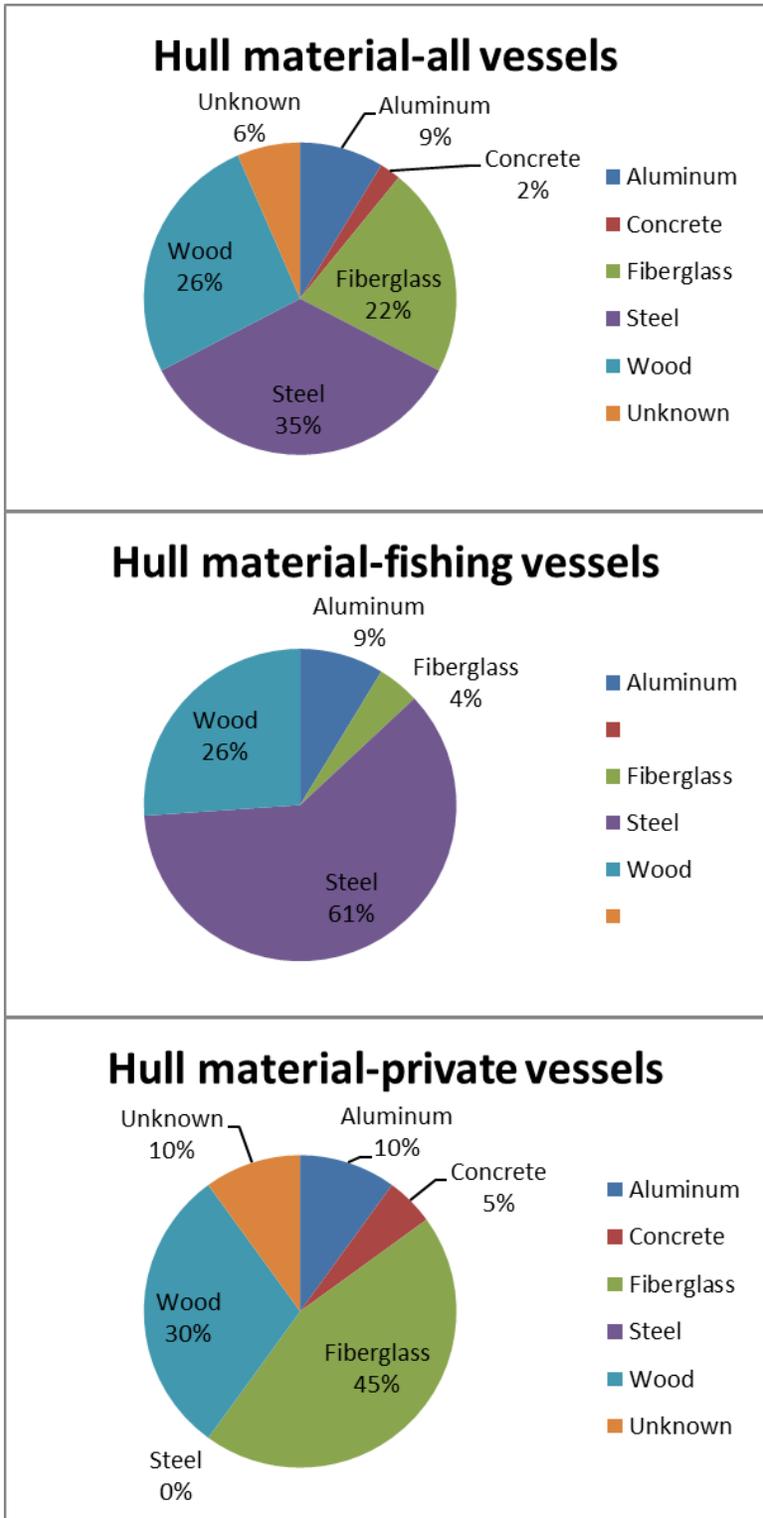


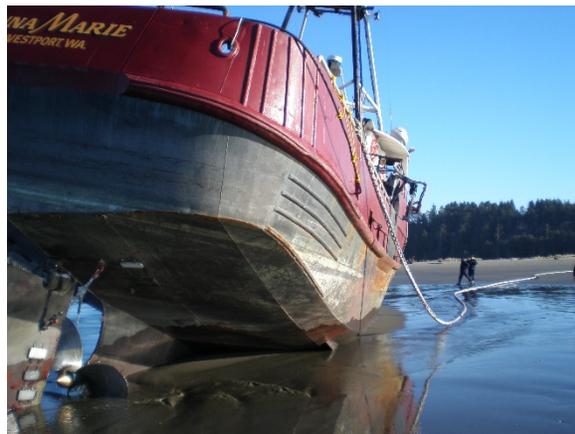
Figure 15: Hull material for all lost vessels, lost fishing vessels, and lost private vessels.

## Salvage

Of the 46 vessels that were lost in the sanctuary 20 were salvaged (43%). A review of the circumstances of these 20 vessels shows 4 general categories of salvage situations. The first two represent vessels that have grounded, either with the hull intact or with the hull compromised. The second two involve vessel casualties in open water, either with the vessel compromised but still afloat or with the vessel sitting on the sea floor. These categories are listed in order of decreasing numbers, indicative of the potential for a successful salvage, with the best case being an intact vessel that has grounded and the worst situation being a sunken vessel. Experience has shown very limited success with salvaging sunken vessels. In addition to these successful salvages one unsuccessful salvage attempt is also discussed.

**Intact Grounded Vessels** – A review of the database shows 10 instances where vessels grounded with their hull intact and were either able to return to port without assistance or were successfully towed off the beach. Six cases involved commercial fishing vessels that grounded mostly intact. While in some cases these vessels incurred damage, they remained essentially seaworthy. Three cases involved small recreational vessels (17 ft – 21 ft) that capsized and washed ashore with intact hulls. One case involved two barges, the Skookum and Barge 11, which were washed out of the Quillayute River and grounded on First Beach. Successful salvage in these cases was dependent upon vessels being able to self-rescue or receive timely assistance before the vessel’s hull became compromised. For more details, see the vessel incident data sheets in Appendix B for the following vessels:

Quigg Barges  
17 ft Boston Whaler  
19 ft Trophy  
21 ft *Tale Runner II*  
F/V *Tarka II*  
F/V *Western Nomad*  
F/V *Anna Marie*  
F/V *Jayden Ray*  
F/V *Trinity*  
F/V *Qualay Squallum*



**Figure 16: The 2008 salvage of the F/V *Anna Marie* required coordination between a helicopter and multiple salvage vessels.**

**Compromised Grounded Vessels** – There were 6 instances in the database in which vessels grounded and were no longer seaworthy, but were successfully salvaged. In most cases (5 of the 6), these salvage operations required the use of helicopters along remote coastlines. In the remaining instance the wreck location was in an area accessible by heavy equipment and trucks. For more details, see the vessel incident data sheets in Appendix B for the following vessels:

USCG Motor Lifeboat 44363  
*S/V Gale Runner*  
*Off Season*  
*F/V Tamara*  
Ocean Pro 220  
*S/V Soteria*



**Figure 17:** The 2016 salvage of an Ocean Pro 220 recreational vessel from the sanctuary and Olympic National Park wilderness, was accomplished by helicopter.

**Flooded yet Floating Vessels** – There were three recorded instances where vessels were flooded, but still afloat. This can occur when a vessel has residual buoyancy either through intact air compartments or when vessel construction includes buoyant materials. In cases such as these it may be possible, with a timely response, for the vessel to be towed into port before it sinks. There are additional examples where a vessel remained afloat for an extended period, but subsequently sunk before action was taken to save the vessel. For more details see the vessel incident data sheets in Appendix B for the following vessels:

*F/V Mariah Mae*  
*Sea Hawk*  
*Scout*



**Figure 18:** In the 2001 grounding of the *F/V Mariah Mae* the vessel was stabilized and towed to port before sinking.

### Sunken Vessels

There is only one example of a vessel that sank in the study area and was successfully salvaged. While conducting dredging operations at the entrance of the Quillayute River the Dredge *Nehalem* began to flood and eventually came to rest on the bottom in approximately ten feet of water. The vessel was eventually raised and returned to service. This salvage benefited from the shallow depth and protected nature of the location. There is an additional attempt to salvage a sunken vessel in the sanctuary that is worth mentioning. For more details see the Dredge *Nehalem* data sheet in Appendix B.



Figure 19: In 2010 the Dredge *Nehalem* sank just outside the sanctuary in the Quillayute River.

### Unsuccessful Salvage of the F/V *Milky Way*

On September 14, 2005, the F/V *Milky Way* capsized and sank 5.7 miles off the mouth of the Quillayute River in 195 ft of water. The vessel was involved in purse seining at the time. The catch in the net caused the vessel to capsize. USCG and OCNMS staff responded with sanctuary staff supporting overflights and conducting a side scan survey of the site. The USCG stood up a Unified Command and determined that the vessel should be salvaged as a way to deal with the pollution risk. Working with the responsible party two attempts were made to salvage the vessel. Because of the nature of the incident, the vessel hull was believed to be intact, improving the likelihood of a successful salvage. The salvage plan called for divers to secure straps under the hull and to lift the vessel using an ocean-rated derrick barge. When the vessel reached the surface, water would be pumped from its hull. The first attempt was aborted due to changing weather conditions in October 2005. The second attempt took place in August 2007. Challenges to the operation included weather, siltation of the vessel, and funding issues. The vessel was not recovered and the USCG closed the case on December 31, 2007. The vessel remains and has been charted as a shipwreck on the NOAA navigational charts.

### Charting

There were five surveys conducted to locate the 26 vessels that were not salvaged. Of these, two were located and charted (Figure 20). When possible the OCNMS attempts to locate vessels lost in the sanctuary to assess damages to sanctuary resources and to update the nautical charts. While these wrecks may not be a navigation hazard in the traditional sense, they do represent hazards to fishermen that fish on or near the seafloor.

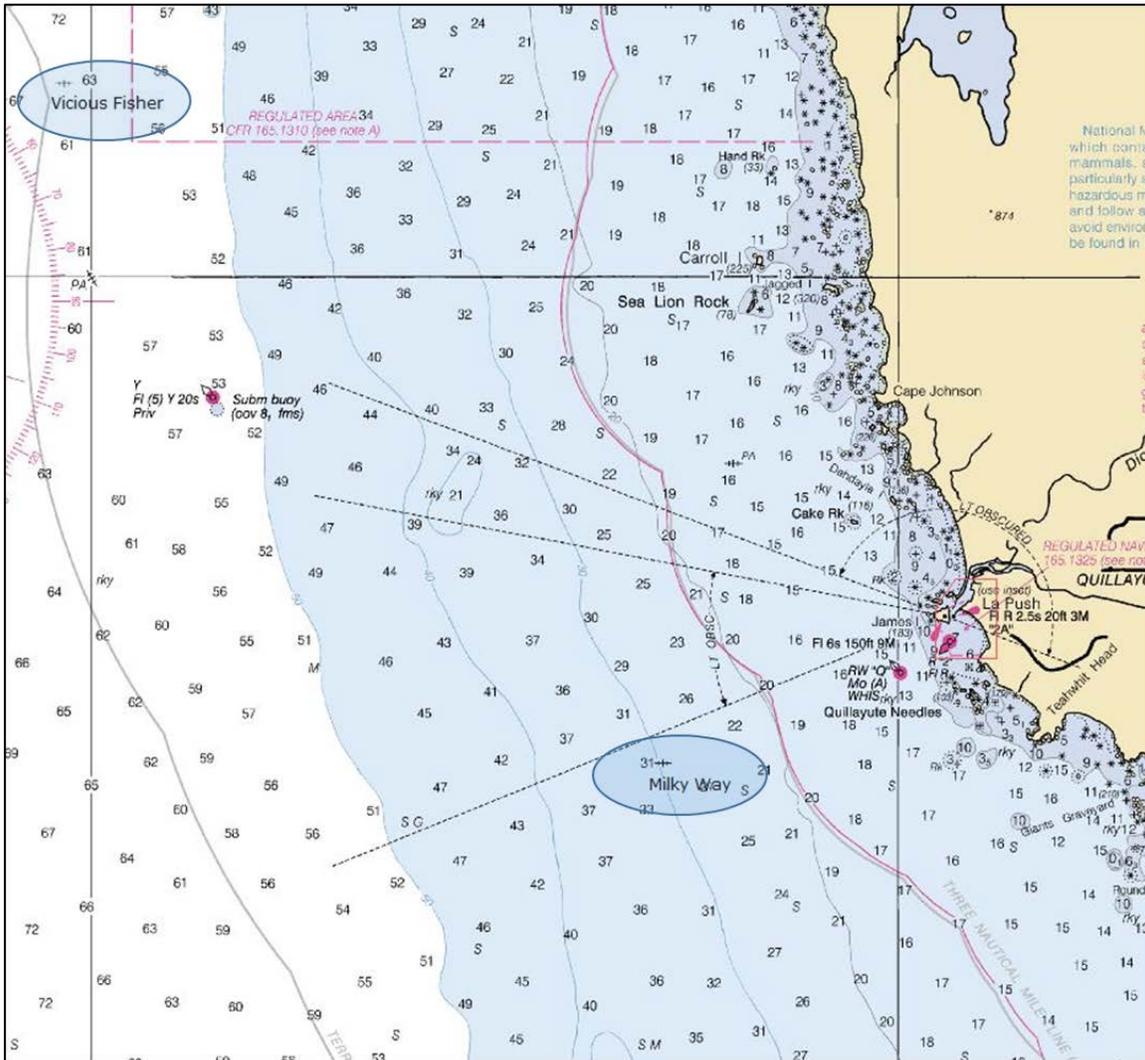


Figure 20: Excerpt of NOAA Chart 18500, showing the location of two fishing vessels surveyed by OCNMS and submitted for charting updates.

### Representative Vessel Characteristics

Using the summary information, the following are generalized examples of vessels lost in OCNMS.

Table 3: Representative Vessel Characteristics and Incident Causes, based on OCNMS records.

Characteristics & Causes	Fishing Vessel	Private Vessel
Incident Type (most common)	Flooding	Flooding
Incident Cause (most common)	Human Error	External Conditions
Age Lost (average)	38 years	30 years
Length (average)	53.8 feet	37.6 feet
Hull Type (most common)	Steel	Fiberglass

## Next Steps

The report will be shared with the OCNMS Advisory Council (AC) to seek advice on what, if any, further action should be taken. If further action is recommended, the AC may elect to form a working group and to consider options, such as:

- Further research to review additional incidents not included, and/or additional details on existing incidents
- Further review the dataset with subject matter experts, analyzing the incident causes
- Compare report findings to broader regional or national studies
- Characterize the Olympic Coast vessel population, which would allow the vessels lost in OCNMS to be compared to the overall population
- Consider policy options to mitigate against future incidents and provide recommendations to the Sanctuary Superintendent

## Acknowledgments

I would like to thank LT Vincent Nguyen, USCG for his assistance in accessing information from the MISLE (Maritime Information for Safety and Law Enforcement) database, and Washington Department of Ecology's Jack Barfield for assistance with Ecology's vessel and incident data. Nancy Wright, OCNMS Geographer, was a great help not only with the OCNMS database, but also as a source of encouragement. Finally, I would also like to thank the anonymous peer reviewers for commenting on a near-final draft of this report.

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## Appendix A: Database Notes

The primary purpose of the Incident Database is to document vessels that have violated sanctuary regulations by discharging, sinking or grounding in the sanctuary (this also includes spills from unknown sources). A secondary use is to document near-misses. Another use is to record bottom obstructions. In the future OCNMS may combine this data with other information such as historic wrecks, cables, and other debris such as dumped and abandoned material; providing a complete picture of what we know of man-made objects in the sanctuary. The following information provides some additional details on the database.

### *Vessel Incident Criteria*

#### Types of Incidents

- All vessels or aircraft that sink or ground in the sanctuary, regardless of whether they have been salvaged, or not
- All prohibited vessel discharges in OCNMS, e.g., material dumped or discharged from vessels or aircraft
- Discharges from outside the sanctuary if they enter the sanctuary
- Near-misses for large commercial vessels
- Significant submerged marine debris, e.g., lost cargo or material from military or commercial vessels

#### Location

- Inside or within 10 nautical miles from the sanctuary
- Exclude incidents in marinas or from outside OCNMS, unless the discharge enters the sanctuary
- For large vessel near-misses, include significant incidents within 50 nautical miles of the sanctuary. For instance, if they result in a tug being dispatched

#### Rules for documenting positions

- For near misses, like a ship losing power that did not result in a sanctuary violation, report the position where the condition was originally reported
- For incidents with multiple reported positions, use the final reported position, e.g., where the vessel was abandoned. If the vessel was salvaged use the location where the salvage occurred

### *Database Fields*

INCIDENT TYPE – This is self-explanatory; for this set of data it will be V for Vessel

INCIDENT NAME - The Incident Name should be a short simple name, often the name of the vessel, followed by a short description, e.g., collision or grounding.

INCIDENT DATE and CALL DATE - Incident Date and Call Date will be the same if the sanctuary is notified on the same day of the incident. In the case of near misses, the incident date will most likely be the day the incident is first reported, even if the resolution of the issue takes an extended period of time, e.g., a disabled vessel being towed to safety.

INCIDENT - When the Incident ID field is created, a sequential number in the database is used with the INCIDENT TYPE field to create the Incident field. The format is:

YYYYV#####

- YYYY – The year of the incident
- V – The incident type; in this case it will be a V for a Vessel Incident
- ##### - A five-digit number with leading zeroes and the Incident ID

LOCATION – This is a free form field with a short description of the general location.

LATITUDE (dd) and LONGITUDE (dd) – These are reported in decimal degrees. West longitude is reported as a negative number.

LOCATION RELIABILITY – The following explanations for location reliability are based on BOEM protocols. If the vessel has been salvaged, location reliability will remain blank, as it will not be plotted on the MHR data layer.

1 = Confirmed through physical verification and has been accurately positioned (e.g., with GPS or on an accurate modern map), or is identified on the basis of accurately positioned remote-sensing survey. The location is considered to be reliable enough that a wreck would be easy to relocate using standard DGPS equipment.

2 = A specific location is provided by an informant, reported in the literature or on a map. The location reliability is considered to be moderate to good. It is anticipated that these sites could be discovered, but discovery would require a moderate amount of field survey with remote sensing equipment and/or additional historical research.

3 = A general location is provided by an informant or in the literature. Also included in this category are general positions provided in relation to a known landmark (e.g., 10 miles south of Ship Island.) The location reliability is considered to be fair to poor. Discovery of sites included in this category could be very difficult and would require a considerable amount of research and/or remote sensing survey.

4 = Unreliable or vague locational information is provided. Examples would include many early accounts of vessel losses such as reports of vessels lost in hurricanes "near latitude such and such" or other general indications of loss (e.g., 30 miles off Cape

Flattery). Directed searches for these vessels are nearly impossible and their discovery will mainly be by chance.

NMFS, NRC and USCG MISLE, ERTS Case No. – These are references to other data sources, often blank.

DOCUMENT – This field allows the attachment of files to the database. These can include pdf files of email, assessment reports, digital photos, etc. These files should also be stored in a file on the OCNMS shared drive and the location should be indicated in the “Additional Files Location” field.

The tabs below the General Incident Information fields are data from the Vessel Incident and the Contact tables.

TYPE OF INCIDENT – This field uses a pull-down menu restricting the options to facilitate analysis. The following options were selected from the Pacific States/British Columbia Oil Spill Task Force Data Dictionary (Revised 2014). While the definitions in this data dictionary are meant to apply specifically to spills OCNMS uses it more broadly. As future analysis is conducted this may need to be reevaluated.

- Allision – Vessel striking a fixed or semi-fixed object such as a pier, bridge, an anchored vessel, or buoy
- Collision- Vessels striking each other
- Fire/Explosion- Uncontrolled ignition of gas or liquid
- Fitness for Service- Unable to safely perform its function without repairs
- Flooding - Water intrusion into areas on a vessel not intended to hold water, for the purpose of this study this includes capsized vessels
- Grounding- Vessel striking the waterway bottom with enough force to damage the vessel
- Other
- Spill (without precursor event)-Release of oil without being caused by a secondary incident; normally due to Human Error or Organizational/ Management Failure

Incidents that result in a lost vessel can generally be described as a series of events that lead to that loss, (e.g., a hull failure, followed by flooding, then sinking). For the purpose of this study, where there are multiple events that can be described by more than one incident type, the first event should generally be used to describe the type of incident. One exception to this general rule involves flooding. All vessels that sink are flooded at some point; the causes for this are often not reported and may not be known. Common causes of hull failures include the failure of through-hull fittings and in the case of wooden vessels, the working loss of seams. While in these cases it could be argued that the incident type is “fitness for service”, “flooding” would be selected as the best description.

**INCIDENT CAUSE** – This field uses a pull-down menu restricting the options to facilitate analysis. The following options were selected from the Pacific States/British Columbia Oil Spill Task Force Data Dictionary (Revised 2014). The document defines cause types as including both Immediate Cause and Contributing Factors. The OCNMS currently only includes one cause, which could be considered the Immediate Cause.

- **Equipment Failure**- A mechanical, structural, or electrical failure NOT attributable to a human-error related installation, operation, or maintenance deficiency. An example which would not be classified as “equipment failure” would be failure from normal wear and tear as a result of lack of maintenance
- **External Conditions**- Natural phenomenon, which occur with a magnitude outside of reasonably anticipated design or operating limits
- **Human Error**-The inability of an individual to safely complete a task, over which the organization has only indirect control
- **Organizational/Management Failure**- The failure of an organization to provide the necessary policies, procedures, equipment, personnel, supervision, training, or time to safely design, operate, and maintain a system which could potentially cause a spill
- **Other**
- **Unknown**

**SURVEYED** – This field is used for sunken vessels when an acoustic survey is conducted to locate the wreck on the sea floor. It does not apply to grounded vessels.

**LOCATED** – This field applies to sunken vessels that have been located by remote acoustic survey or by ROV.

**CHARTED** – This field is marked yes if the sunken vessel has been added to the official NOAA charts.

## Appendix B: Vessel Data Sheets

### Incident

Quigg Barge-salvage



2010 picture of similiar operation

### Location

First Beach off La Push



### Incident Notes

On November 8, 1995 two Quigg Brothers' barges, the Skookum and Barge 11 were washed downstream and grounded on First Beach. They had been working on harbor maintenance activities at the mouth of the Quillayute River. The two barges were removed from First Beach on November 20, 1995. However, a crane was washed off the Skookum, and currently rests on the seabed within the sanctuary.

<b>Vessel</b>	Skookum, Barge 11	<b>Length</b>	135	<b>Vessel Type</b>	Other
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	Skookum-barge, Barge 11-scow
<b>Hull Type</b>	Unknown	<b>Age Lost</b>	unknown	<b>Incident Date</b>	11/8/1995
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	External Conditions	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

USCG MLB 44363-salvage

### Location

James Island



### Incident Notes

The USCG Motor Life Boat (MLB) 44363 stationed at Station Quillayute River, while responding to a mayday from the S/V Gale Runner, capsized and grounded in a cove on James Island in severe weather on the night of February 11, 1997. Three crew were killed and one survived. The 2-person crew of the S/V Gale Runner was rescued by USCG helicopter. MLB 44363 was later cut up and removed by helicopter. The USCG investigation into the accident resulted in a number of safety improvements in the operation of USCG Motor Lifeboat Stations.

<b>Vessel</b>	USCG MLB 44363	<b>Length</b>	44 ft	<b>Vessel Type</b>	Public Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	USCG boat
<b>Hull Type</b>	Steel	<b>Age Lost</b>	unknown	<b>Incident Date</b>	2/11/1997
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	3	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

S/V Gale Runner-salvage



Picture not available

### Location

Olympic National Park, Second Beach



### Incident Notes

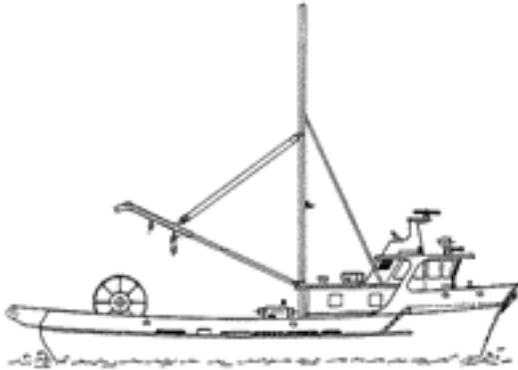
On the night of February 12, 1997, the 31-foot sailboat, the Gale Runner, became trapped during a violent storm in the waters off La Push. The master attempted to escape the storm by sailing to La Push, but was thwarted when 25-foot waves and 30-knot winds demasted the boat and blew out hatches and portholes. After the vessel became flooded and the engine failed and it began to drift dangerously toward nearby rock formations, the crew called the USCG for help. The two people aboard the Gale Runner were later rescued by a USCG helicopter moments before the boat struck the rocks. The Gale Runner was wrecked, and subsequently salvaged, from Second Beach in Olympic National Park.

<b>Vessel</b>	Gale Runner	<b>Length</b>	31 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	10 GT	<b>Year Built</b>	unknown	<b>Vessel Description</b>	Sloop
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	unknown	<b>Incident Date</b>	2/12/1997
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	External Conditions	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Viking-grounding



Picture not available

### Location

Tatoosh Island



### Incident Notes

On May 3, 1997, the F/V Viking grounded on Tatoosh Island and sustained severe damage to the hull. The owner/operator fell asleep while on watch. The F/V Viking was reported to have 1000 gallons of diesel and 40 gallons of lube oil on board. Vessel was scuttled outside OCNMS. The salvage plan called for a disposal site at 48 20N 125 44W, but the final position has not been verified.

<b>Vessel</b>	Viking	<b>Length</b>	49.2 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	37 GRT	<b>Year Built</b>	1991	<b>Vessel Description</b>	Steel hull fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	6	<b>Incident Date</b>	5/3/1997
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	501-5000 gallons'
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

# Appendix B: Vessel Data Sheets

## Incident

S/V Sylvia-sinking



Picture not available

## Location

17 nm SW of La Push



## Incident Notes

On October 17, 1997, the S/V Sylvia, a 54' Ketch, called a Mayday reporting taking on water, with the bilge pumps not keeping up. They sank 17 NM SW of La Push, and were rescued by USCG helicopter. The vessel was reported to have 2-55 gallon tanks of diesel on board and an unknown quantity of fuel in the service tank.

<b>Vessel</b>	Sylvia	<b>Length</b>	54 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	Wooden ketch
<b>Hull Type</b>	Wood	<b>Age Lost</b>	unknown	<b>Incident Date</b>	10/17/1997
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

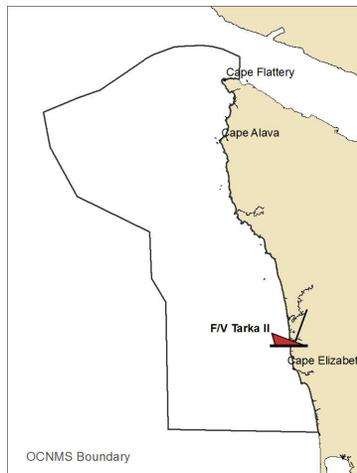
### Incident

F/V Tarka II-salvage



### Location

Quinalt Indian Tribal Land 2 nm south of Queets River



### Incident Notes

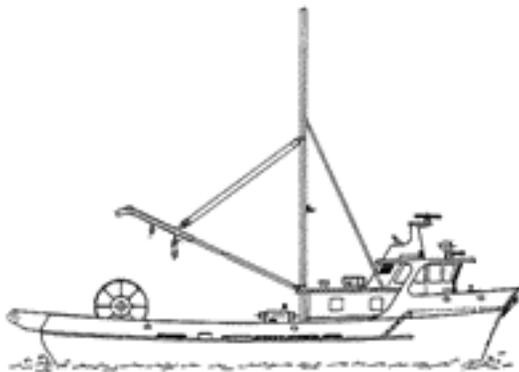
On December 2, 1997 the F/V Tarka II grounded approximately 2 nm south of Queets River, with 14,000 lbs of crab onboard. The insurance company contracted with a marine surveyor and commercial salvor to salvage the vessel. The vessel was towed off the beach at high tide.

<b>Vessel</b>	<input type="text" value="Tarka II"/>	<b>Length</b>	<input type="text" value="59.9 ft"/>	<b>Vessel Type</b>	<input type="text" value="Fishing Vessel"/>
<b>Tonnage</b>	<input type="text" value="68 GRT"/>	<b>Year Built</b>	<input type="text" value="1974"/>	<b>Vessel Description</b>	<input type="text" value="Fishing Vessel"/>
<b>Hull Type</b>	<input type="text" value="Steel"/>	<b>Age Lost</b>	<input type="text" value="23"/>	<b>Incident Date</b>	<input type="text" value="12/2/1997"/>
<b>Incident Type</b>	<input type="text" value="Grounding"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="Unknown"/>	<b>Fatalities</b>	<input type="text" value="0"/>	<b>Spill Category</b>	<input type="text" value="no spill"/>
<b>Surveyed</b>	<input type="text" value="No"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Chartered</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

### Incident

F/V Spectre-sinking



Picture not available

### Location

10 nm NW of Ocean Shores, outside OCNMS



### Incident Notes

On August 18, 1999 the F/V Spectre was reported on fire. The USCG let the vessel burn and watched it sink in approximately 26 fathoms of water at position 47 04.7' N 124 23.1'W. Only a small sheen was observed after the sinking. The belief is that most of the fuel had burned.

<b>Vessel</b>	<input type="text" value="Spectre"/>	<b>Length</b>	<input type="text" value="49 ft"/>	<b>Vessel Type</b>	<input type="text" value="Fishing Vessel"/>
<b>Tonnage</b>	<input type="text" value="66 GT"/>	<b>Year Built</b>	<input type="text" value="1984"/>	<b>Vessel Description</b>	<input type="text" value="Steel hull fishing vessel"/>
<b>Hull Type</b>	<input type="text" value="Steel"/>	<b>Age Lost</b>	<input type="text" value="15"/>	<b>Incident Date</b>	<input type="text" value="8/18/1999"/>
<b>Incident Type</b>	<input type="text" value="Fire/Explosion"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Not Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="Unknown"/>	<b>Fatalities</b>	<input type="text" value="0"/>	<b>Spill Category</b>	<input type="text" value="unknown"/>
<b>Surveyed</b>	<input type="text" value="No"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Charted</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

### Incident

F/V Mariah Mae-salvage

### Location

Tatoosh Island



### Incident Notes

The F/V Mariah Mae had a powered grounding on Tatoosh Island. The vessel's captain reported that he had given instructions to the watchstander and went below to sleep, we awoke when the vessel grounded. The vessel was salvaged with the assistance of the F/V Orbit using divers and dive bags. A light unrecoverable sheen was reported as floating away from Tatoosh Island.

<b>Vessel</b>	Mariah Mae	<b>Length</b>	33.3	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	1973	<b>Vessel Description</b>	Fishing vessel
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	28	<b>Incident Date</b>	7/29/2001
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	<25 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Boston Whaler-accident



Picture not available, similiar model

### Location

North end of James Island



### Incident Notes

On August 29th, 2001 a 17 ft Boston Whaler with four persons on board got underway from the La Push Marina in heavy fog. The following morning the USCG found the vessel overturned on the north side of Little James Island. All four passengers were lost, three of the bodies were subsequently recovered.

<b>Vessel</b>	Unknown	<b>Length</b>	17 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	17 ft Boston Whaler
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	unknown	<b>Incident Date</b>	8/29/2001
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	4	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

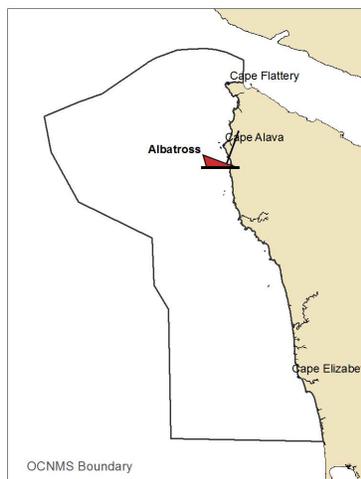
Albatross-grounding



Picture not available

### Location

Ozette Island



### Incident Notes

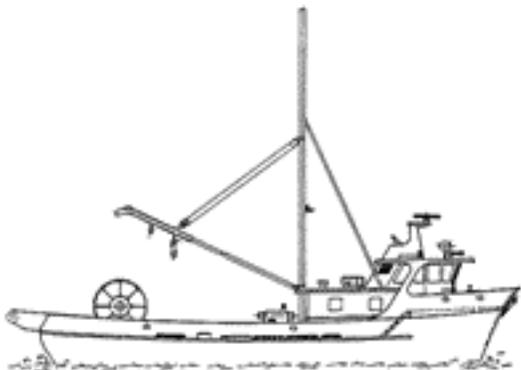
The vessel Albatross reported being disabled and adrift. The Albatross was unable to deploy its anchor and grounded on Ozette Island. The skipper abandoned ship and was rescued by CG helo.

<b>Vessel</b>	Albatross	<b>Length</b>	42 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	No information available
<b>Hull Type</b>	Unknown	<b>Age Lost</b>	unknown	<b>Incident Date</b>	9/21/2001
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Western Nomad-salvage



Picture not available

### Location

Grounded North end of Tatoosh Island



### Incident Notes

The F/V Western Nomad helmsman fell asleep and ran aground on Tatoosh Island. The crew prepared to abandon ship, but was able to refloat the vessel. After assessing the damage, the operator determined there was no hull breach and made way for Neah Bay.

<b>Vessel</b>	Western Nomad	<b>Length</b>	39 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	Aluminum hulled fishing vessel
<b>Hull Type</b>	Aluminum	<b>Age Lost</b>	unknown	<b>Incident Date</b>	4/11/2002
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	no spill
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Sea Hawk-salvage



Picture not available

### Location

Overturned in Canadian Waters, drifted into OCNMS, towed to Neah Bay



### Incident Notes

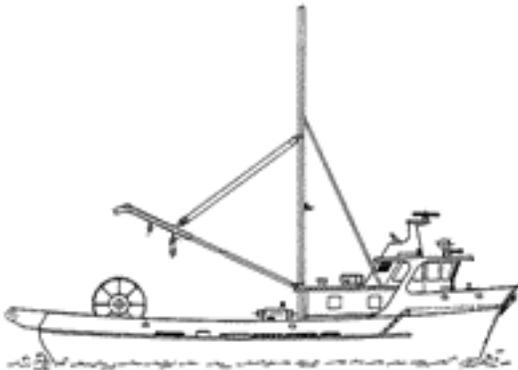
On July 5, 2004 the vessel Sea Hawk was reported capsized in Canadian Waters w/100 gallons of gasoline. The vessel subsequently drifted into OCNMS waters. The USCG spray painted the hull orange and issued a notice to mariners. The owner asked permission to sink vessel, USCG told them that was not an option in OCNMS. USCG reported vessel towed to Neah Bay on July 6, 2004.

<b>Vessel</b>	Sea Hawk	<b>Length</b>	25 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	25 ft century sport fisher
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	unknown	<b>Incident Date</b>	7/5/2004
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	25-100 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Missy-Too-sinking



Picture not available

### Location

33 nm west of Point of the Arches



### Incident Notes

On the evening of April 17th the F/V Missy-Too called the USCG to report they were taking on water. Crew from the F/V Mariah Mae pulled the men from 10-foot seas after the Missy-Too sank. All four men were wearing survival suits. The fishermen were transferred to the Coast Guard motor lifeboat and transported safely to shore. The Missy-Too reported having 300 gallons of diesel onboard. The source of the flooding was not known for certain but the owner noted inflow of water in the engine room, just forward of mid ships, on the starboard side bottom. He suspects a plank on this wood hull vessel gave way. The hull was visually inspected by a diver when the vessel changed ownership in June 2004. Based on the limited information available a positive determination of the cause of the sinking cannot be made.

<b>Vessel</b>	Missy-Too	<b>Length</b>	33 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	14 GRT	<b>Year Built</b>	1968	<b>Vessel Description</b>	Plank-on-frame seiner/long liner
<b>Hull Type</b>	Wood	<b>Age Lost</b>	37	<b>Incident Date</b>	4/17/2005
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	101-500 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Off Season-salvage

### Location

Olympic National Park, Sand Point



Picture not available, similiar model



### Incident Notes

On May 5, 2005 a 1995 22' Sea sport recreational vessel with 80 gallons of gasoline onboard capsized between Cape Alava and James Island while engaged in recreational fishing. The vessel came ashore in Olympic National Park at Sand Point. The vessel was successfully salvaged.

<b>Vessel</b>	<input type="text" value="The Offseason"/>	<b>Length</b>	<input type="text" value="22 ft"/>	<b>Vessel Type</b>	<input type="text" value="Private Vessel"/>
<b>Tonnage</b>	<input type="text" value="unknown"/>	<b>Year Built</b>	<input type="text" value="1995"/>	<b>Vessel Description</b>	<input type="text" value="22' Sea Sport recreational vessel"/>
<b>Hull Type</b>	<input type="text" value="Fiberglass"/>	<b>Age Lost</b>	<input type="text" value="10"/>	<b>Incident Date</b>	<input type="text" value="5/5/2005"/>
<b>Incident Type</b>	<input type="text" value="Flooding"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="External Conditions"/>	<b>Fatalities</b>	<input type="text" value="0"/>	<b>Spill Category</b>	<input type="text" value="25-100 gallons"/>
<b>Surveyed</b>	<input type="text" value="No"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Charted</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

### Incident

F/V Ocean Tor-sinking



### Location

37 miles west of Cape Flattery



### Incident Notes

On 26 July 2005, the F/V Ocean Tor, in Canadian waters west of Cape Flattery, was in the process of transferring fish from the nets into the fish holds when the vessel suddenly listed heavily to port, rolled over, and subsequently capsized. Two crew were rescued and two crew members lost their lives. The vessel remained partially afloat and drifted into OCNMS. The vessel capacity was reported as 4000 gallons diesel, 300 gallons hydraulic fluid, 45 gallons lube oil. USCG conducted helo operations with OCNMS staff on July 28, the vessel was not found but sheen was observed. A subsequent survey was not successful. An investigation by the Transportation Safety Board of Canada, found that the flooding likely came from the shaft tunnel. The investigation also found the vessel was not properly manned and that the risk to the vessel's stability was not fully appreciated, when it was noticed that the vessel was unusually low in the water for the amount of fish onboard.

<b>Vessel</b>	<input type="text" value="Ocean Tor"/>	<b>Length</b>	<input type="text" value="76 ft"/>	<b>Vessel Type</b>	<input type="text" value="Fishing Vessel"/>
<b>Tonnage</b>	<input type="text" value="100 GT"/>	<b>Year Built</b>	<input type="text" value="1974"/>	<b>Vessel Description</b>	<input type="text" value="Steel hulled fishing vessel"/>
<b>Hull Type</b>	<input type="text" value="Steel"/>	<b>Age Lost</b>	<input type="text" value="31"/>	<b>Incident Date</b>	<input type="text" value="7/26/2005"/>
<b>Incident Type</b>	<input type="text" value="Flooding"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Not Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="External Conditions"/>	<b>Fatalities</b>	<input type="text" value="2"/>	<b>Spill Category</b>	<input type="text" value="unknown"/>
<b>Surveyed</b>	<input type="text" value="Yes"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Chartered</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

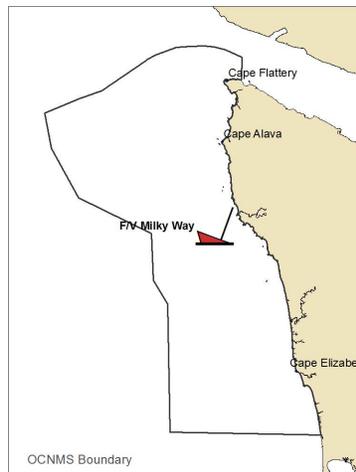
### Incident

F/V Milky Way-sinking



### Location

5.7 miles WSW of Quillayute River mouth



### Incident Notes

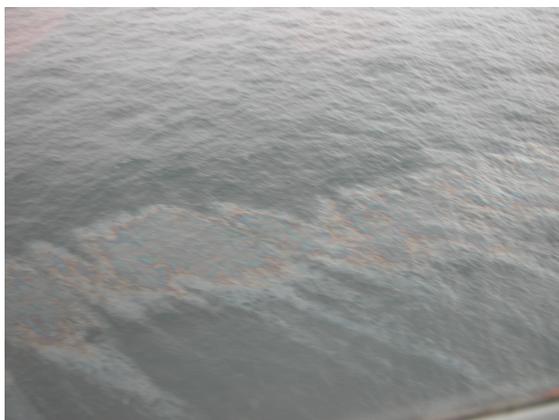
On September 14, 2005 the F/V Milky Way capsized and sank 5.7 miles WSW of the mouth of the Quillayute River. The vessel was involved in purse seining at the time. The catch in the net created an overturning moment and capsized the vessel. The crew was rescued. USCG and OCNMS staff responded with sanctuary staff supporting overflights and conducting a side scan survey of the site. The USCG stood up a Unified Command and determined that the vessel should be salvaged as a way to deal with the pollution risk. Two attempts were made to salvage the vessel and failed. The USCG closed the case on December 31, 2007.

<b>Vessel</b>	Milky Way	<b>Length</b>	59 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	113 GRT	<b>Year Built</b>	1979	<b>Vessel Description</b>	Steel hull with an aluminum wheelhouse
<b>Hull Type</b>	Steel	<b>Age Lost</b>	26	<b>Incident Date</b>	9/14/2005
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	Yes	<b>Located</b>	Yes	<b>Charted</b>	Yes

## Appendix B: Vessel Data Sheets

### Incident

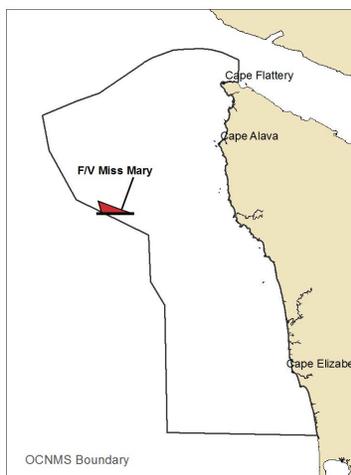
F/V Miss Mary-sinking



Sheen from the Miss Mary

### Location

25 nm west of La Push



### Incident Notes

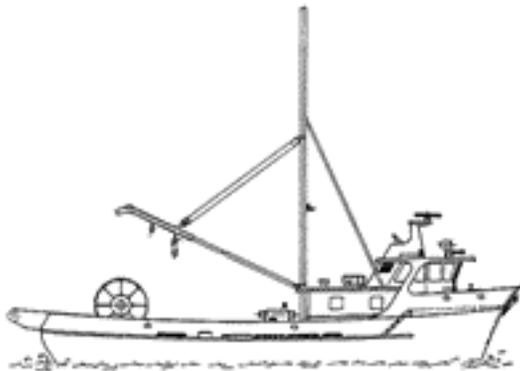
On April 21, 2007 the F/V Lady Cecilia broadcast a mayday for the F/V Miss Mary, reported to be heeled over 90 degrees. They reported 2 people in the water and one unaccounted for. A third crew member was later sighted on the hull of the capsized vessel. The 3 crew were rescued by the F/V Lady Cecilia. The CG later flew over the wreck site and documented sheen. The Miss Mary sank with an estimated 1500 gallons of fuel. A USCG flight reported the resulting spill to cover approximately 50 yards by 2 miles.

<b>Vessel</b>	Miss Mary	<b>Length</b>	52 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	88 GRT	<b>Year Built</b>	1979	<b>Vessel Description</b>	Steel hulled fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	28	<b>Incident Date</b>	4/21/2007
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	501-5000 gallons'
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Andiamo-sinking



Picture not available

### Location

25 nmi off LaPush, about 1/2 nm inside sanctuary



### Incident Notes

On November 21, 2007 the Canadian vessel Andiamo reported hitting a submerged log while transiting in the dark. The vessel sank in OCNMS with approximately 400 gallons of fuel onboard. The crew abandoned ship to a life raft and were picked up by a tug.

<b>Vessel</b>	Andiamo	<b>Length</b>	43 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	1990	<b>Vessel Description</b>	Wooden hulled fishing
<b>Hull Type</b>	Wood	<b>Age Lost</b>	17	<b>Incident Date</b>	11/20/2007
<b>Incident Type</b>	Collision	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	External Conditions	<b>Fatalities</b>	0	<b>Spill Category</b>	101-500 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Anna Marie-salvage

### Location

Off Copalis River, in surf zone just off beach



### Incident Notes

On January 12, 2008 the F/V Anna Marie was setting crab pots, hit a rock, lost steering, and ultimately ran aground off Copalis Beach, at Griffiths-Friday Ocean State Park, just south of the sanctuary boundary. There were 4 people onboard and no injuries. Vessel remained on beach through a spell of relatively calm weather from Tuesday through Saturday. Efforts to free vessel initially failed, because 1) fishing vessel could not get tow line to Anna Marie through surf, 2) helicopter could not lift 10 inch tow line, and 3) tow line too short to reach tug standing offshore beyond surf break. Vessel was finally pulled off the beach on January 26th, 2008.

<b>Vessel</b>	Anna Marie	<b>Length</b>	78 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	177 GRT	<b>Year Built</b>	1969	<b>Vessel Description</b>	Steel hulled fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	39	<b>Incident Date</b>	1/23/2008
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Small vessel-capsize



Picture not available

### Location

30 nm NW of La Push



### Incident Notes

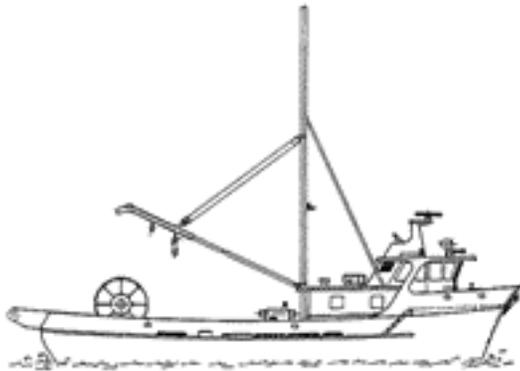
A 22' pleasure craft capsized 30 nm NW of La Push, WA. NOAA ship McArthur II was in the area doing a OCNMS project and was diverted to assist per USCG instruction.

<b>Vessel</b>	Unknown	<b>Length</b>	22 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	Recreational vessel
<b>Hull Type</b>	Unknown	<b>Age Lost</b>	unknown	<b>Incident Date</b>	5/13/2008
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

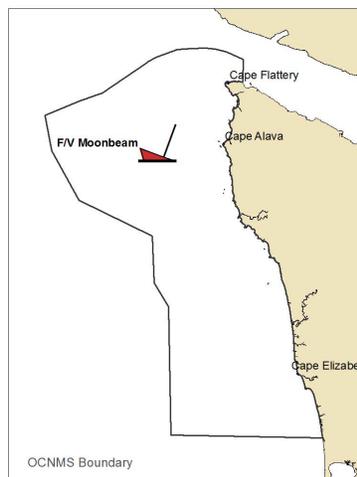
### Incident

F/V Moonbeam-sinking



### Location

14 nm west of Cape Alava



### Incident Notes

The F/V Moonbeam was tuna fishing about 17 miles off of Cape Alava when the weather turned bad and they decided to head back to Neah Bay, WA. The motor started running bad and the crew discovered the vessel was taking on water. The reported cause was a sprung plank in the wooden hull. The vessel's bilge pumps could not keep up with the incoming water. The crew called a May Day and abandoned the sinking vessel. The USCG picked the crew up from their life raft about 45 minutes later. The F/V Moonbeam sank 10 minutes later.

<b>Vessel</b>	Moonbeam	<b>Length</b>	34 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	Wooden hulled fishing vessel
<b>Hull Type</b>	Wood	<b>Age Lost</b>	unknown	<b>Incident Date</b>	9/15/2009
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Equipment Failure	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Dredge Nehalem-salvage



### Location

Quillayute River



### Incident Notes

On February 22, 2010, the dredge Nehalem was underway and conducting dredging operations at the entrance of the Quillayute River, when they were reported listing. The vessel began to flood and list to port; the crew was removed. At some point during the evening of the 22nd or morning of the 23rd the vessel sank and came to rest on the bottom on its port side in approximately ten feet of water. It is estimated that 200 gallons of fuel/oil spilled when it sank and as a result, sheen was created upon the surface of the surrounding waterway. The vessel was eventually raised and returned to service.

<b>Vessel</b>	<input type="text" value="Nehalem"/>	<b>Length</b>	<input type="text" value="40 ft"/>	<b>Vessel Type</b>	<input type="text" value="Dredger"/>
<b>Tonnage</b>	<input type="text" value="unknown"/>	<b>Year Built</b>	<input type="text" value="unknown"/>	<b>Vessel Description</b>	<input type="text" value="Overturned dredge, lost crane"/>
<b>Hull Type</b>	<input type="text" value="Steel"/>	<b>Age Lost</b>	<input type="text" value="unknown"/>	<b>Incident Date</b>	<input type="text" value="2/22/2010"/>
<b>Incident Type</b>	<input type="text" value="Flooding"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="Human Error"/>	<b>Fatalities</b>	<input type="text" value="0"/>	<b>Spill Category</b>	<input type="text" value="101-500 gallons"/>
<b>Surveyed</b>	<input type="text" value="No"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Charted</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

### Incident

Scout-salvage

### Location

9 NM NW of Neah Bay, WA



### Incident Notes

On December 21, 2010 the sanctuary received notice that the wooden motor yacht Scout was riding low in the water 9 miles NW of Neah Bay, in OCNMS. Global Diving was contracted to salvage the vessel. The vessel was towed into calmer waters where it was stabilized and then towed into Neah Bay. The initial cause of the flooding is not known.

<b>Vessel</b>	Scout	<b>Length</b>	62 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	53 GT	<b>Year Built</b>	1967	<b>Vessel Description</b>	Recreational vessel
<b>Hull Type</b>	Wood	<b>Age Lost</b>	43	<b>Incident Date</b>	12/21/2010
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	101-500 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

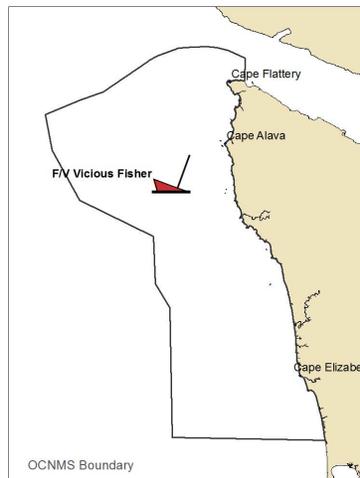
### Incident

F/V Vicious Fisher-sinking



### Location

17 nautical miles WNW of La Push



### Incident Notes

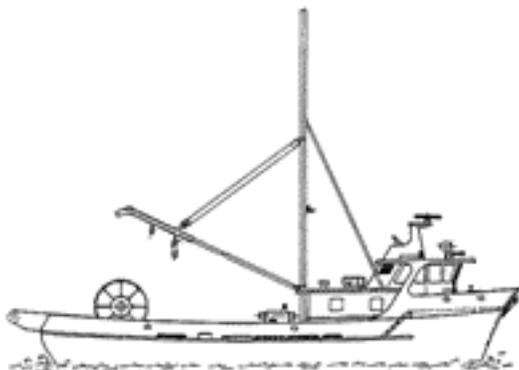
On February 3, 2011, the crew of the F/V Vicious Fisher discovered 4 feet of water in the bilge. The crew attempted to pump the water out, but their pumps could not keep up with the flooding. The captain reported the flooding to the USCG, which responded with additional pumps. The crew and USCG rescue swimmer abandoned ship to a USCG 47 foot motor life boat. The vessel sank in OCNMS. Cause was determined to be flooding from an undetermined breach in the hull.

<b>Vessel</b>	Vicious Fisher	<b>Length</b>	75 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	1980	<b>Vessel Description</b>	75' Wooden Long-line vessel
<b>Hull Type</b>	Wood	<b>Age Lost</b>	31	<b>Incident Date</b>	2/3/2011
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Equipment Failure	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	Yes	<b>Located</b>	Yes	<b>Charted</b>	Yes

## Appendix B: Vessel Data Sheets

### Incident

F/V Western Nomad-grounding



Picture not available

### Location

Waatch Point



### Incident Notes

Late on September 30, 2011 the USCG received an EPIRB signal from the 39-foot F/V Western Nomad. The USCG received word from a third party that was in contact with the F/V Western Nomad hard aground 30 yards from the shore, in the vicinity of Waatch Point. The master and crew member were hoisted off the vessel by USCG helicopter. The vessel was later towed off the rocks at high tide and towed back to Neah Bay. No oil was spilled.

<b>Vessel</b>	Western Nomad	<b>Length</b>	39 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	Aluminum hulled fishing vessel
<b>Hull Type</b>	Aluminum	<b>Age Lost</b>	unknown	<b>Incident Date</b>	9/30/2011
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	no spill
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

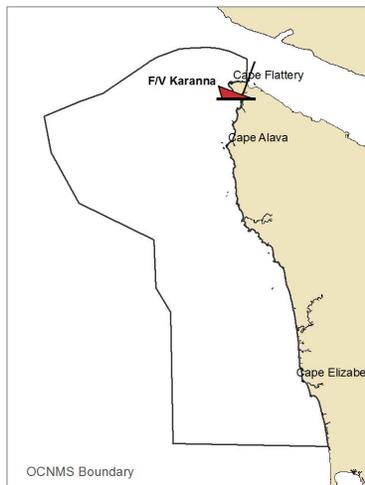
## Appendix B: Vessel Data Sheets

### Incident

F/V Karanna-sinking

### Location

Chibahdehl Rocks



### Incident Notes

On May 9, 2012 the F/V Karanna grounded in the vicinity of Chibahdehl Rocks on Cape Flattery. The vessel operator fell asleep at the helm and ran aground. The USCG rescued the 4 member crew. The vessel had a capacity of 320 gallons and it was estimated that 100 gallons were released. Due to strong winds and sea state, the USCG was not able to approach the vessel or boom and offload petroleum products. Initial plans to salvage the vessel were hampered by sea state and the vessel broke up on the rocks and was not salvaged.

<b>Vessel</b>	Karanna	<b>Length</b>	37.2 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	18 GRT	<b>Year Built</b>	1950	<b>Vessel Description</b>	Wooden fishing vessel
<b>Hull Type</b>	Wood	<b>Age Lost</b>	62	<b>Incident Date</b>	5/9/2012
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	25-100 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

# Appendix B: Vessel Data Sheets

## Incident

Miss Kelly-fire/sinking

## Location

20 miles NW Grays Harbor



## Incident Notes

On June 21, 2012 the USCG received notification that the 52 ft. recreational vessel Miss Kelly was on fire approximately 18 NM N of Grays Harbor. The recreational vessel Peer Pressure was in the area and assisted by taking 3 people off the vessel. The vessel was a complete loss and sank offshore just outside OCNMS. The cause of the fire is not known.

<b>Vessel</b>	Miss Kelly	<b>Length</b>	51.6 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	51 GRT	<b>Year Built</b>	1985	<b>Vessel Description</b>	Hatteras yacht
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	27	<b>Incident Date</b>	6/21/2012
<b>Incident Type</b>	Fire/Explosion	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

WN6466RM-sinking



Picture not available

### Location

6.5 nm WSW Tatoosh Island



### Incident Notes

A 20' aluminum sail boat (WN6466RM) was reported sunk in OCNMS with 20 gallons of diesel onboard. The vessel owner, made the report at Station Neah Bay. There is no information on how the vessel was sunk or how the crew got to Neah Bay.

<b>Vessel</b>	SV WN6466RM	<b>Length</b>	20 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	2004	<b>Vessel Description</b>	Aluminum hulled sailing vessel
<b>Hull Type</b>	Aluminum	<b>Age Lost</b>	8	<b>Incident Date</b>	8/14/2012
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	<25 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Viking Storm-Maverick-collision/sinking

### Location

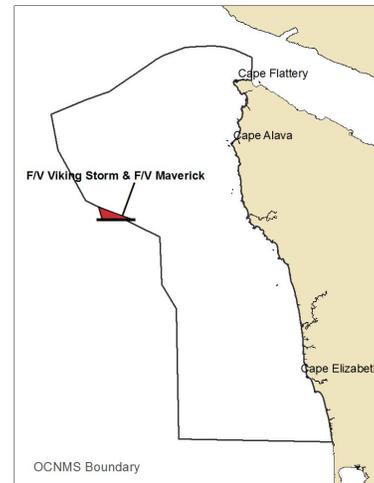
30 nm west of La Push



Viking Storm



Maverick



### Incident Notes

On 28 September 2012, at approximately 0430 Pacific Daylight Time, the Canadian fishing vessel Viking Storm collided with the American fishing vessel Maverick in thick fog, 30 nautical miles off La Push, Washington. The Maverick capsized and sank from the impact; 3 of the 4 crew members on board survived and were rescued by the Viking Storm. The fourth crew member was never found and was presumed drowned. Because of the involvement of a Canadian vessel, the Transportation Safety Board of Canada conducted an investigation that documented a number of contributing factors to the accident. These include, but were not limited, the failure of both vessels to maintain a proper watch. OCNMS obtained images from a private survey company, which may have been from the sinking of the Maverick. Unfortunately the actual positional information from the survey is proprietary.

<b>Vessel</b>	Maverick	<b>Length</b>	39.3 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	27 GRT	<b>Year Built</b>	1973	<b>Vessel Description</b>	Steel hulled fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	39	<b>Incident Date</b>	9/28/2012
<b>Incident Type</b>	Collision	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	1	<b>Spill Category</b>	501-5000 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Koprino-sinking



### Location

15 nm West of Queets River



### Incident Notes

On October 12, 2012, USCG Station Grays Harbor in Westport, WA, received a call from the M/V Koprino that the vessel was taking on water approximately 15 miles west of Queets within OCNMS. At that time, the crew estimated 600 gallons of flooding and taking on water at a rate of 5 gallons per minute. The engine compartment and the bow were flooded, but the fish hold was reported dry. Pumps delivered by the USCG could not keep up with the flooding and the ship was abandoned and subsequently sank. USCG personnel observed water coming through the seams. Prior to evacuating the vessel the fish hold and other hatches were left open in an attempt to scuttle the vessel and to avoid a navigational hazard. The vessel was last observed taking on water, but still afloat. OCNMS attempted to locate the vessel on the seafloor, but was not successful.

<b>Vessel</b>	<input type="text" value="Koprino"/>	<b>Length</b>	<input type="text" value="86 ft"/>	<b>Vessel Type</b>	<input type="text" value="Private Vessel"/>
<b>Tonnage</b>	<input type="text" value="96 GT"/>	<b>Year Built</b>	<input type="text" value="1926"/>	<b>Vessel Description</b>	<input type="text" value="Wood packer, aft wheelhouse design"/>
<b>Hull Type</b>	<input type="text" value="Wood"/>	<b>Age Lost</b>	<input type="text" value="86"/>	<b>Incident Date</b>	<input type="text" value="10/12/2012"/>
<b>Incident Type</b>	<input type="text" value="Flooding"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Not Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="Unknown"/>	<b>Fatalities</b>	<input type="text" value="0"/>	<b>Spill Category</b>	<input type="text" value="101-500 gallons"/>
<b>Surveyed</b>	<input type="text" value="Yes"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Chartered</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

### Incident

F/V Jayden Ray-salvage

### Location

Three miles north of the Quillayute River



### Incident Notes

On January 3, 2013 the F/V Jayden Ray, a 40 foot 26 gross ton uninspected fishing vessel was transiting to Quillayute River to offload their catch of dungeness crab. The operator fell asleep at the helm and the vessel struck some submerged rocks about 3 NM north of La Push WA. The rock punctured the hull and damaged the rudder. The operator was able to maneuver the vessel out into deeper water, where a USCG asset took the vessel in tow. The vessel was towed and safely moored at the fuel dock in La Push, WA.

<b>Vessel</b>	Jayden Ray	<b>Length</b>	40 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	26 GRT	<b>Year Built</b>	1971	<b>Vessel Description</b>	Steel hulled fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	42	<b>Incident Date</b>	1/3/2013
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Trophy-salvage



### Location

Vessel grounded in Olympic National Park near Duk Point



### Incident Notes

On June 2, 2013 a 19 ft boat was reported as being capsized 1.8 miles off the south end of Makah Bay. Estimated fuel onboard was reported as 40 to 60 gallons of gasoline. On June 6, 2013 the ONP Ozette Ranger investigated the vessel which was overturned and beached near Duk Point. The owner was contacted and arranged to have the vessel removed. On June 20, 2013, the ONP Ozette Ranger reported that the boat was rolled over with jacks and towed off the beach to Neah Bay. The cause of the original accident is not known.

<b>Vessel</b>	Unknown	<b>Length</b>	19 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	unknown	<b>Vessel Description</b>	19 ft Trophy boat with outdrive
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	unknown	<b>Incident Date</b>	6/2/2013
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Unkown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

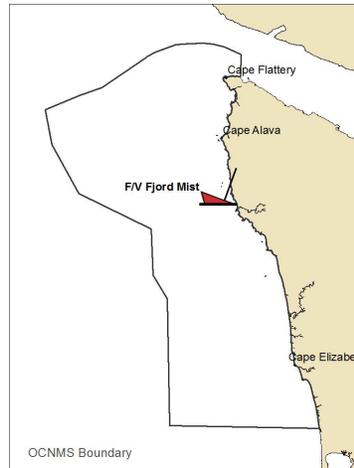
## Appendix B: Vessel Data Sheets

### Incident

F/V Fjord Mist-sinking

### Location

Approximately 7 miles NNW of La Push, WA, and 0.5 miles W of Sea Lion Rock



### Incident Notes

On September 27, 2013, the F/V Fjord Mist reported to the CG they were taking on water and sinking. Despite rapid support from two CG Station Quillayute River life boats and an MH-65 helicopter from CG Air Station Port Angeles, the F/V Fjord Mist sank in 103 feet of water approximately 0.5 miles west of Sea Lion Rock within Olympic Coast National Marine Sanctuary. All persons aboard the vessel were rescued without injury and transported to USCG Station Quillayute River. The vessel had an estimated 150 gallons of diesel on board, and unreported amounts of engine oil and hydraulic fluid. The skipper of the F/V Fjord Mist reported that they were slime eel fishing and had just set their gear when he noticed that the bilge was filling up with water. He climbed down in the hold and noticed a lot of water was coming in through the calking seams along the inside of the boat's hull and that his bilge pumps could not keep up. The deployed fishing gear was later recovered by another fishing vessel.

<b>Vessel</b>	Fjord Mist	<b>Length</b>	49.6 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	34 GRT	<b>Year Built</b>	1935	<b>Vessel Description</b>	Wood fishing vessel
<b>Hull Type</b>	Wood	<b>Age Lost</b>	78	<b>Incident Date</b>	9/27/2013
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	101-500 gallons
<b>Surveyed</b>	Yes	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

The Rock-grounding

### Location

Ocean Shores



### Incident Notes

On October 1, 2013 the Sailboat `The Rock` was reported adrift 4 miles off shore from Grays Harbor. USCG had previously evacuated the sailboat offshore of Oregon on September 28, 2013. The skipper reported being beset by severe weather, the near by Tillamook Harbor Bar was closed and the skipper requested to be rescued. The sailboat came ashore in Ocean Shores. The worst case scenerio spill was reported to be 30 gallons, no sheen was observed coming from the sailboat in surf and this was referred over to DNR Derelict Program.

<b>Vessel</b>	<input type="text" value="The Rock"/>	<b>Length</b>	<input type="text" value="36 ft"/>	<b>Vessel Type</b>	<input type="text" value="Private Vessel"/>
<b>Tonnage</b>	<input type="text" value="unknown"/>	<b>Year Built</b>	<input type="text" value="1982"/>	<b>Vessel Description</b>	<input type="text" value="Homemade concrete sailboat"/>
<b>Hull Type</b>	<input type="text" value="Concrete"/>	<b>Age Lost</b>	<input type="text" value="31"/>	<b>Incident Date</b>	<input type="text" value="10/1/2013"/>
<b>Incident Type</b>	<input type="text" value="Grounding"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Not Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="External Conditions"/>	<b>Fatalities</b>	<input type="text" value="0"/>	<b>Spill Category</b>	<input type="text" value="unknown"/>
<b>Surveyed</b>	<input type="text" value="No"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Chartered</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

### Incident

La Pietra-fire/sinking

### Location

8 NM SSW of Destruction Island



### Incident Notes

On July 4, 2014, a fire broke out in the engine room of the 79 foot recreational vessel La Pietra. The onboard vessel owners (husband and wife) were rescued by the USCG. La Pietra burned to the waterline and sank with 600 gallons of diesel on board. At the time of the fire and subsequent sinking, the vessel was about 4 miles southwest of Destruction Island, within OCNMS. The NTSB investigated this accident, accident number DCA14LM01, and determined that the probable cause was an engine room fire of unknown origin. Contributing to the loss of the vessel was the owners' inability to access and shut off the engine room ventilation system, which diminished the effectiveness of the fire suppression system and extinguishing efforts.

<b>Vessel</b>	La Pietra	<b>Length</b>	66.8 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	109 GRT	<b>Year Built</b>	1986	<b>Vessel Description</b>	Fiberglass pleasure craft
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	28	<b>Incident Date</b>	7/4/2014
<b>Incident Type</b>	Fire/Explosion	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Dawn Trader-fire/sinking



Picture not available, believed to be same model

### Location

4nm NW of Neah Bay



### Incident Notes

On August 3, 2014, the Dawn Trader, a 33 foot recreational vessel, caught fire and sank approximately 4nm NW of Neah Bay, WA. One person was rescued from the burning vessel, which then exploded, burned to the waterline, broke apart and sank. The USCG reported an expectation that all fuel was consumed in the fire. The cause of the fire is not known.

<b>Vessel</b>	Dawn Trader	<b>Length</b>	33 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	13 GRT	<b>Year Built</b>	1973	<b>Vessel Description</b>	Morgan yacht
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	41	<b>Incident Date</b>	8/3/2014
<b>Incident Type</b>	Fire/Explosion	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Corsair-sinking

### Location

28 nm off the coast, 3.5 nm south of sanctuary boundary



Photo credit: Ed Chauvaud



### Incident Notes

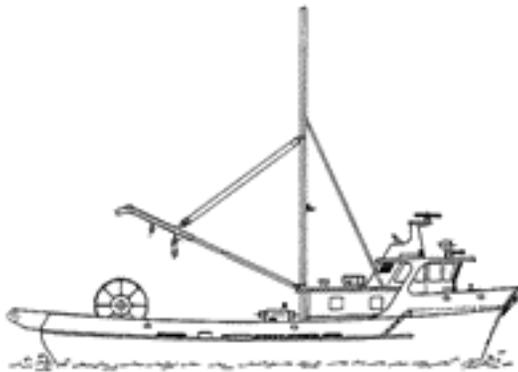
On April 18, 2015 the F/V Corsair, while fishing for shrimp, flooded and sank. The USCG rescued the crew. 2000 gallons of fuel was reported onboard. It is unknown how much was released. NOAA trajectory predicted no impacts to Washington coast. USCG to investigate cause.

<b>Vessel</b>	<input type="text" value="Corsair"/>	<b>Length</b>	<input type="text" value="49.6 ft"/>	<b>Vessel Type</b>	<input type="text" value="Fishing Vessel"/>
<b>Tonnage</b>	<input type="text" value="54 GT"/>	<b>Year Built</b>	<input type="text" value="1968"/>	<b>Vessel Description</b>	<input type="text" value="Steel hull fishing vessel"/>
<b>Hull Type</b>	<input type="text" value="Steel"/>	<b>Age Lost</b>	<input type="text" value="47"/>	<b>Incident Date</b>	<input type="text" value="4/18/2015"/>
<b>Incident Type</b>	<input type="text" value="Flooding"/>	<b>Incident Category</b>	<input type="text" value="Sank or Grounded-Not Salvaged"/>		
<b>Incident Cause</b>	<input type="text" value="Unknown"/>	<b>Fatalities</b>	<input type="text" value="0"/>	<b>Spill Category</b>	<input type="text" value="unknown"/>
<b>Surveyed</b>	<input type="text" value="No"/>	<b>Located</b>	<input type="text" value="No"/>	<b>Charted</b>	<input type="text" value="No"/>

## Appendix B: Vessel Data Sheets

### Incident

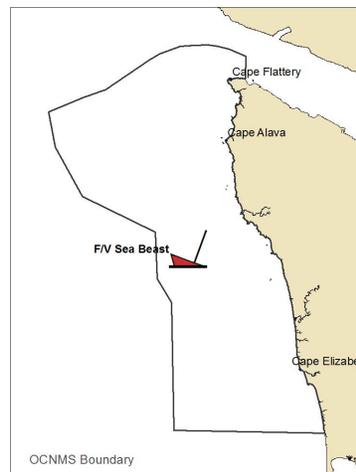
F/V Sea Beast-sinking



Picture not available

### Location

16nm SW of La Push



### Incident Notes

The crew of F/V Sea Beast contacted the USCG that they were taking on water over the stern and were sinking. Three crew donned survival suits and abandoned ship. The Sea Beast capsized with the master still onboard. The three crew were rescued and the subsequent SAR did not locate the fourth crew member. The Sea Beast can reportedly carry up to 1,000 gallons of diesel fuel, 500 gallons were reported onboard.

<b>Vessel</b>	Sea Beast	<b>Length</b>	52 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	42 GRT	<b>Year Built</b>	1974	<b>Vessel Description</b>	Steel hulled fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	41	<b>Incident Date</b>	5/3/2015
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	1	<b>Spill Category</b>	101-500 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Tamara-salvage

### Location

South of OCNMS, off Ocean Shores



### Incident Notes

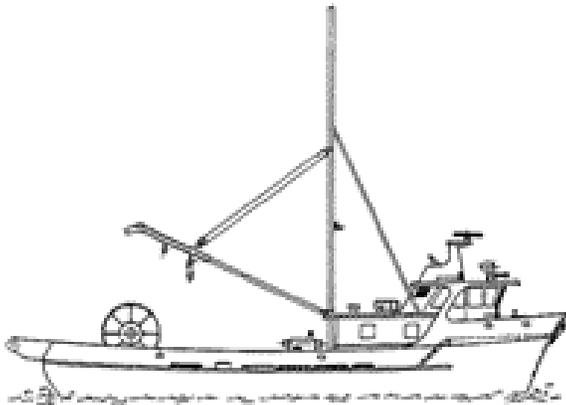
The F/V Tamara was transiting off the coast in the early morning before sunrise and ran aground north of the entrance to Grays Harbor. The two crew were rescued by USCG Helicopter. The vessel was accessible on the beach at low tide. Sheen was observed at the vessel's location. 630 gallons of fuel were pumped off. It was determined that the vessel could not be refloated and was demolished and removed at low tide.

<b>Vessel</b>	Tamara	<b>Length</b>	42.1 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	26 GRT	<b>Year Built</b>	1972	<b>Vessel Description</b>	Troller
<b>Hull Type</b>	Wood	<b>Age Lost</b>	43	<b>Incident Date</b>	8/11/2015
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	501-5000 gallons'
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Norn-sinking



Picture unavailable

### Location

38 NM west of Quillayute River



### Incident Notes

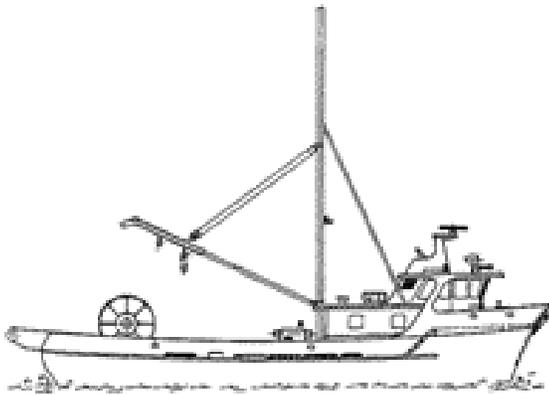
On December 17, 2015 the USCG received a mayday from the F/V Norn, reporting the vessel was taking on water approximately 38 nm west of Quillayute River. The 3 member crew abandoned ship to their life raft and were rescued by a USCG motor lifeboat. The last known position of the vessel was approximately 1 nm outside of OCNMS. The USCG reported the temperature was 38 degrees with 40 mph winds, rain, 14-foot seas and 48-degree water. The cause of the flooding is not known.

<b>Vessel</b>	F/V Norn	<b>Length</b>	38 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	23 GRT	<b>Year Built</b>	1948	<b>Vessel Description</b>	Wooden fishing vessel
<b>Hull Type</b>	Wood	<b>Age Lost</b>	67	<b>Incident Date</b>	12/17/2015
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	External Conditions	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Capt John-sinking



Picture unavailable

### Location

30 nm west of La Push, outside OCNMS



### Incident Notes

On January 24, 2016 the USCG received a call from the Capt John that they were taking on water and could not keep up with the flooding. The USCG responded with a motor lifeboat (MLB) and helicopter. Several good Samaritans arrived on scene and remained until more capable assets arrived. The USCG helicopter arrived on scene and advised the Capt John crew to abandoned ship. The helicopter rescue swimmer was lowered to the vessel and assisted the fishermen until the arrival of the MLB crew. The vessel reportedly sank in more than 2,000 feet of water. It was carrying more than 70,000 lbs of Dover Sole on board as well as approximately 800 gallons of fuel. A 200-foot by 200-foot oil sheen was reported at the location of the sunken vessel. The cause of the sinking is currently under investigation.

<b>Vessel</b>	Capt John	<b>Length</b>	65.5 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	95 GRT	<b>Year Built</b>	1965	<b>Vessel Description</b>	Steel hull fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	51	<b>Incident Date</b>	1/24/2016
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Not Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	501-5000 gallons'
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Tale Runner II-capsize

### Location

Makah Bay, capsized near Strawberry Rock, grounded on Sooes Beach



Picture not available, similiar model



### Incident Notes

The 21-foot Tale Runner II hailed the USCG via mayday broadcast just prior to the vessel capsizing in Makah Bay in the vicinity of Strawberry Rock. The USCG rescued the three crew from the water and transported them for medical treatment. The vessel was carrying approximately 24 gallons of gasoline and subsequently grounded on Sooes Beach. The owner reportedly made arrangement for personnel from the Big Salmon Resort in Neah Bay to recover the vessel from the beach.

<b>Vessel</b>	Tale Runner II	<b>Length</b>	21	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	unknown	<b>Year Built</b>	2002	<b>Vessel Description</b>	21 foot Sea Ranger
<b>Hull Type</b>	Fiberglass	<b>Age Lost</b>	14	<b>Incident Date</b>	4/18/2016
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Unknown	<b>Fatalities</b>	0	<b>Spill Category</b>	unknown
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

Ocean Pro 220-capsize



### Location

Vessel capsized off Hand Rock, grounded by Cedar Creek, Olympic National Park



### Incident Notes

On August 17, 2016 a Hewescraft Ocean Pro 220 recreational vessel, with 2 persons and a dog onboard, capsized off of Hand Rock. Hand Rock is located inside OCNMS, approximately 1.5nm off the coast between Cape Alava and La Push. One survivor was rescued by a good Samaritan. The USCG responded with a motor lifeboat from Station Quillayute River and Air Station Port Angeles. A rescue swimmer found the body of the missing person underneath the capsized hull, but was unable to retrieve. The capsized vessel drifted into surf zone and onto the rocks, ultimately grounding in the vicinity of Norwegian Memorial. The dog was able to make its way to the shore, where rangers returned him to his family. The body of the missing person was eventually located and recovered and the vessel and most associated debris were successfully removed from the sanctuary and park by Global Diving & Salvage.

<b>Vessel</b>	Dopps-Ocean Pro 220	<b>Length</b>	24.7 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>		<b>Year Built</b>	2015	<b>Vessel Description</b>	Hewescraft Ocean Pro 220
<b>Hull Type</b>	Aluminum	<b>Age Lost</b>	1	<b>Incident Date</b>	8/17/2016
<b>Incident Type</b>	Flooding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	External Conditions	<b>Fatalities</b>	1	<b>Spill Category</b>	25-100 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

## Appendix B: Vessel Data Sheets

### Incident

F/V Trinity-grounding



### Location

Copalis Beach



### Incident Notes

On September 8, 2016, the F/V Trinity grounded off of Copalis Beach. The vessel was unable to re-float on the following high tide and arranged for tow assistance. On September 9, 2016, the F/V Trinity was safely towed from the beach, with the crew still aboard, to a shipyard in Hoquiam where it will be inspected for damage prior to any further sailings. No spills were reported.

<b>Vessel</b>	F/V Trinity	<b>Length</b>	70 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	88 GT	<b>Year Built</b>	1975	<b>Vessel Description</b>	Commercial Fishing Vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	41	<b>Incident Date</b>	9/8/2016
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	no spill
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Chartered</b>	No

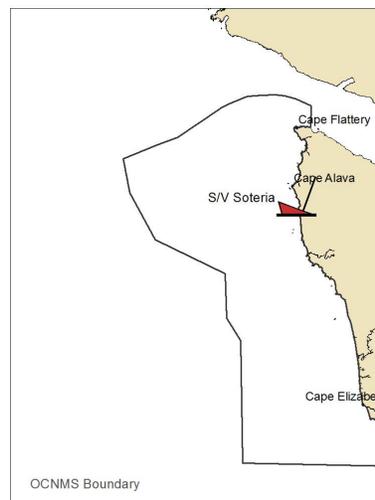
## Appendix B: Vessel Data Sheets

### Incident

S/V Soteria-grounding

### Location

Sand Point



### Incident Notes

On October 6, 2016 the USCG responded to the S/V Soteria, which was disabled and taking on water in heavy weather, 17 nm off the coast. The USCG determined it was not safe to tow the vessel. The USCG in communication with the Soteria crew concurred that the 3 person crew should be evacuated. It was also determined that a boat-to-boat transfer or helicopter hoist of POB directly from the Soteria would not be safe. USCG helicopter transferred survival suits to the Soteria and the crew abandoned ship one by one and were recovered by the motor life boat. The vessel was abandoned and was later sighted by the sanctuary vessel R/V Tatoosh grounded on Sand Point in Olympic National Park on October 9, 2016. The vessel was also reported as grounding on October 8, 2016 by park visitors. The vessel subsequently broke apart, resulting in a debris field north of Sand Point and the original grounding location. Global Diving & Salvage recovered most of the debris, during an operation from October 25 through 27.

<b>Vessel</b>	S/V Soteria	<b>Length</b>	40.9 ft	<b>Vessel Type</b>	Private Vessel
<b>Tonnage</b>	20 GT	<b>Year Built</b>	1974	<b>Vessel Description</b>	Wooden ketch rigged sailboat
<b>Hull Type</b>	Wood	<b>Age Lost</b>	42	<b>Incident Date</b>	10/6/2016
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	External Conditions	<b>Fatalities</b>	0	<b>Spill Category</b>	25-100 gallons
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No

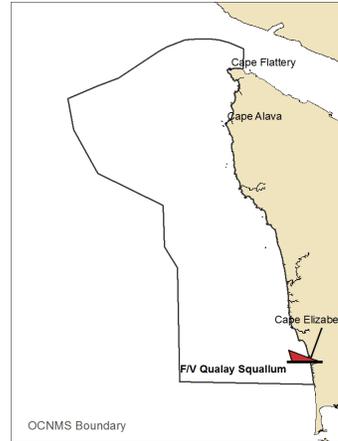
## Appendix B: Vessel Data Sheets

### Incident

F/V Qualay Squallum-grounding

### Location

Grenville Bay



### Incident Notes

Early in the morning of December 7, 2016 the 58' steel hulled F/V Qualay Squallum had a powered grounding between Point Grenville and Moclips on a Quinault Reservation beach, in the Olympic Coast National Marine Sanctuary. The USCG removed the five-man crew by helicopter. The fishing vessel reported has less than 3,000 gallons of diesel fuel and 8,000 pounds of crab aboard. Sector Columbia River and Washington Department of Ecology worked with salvagers, contracted by the responsible party, to tow the vessel off the beach.

<b>Vessel</b>	F/V Qualay Squallum	<b>Length</b>	58 ft	<b>Vessel Type</b>	Fishing Vessel
<b>Tonnage</b>	73 GRT	<b>Year Built</b>	1989	<b>Vessel Description</b>	Steel hull fishing vessel
<b>Hull Type</b>	Steel	<b>Age Lost</b>	27	<b>Incident Date</b>	12/7/2016
<b>Incident Type</b>	Grounding	<b>Incident Category</b>	Sank or Grounded-Salvaged		
<b>Incident Cause</b>	Human Error	<b>Fatalities</b>	0	<b>Spill Category</b>	no spill
<b>Surveyed</b>	No	<b>Located</b>	No	<b>Charted</b>	No



NATIONAL MARINE  
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