

FY15 PROJECT PROPOSAL SUMMARY PAGE

Continuing, Multi-Year Projects

Proposals are due to the EVOSTC office by September 2, 2014. Please note that the information in your proposal and budget form will be used for funding review. Late proposals, revisions or corrections may not be accepted.

Project Title: Northeast Montague Island Marine Debris Cleanup

Project Period: February 1, 2015 – January 31, 2016

Primary Investigator(s): Chris Pallister, President, Gulf of Alaska Keeper

Study Location: Hinchinbrook Entrance shoreline on the northeast side of Montague Island, starting approximately 6 miles southwest of Zaikof Point and continuing southwest for approximately 2.5 miles

Project Website (if applicable): www.goak.org

Abstract*: This marine debris cleanup project will during 40 days remove heavy deposits (over 20 tons per mile) of plastic marine debris from approximately 3 miles of shoreline on the northeast shore of Montague Island along Hinchinbrook Entrance. This shoreline is critical habitat for Steller sea lions and is frequented by depleted harbor seals. The cleanup work will be a continuation of a marine debris project begun in 2013 in this specific area for the EVOSTC and continued through 2014 with Legislative and ADEC grants. Through August 2014, starting at Zaikof Point on Montague Island at the entrance to PWS and moving south, 6.5 miles of this shoreline have been cleaned. The 2015 cleanup will also remove both Japanese tsunami debris and other marine debris. At the completion of this project approximately 9.5 miles out of 74 miles of heavily fouled shoreline stretching south of Hinchinbrook Entrance will have been cleaned.

A large component of the Japanese tsunami debris is Styrofoam, urethane foam, and lightweight debris such as bottles and other plastic containers. This debris is highly mobile and susceptible to refloating by tides and storms. Once the debris is refloated from shoreline deposits, prevailing winds and currents will move it through Hinchinbrook Entrance. The debris will then be redistributed throughout the inner islands of Prince William Sound fouling hundreds of miles of previously cleaned intertidal habitat. The primary goal of this cleanup project is to remove in 40 days as much debris as possible from the northeast shore of Montague Island in order to limit recontamination of inner PWS shorelines. This project replaces a cleanup originally planned nearly 30 miles further south in Patton Bay. A large peninsular land mass called Box Point traps and contains debris in Patton Bay and points further south. Refloated debris south of Box Point does not threaten inner PWS shorelines nearly as much as the debris deposits further north. It is important to focus the cleanup effort on areas that threaten the most environmental damage.

Debris will be collected and placed in Super Sacks. *See attached photos of the 2014 ADEC northeast Montague Island cleanup.* Large items will be lashed together in preparation for helicopter slinging. All the debris will subsequently be removed during the summer of 2015 by helicopter and barge. The helicopter/barge removal project will be a separate phase of the cleanup project. Gulf of Alaska Keeper is working with ADEC, NOAA, the Alaska Legislature and corporate entities to organize and fund the removal portion of the project. Debris will most likely be shipped to either a recycling facility or landfill in the Pacific Northwest. Since the arrival of the tsunami debris disposal options in Alaska have become very limited to non-existent in most areas.

**The abstract should provide a brief overview of the overall goals and hypotheses of the project and provide sufficient information for a summary review as this is the text that will be used in the public work plan and may be relied upon by the PAC and other parties.*

Estimated Budget:

EVOSTC Funding Requested* (must include 9% GA):

| FY12 | FY13 | FY14 | FY15 | FY16 | TOTAL |
|----------------|----------------|----------------|----------------|-------------|------------------|
| 489,955 | 472,515 | 445,919 | 310,650 | | 1,719,039 |

Non-EVOSTC Funds to be used:

| FY12 | FY13 | FY14 | FY15 | FY16 | TOTAL |
|----------------|----------------|----------------|----------------|-------------|------------------|
| 350,000 | 335,000 | 360,000 | 140,000 | | 1,185,000 |

**If the amount requested here does not match the amount on the budget form, the request on the budget form will be considered to be correct.*

Date: September 1, 2014

Reviewers will have available your annual report, original proposal, and this proposal during their review. However, to assist reviewers, please highlight or otherwise distinguish any new or additional information that was not included in your original proposal.

I. EXECUTIVE SUMMARY

Please provide a summary of the project including key hypotheses and overall goals, as submitted in your original proposal. If there are additional highlights that you would like to include since you submitted your annual report, please include them here. Also, please list any publications that have been submitted and/or accepted since you submitted your annual report.

GoAK's original August 2011 marine debris cleanup proposal planned a marine debris cleanup in Patton Bay and Jeannie Cove on southeast Montague Island in 2014. The plan called for a 9-person cleanup crew to work from camps and to remove as much marine debris as possible over an 85-day period. Collected debris was to be slung by helicopter to a barge and then transported to the Anchorage landfill.

The arrival of massive amounts of Japanese tsunami marine debris since the original project proposal threw off the proposed cleanup schedule when the EVOSTC added an extra cleanup season in 2013 to remove tsunami debris from interior PWS island shorelines. That delayed the scheduled Barren Islands cleanup from 2013 to 2014 and the Montague Island cleanup from 2014 to 2105. The immense volume of Japanese tsunami debris has also caused GoAK to reconsider the original Patton Bay, Montague Island plan with the goal of best utilizing limited cleanup funds while providing PWS the maximum environmental protection possible.

Therefore, we now propose using a vessel-based, 10-person crew and groups of volunteers to remove marine debris from 3 miles of extremely fouled shoreline nearer the entrance to PWS at Hinchinbrook Entrance. This cleanup project will better protect previously cleaned inner-PWS shorelines at risk of fouling by marine debris refloated and redistributed from the newly proposed cleanup project beaches. Collected and consolidated debris will be removed in July 2015 by helicopter and barge in a separately funded project.

II. COORDINATION AND COLLABORATION

A. Within a EVOSTC-Funded Program

None that we are aware of

B. With Other EVOSTC-funded Projects

None that we are aware of

C. With Trustee or Management Agencies

The ongoing Japanese tsunami debris cleanup is a long-term massive undertaking. The Montague Island project will take years to complete and will require the resources of multiple agencies and the help of the Alaska Legislature to successfully complete. To date, in addition to the EVOSTC, the Alaska Legislature, NOAA and the Alaska Department of Environmental Conservation have all contributed their expertise and funding to the project. We consult with and obtain permits from the Alaska Department of Fish and Game, the Alaska Department of Natural Resources and the State Parks Division, the U.S. Fish and Wildlife Service, the Chugach National Forest, the National Marine Fisheries Service, and the Chugach Alaska Corporation. In addition to governmental entities and agencies, GoAK works closely with other non-governmental organization to coordinate the tsunami debris cleanup. Island Trails Network from Kodiak, the Center for Alaskan Coastal Studies from Homer, Airborne Technologies, Inc. from Wasilla all partner with GoAK to accomplish the cleanup. Three groups of volunteers from Japan and one California group from the Clean Ocean Project have joined GoAK's Montague Island cleanup projects. In 2015, two 6-person groups of Japanese volunteers will join the Montague Island project for two weeks each. A 6-person group of Clean Ocean Project will join the cleanup for 10 days. That will be over 2000 hours of volunteer time on this proposed project.

III. PROJECT DESIGN – PLAN FOR FY15

A. Objectives for FY15

The primary objective of the 2014 Montague Island project as originally proposed was to remove as much marine debris as possible from approximately 15 miles of southeast Montague Island shoreline in Patton Bay and Jeannie Cove. All of this shoreline is south of Box Point. Debris densities at the time of the original proposal were estimated to be between 5 and 6 tons per mile.

The Montague Island cleanup project was originally designed to be the third year of a 3-year marine debris cleanup project in Prince William Sound and the Barren Islands which was scheduled to end in 2014. However, starting late in the summer of 2011, the influx of Japanese tsunami debris into the area necessitated modifying the original project. Consequently, the 2013 season was spent removing tsunami debris from PWS rather than on the originally scheduled Barren Islands cleanup. That pushed the Barren Islands project back to 2014 and the proposed Montague Island Patton Bay cleanup to 2015.

B. Changes to Project Design

This phase of the multi-year cleanup project has undergone significant changes since the original proposal. The original proposal targeted removing heavy marine-debris deposits in Patton Bay and Jeannie Cove, both areas with significant salmon bearing streams and rich coastal habitat. This modified plan proposes that the cleanup area be moved further north to focus on potentially more

harmful marine debris deposits and, consequently, to better protect Prince William Sound's intertidal habitat.

Rather than utilizing a 9-person cleanup crew camped in Patton Bay for 85 days and hauling debris to Anchorage, we now propose using a 10-person cleanup crew staged on, and supported by, vessels for 40 days in Zaikof Bay near the northeast corner of Montague Island. The crew will clean beaches along the northeast Montague Island shore. The original plan called for one vessel to support the Patton Bay cleanup. There are no camping areas on the northeast Montague Island shoreline. Workers must live on vessels sheltered in Zaikof Bay and be transported daily to and from the cleanup site. That will require large vessel upon which the crew and volunteers will be housed, a fast crew transport vessel for the daily commute to the work site, and a support vessel to haul fuel and supplies. The cleanup crew will commute to the northeast Montague Island beaches daily from the shelter of Zaikof Bay. They will collect, consolidate and rig marine debris for helicopter slinging. Debris will no longer be hauled to the Anchorage landfill as originally planned, but will instead be removed during a separately funded helicopter/barge transport project. The debris will most likely be shipped to either Seattle or Astoria, Oregon.

There are several factors that support relocating the 2015 cleanup project. The 2011 Japanese earthquake and tsunami caused a massive influx of marine debris to hit the northern Gulf of Alaska shoreline beginning late in the summer of 2011, peaking in 2012. The extent of the tsunami debris influx was not recognized until the spring of 2012. The tsunami debris continues to arrive but the rate of deposition is slowly declining. *See attached graphs.* However, to date, **the amount of marine debris present on Montague Island has more than doubled** since the original cleanup proposal was submitted in August 2011. In fact, **plastic debris densities in the target area are 4 to 5 times higher than the estimates for Patton Bay in the original proposal.** The original cleanup proposal was submitted before the tsunami marine debris impact was realized.

Much of the tsunami debris is composed of Styrofoam and urethane foam insulation from structures wiped out by the tsunami. There is a very large volume of foam debris and a considerable amount of it has been broken into small pieces by storms and surf. Not only does the foam occupy a large volume, it is difficult and costly to transport. The small bits of foam are also exceedingly difficult and time consuming to clean up. Foam debris is also highly susceptible to refloating and redistribution by high tides, winds and surf. The same is applicable to the untold thousands of bottles and other lightweight material that accompanied the tsunami debris. Marine debris in the original proposal area, the shoreline south of Box Point, particularly that in Patton Bay and Jeannie Cove, is largely trapped by the topography of the island in that area. Even if the debris did refloat and migrate it would most likely move to the southwest and sweep below PWS toward the west. Beach debris north of Box Point, if refloated, would be moved by prevailing winds and currents through Hinchinbrook Entrance and into PWS where it would be redistributed over hundreds of miles of shoreline. In 2012, in response to the tsunami debris influx, GoAK proposed that the Montague Island area north of Box Point be targeted for cleanup specifically for these reasons.

In 2013, for the EVOSTC, GoAK focused on removing tsunami-related foam debris from 300 miles of interior PWS islands shorelines and culminating just around the northeast tip of Montague Island near Zaikof Point. As we cleaned around the northeast tip of Montague Island, it quickly became apparent that the amount of debris on the 74 miles of Montague Island Gulf of Alaska shoreline far exceeded anything GoAK had experienced before. Plastic debris density now ranges between 20 and 30 tons per mile of shoreline. Over half of the debris volume is related to the Japanese tsunami.

After finishing the 2013 EVOSTC sponsored PWS cleanup at Montague Island, GoAK continued cleanup work in the same area of Montague Island for the Alaska Legislature for another 30 days. In May 2014, GoAK again resumed cleanup in the same area, first for the Alaska Legislature and then later in the summer for the Alaska Department of Environmental Conservation (ADEC) utilizing money gifted by Japan for tsunami debris cleanup work. Altogether, these 3 projects, over a combined 80 days, have cleaned approximately 125 tons of plastic debris from approximately 6.5 miles of shoreline. However, other than the 4 landing-craft loads of debris we removed from this area in 2013 for the EVOSTC, the debris has been collected, consolidated, and secured in Super Sacks and piles of large items tied together, all ready for helicopter transport. There are currently 400 large Super Sacks (1.3 to 1.5-cubic yards) and approximately 80% more consolidated large debris (plastic drums, fish totes, large nets, lines, etc.) cached for removal. **This is over 200,000 pounds of consolidated plastic debris.**

GoAK was forced to quit removing and transporting the collected debris for several reasons. Most importantly, this incredibly rugged and stormy shoreline is too dangerous to haul debris off of by hand. Landing craft can't make it through the reefs and surf safely, necessitating countless small loads of debris being carried by hand down slick, rocky, log-strewn shorelines and then by skiff through the surf to a vessel waiting offshore, all the while putting workers at risk. Removing debris in this manner is simply not safe. Additionally, every load (40 to 45-cubic yards) of debris GoAK transports from Montague Island to Whittier and ultimately to the Anchorage landfill cost upwards of \$7,000. Each landing-craft load requires a 3-day roundtrip. As we move further south along the Montague coast, the trips become even longer and the exposure greater. **Currently there are approximately 40 landing-craft loads of debris cached on Montague Island.** It would take two full seasons just to remove and transport debris already collected and with the landing-craft-removal methodology would cost nearly \$300,000. A more efficient removal process is critically necessary.

However, **the greatest impediment to removing the debris is that there are no longer any local landfills willing to take the debris.** The Anchorage landfill recently informed GoAK that it would no longer accept marine debris. The Kenai Peninsula landfills will only accept debris from the Kenai Borough. Kodiak will not accept it, nor will any of the other small coastal communities. That essentially means that all of the debris will need to be transported to recycling or landfill facilities in Washington or Oregon. GoAK is working with ADEC, NOAA, the State Legislature and Waste Management to develop and fund a helicopter/barge debris removal process. This is an exceedingly efficient way to remove large volumes of debris in remote locations. It is a methodology GoAK has used several times including at Gore Point and on southwest Montague Island. Our plan is to sling all of the cached Montague Island debris along with that collected during the 2015 season onto an ocean going barge and ship it to either a recycling plant in Seattle or to the Waste Management landfill in Astoria, Oregon. That same helicopter/barge operation would also remove debris cached on Kodiak Island, Afognak Island, the Barren Islands, Gore Point, Kayak Island and several points in Southeast Alaska. It would also remove debris collected during additional cleanup projects in 2015.

IV. SCHEDULE

A. Project Milestones for FY 15

Objective 1. The primary objective in the original proposal was to remove marine debris from 15 to 20 miles of Montague Island shoreline in Patton Bay and Jeannie Cove.

To be met by August 25, 2015

The amended primary objective is to clean and consolidate as much marine debris as possible over 40 days on the northeast shoreline of Montague Island with the goal of cleaning 3 miles heavily fouled shoreline. Consolidated debris will be removed during a separately funded non-EVOSTC project.

To be met by June 30, 2015

B. Measurable Project Tasks for FY 15

FY 15, 1st quarter (February 1, 2015 - April 31, 2015)

Original Proposal:

February: Project planning and preparation, permit applications

April: Vessel and gear preparation, crew hiring

Amended Proposal:

February: Project planning and preparation

March: Vessel and gear preparation, crew scheduling and hiring

April: Vessel and gear preparation, crew scheduling hiring

FY 15, 2nd quarter (May 1, 2015-July 30, 2015)

Original Proposal:

May 15(approximate): Begin Patton Bay cleanup project

Amended Proposal:

May 5 -10 (approximate): Begin northeast Montague Island cleanup

June 30: Complete the EVOSTC portion of the cleanup project

July 1 (approximate): Begin helicopter/barge removal of consolidated debris

July 30 (approximate): Finish helicopter/barge removal project

FY 15, 3rd quarter (August 1, 2015 – October 31, 2015)

Original Proposal:

August 25: Complete Patton Bay cleanup

October 31: Complete Patton Bay cleanup project reports

Amended Proposal:

October 31: Complete northeast Montague Island cleanup project reports

FY 15, 4th quarter (November 1, 2015- January 31, 2016)

V. PROJECT PERSONNEL – CHANGES AND UPDATES

No changes.

VI. BUDGET

A. Budget Forms (Attached)

B. Changes from Original Proposal

The only change from the original proposal budget is to add the 9% GA as required.

C. Sources of Additional Funding

GoAK has reserved **\$100,000** remaining from an Alaska Legislative grant to use to support the helicopter/barge debris removal from Montague Island.

In addition to direct funding, GoAK will utilize groups of volunteers to help with the Montague Island cleanup. Over 2000 volunteer hours have already been committed to the 2015 project. That is an in-kind donation valued at over **\$40,000**.

GoAK's goal is to raise a total of \$1,000,000 in 2015, including the EVOSTC funding, for the northeast Montague Island cleanup. That funding level would allow GoAK to field a larger 14-person cleanup crew over a total of 100 days. That would enable us to clean approximately 10 additional miles of the 68 miles remaining to be cleaned on of Montague Island's Gulf of Alaska shoreline.

In addition to the above EVOSTC funding and in-kind donations, GoAK and its joint venture partners will again request \$1,000,000 from the Alaska Legislature to continue the Japanese tsunami marine debris cleanup. If the Legislative grant is approved, GoAK will use its entire \$316,000 share of this grant to continue the northeast Montague Island cleanup.

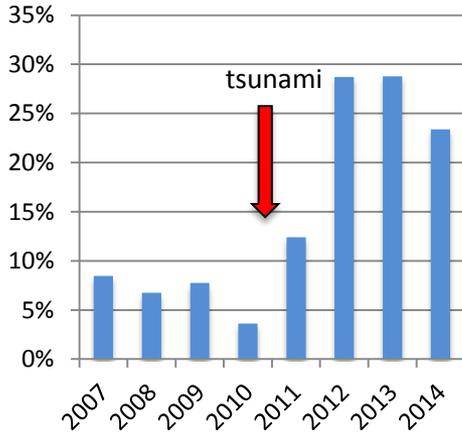
GoAK will also submit a grant proposal to NOAA's Community Based Marine Debris program requesting \$250,000 to continue the northeast Montague Island cleanup.

The Alaska Department of Environmental Conservation plans to request additional money from NOAA (Japanese funding) to continue the Japanese tsunami debris cleanup in Alaska. GoAK will submit a proposal to ADEC to use a portion of the Japanese funding in 2015 to continue the northeast Montague island project.

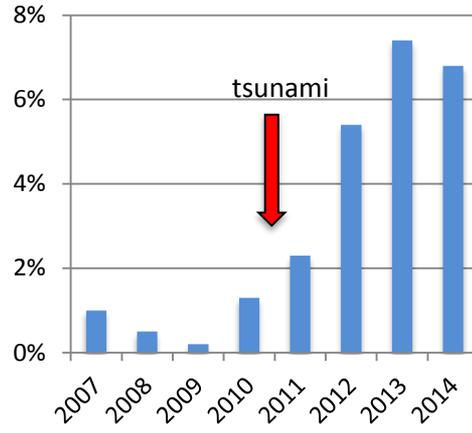
Marine Debris Monitoring Sites

Percentage Styrofoam (per total weight)

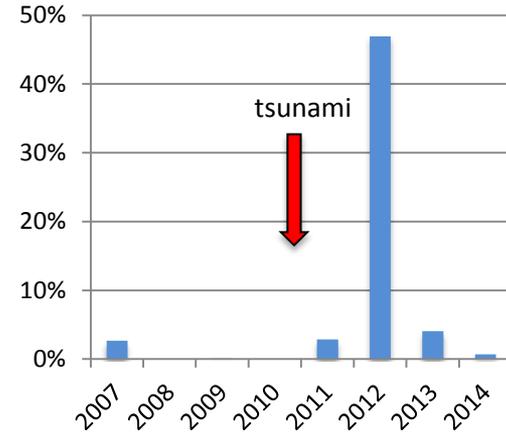
PWS -Mega Byte



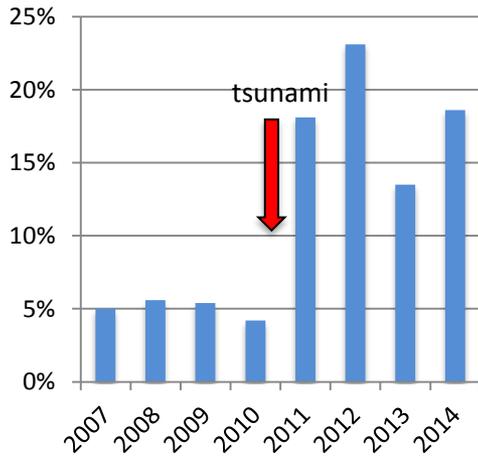
PWS-Snug Harbor



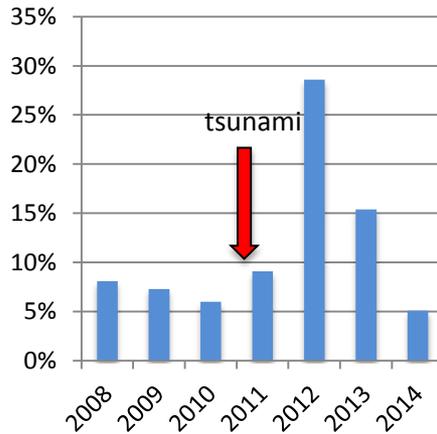
PWS - Block Island



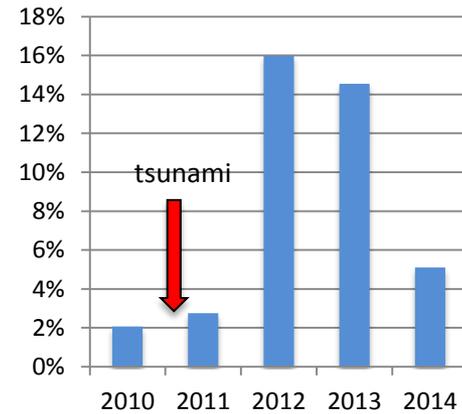
PWS-Total



Gore Point - East

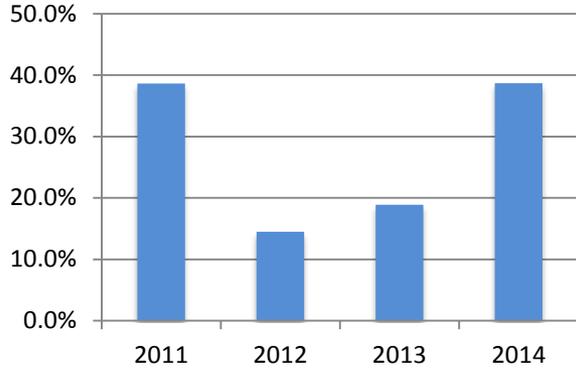


Gore Point North

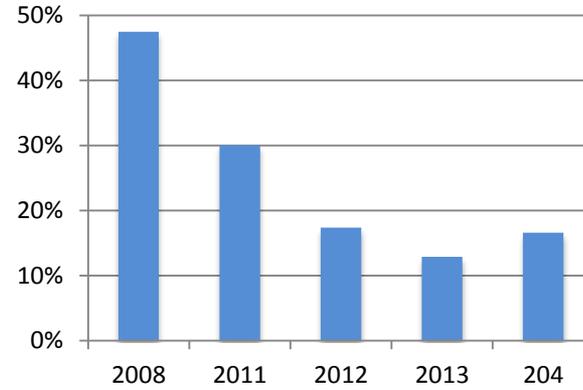


Marine Debris Monitoring Sites

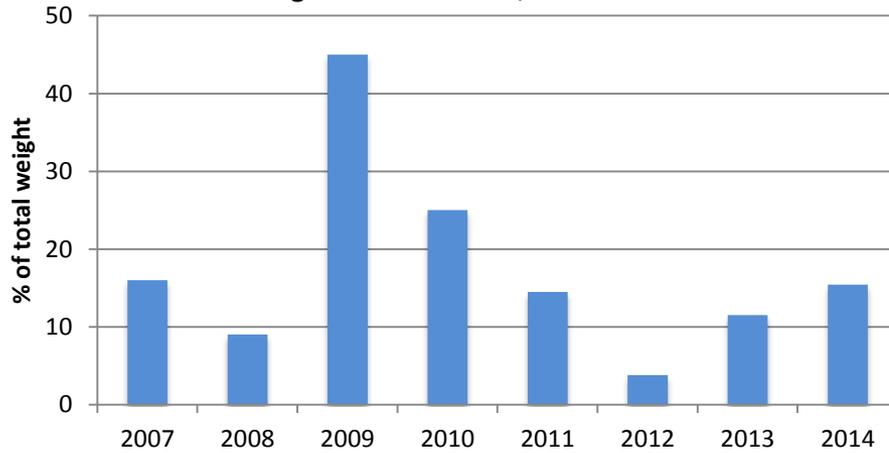
**Relative weight nets & lines
Gore Point North**



**Relative weight nets and lines; Gore
Point East**



Relative weight lines and lines; PWS



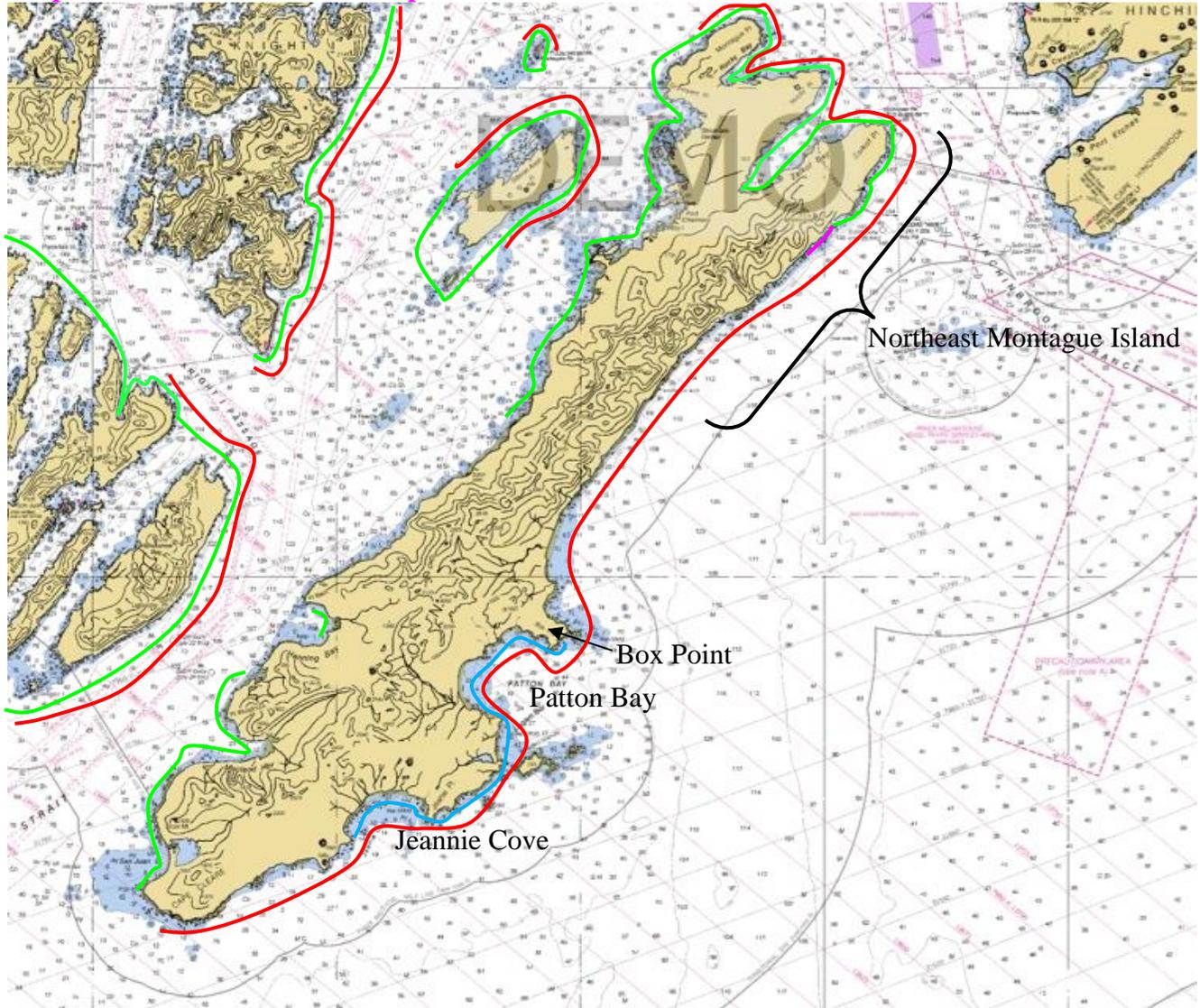
Montague Island, PWS

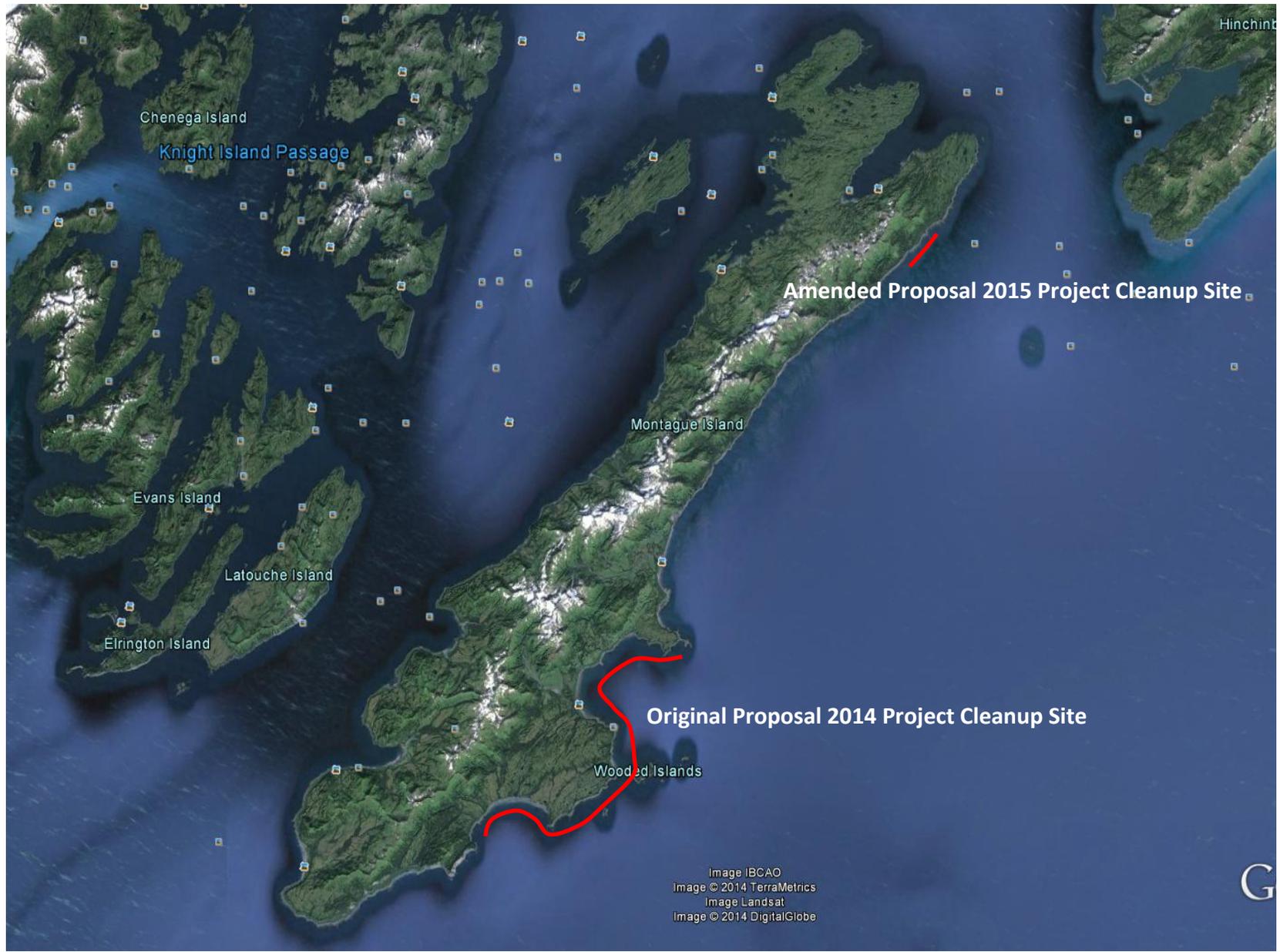
Japanese Tsunami Debris shoreward of this line

Completed 2008-2014 Cleanup Projects

Original Proposed 2014 Patton Bay Cleanup

Proposed 2015 EVOSTC Cleanup





Chenega Island

Knight Island Passage

Hinchinbrook Island

Amended Proposal 2015 Project Cleanup Site

Montague Island

Evans Island

Latouche Island

Elrington Island

Original Proposal 2014 Project Cleanup Site

Wooded Islands

Image IBCAO
Image © 2014 TerraMetrics
Image Landsat
Image © 2014 DigitalGlobe

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**EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
PROGRAM PROJECT BUDGET PROPOSAL AND REPORTING FORM**

| Budget Category: | Proposed FY 12 | Proposed FY 13 | Proposed FY 14 | Proposed FY 15 | Proposed FY 16 | TOTAL PROPOSED | ACTUAL CUMULATIVE |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|
| Personnel | \$29,500.0 | \$29,500.0 | \$29,500.0 | \$0.0 | \$0.0 | \$88,500.0 | \$ 70,720 |
| Travel | \$12,800.0 | \$12,800.0 | \$12,800.0 | \$0.0 | \$0.0 | \$38,400.0 | \$ 25,600 |
| Contractual | \$387,200.0 | \$389,200.0 | \$366,800.0 | \$285,000.0 | \$0.0 | \$1,428,200.0 | \$ 1,088,400 |
| Commodities | \$2,000.0 | \$2,000.0 | \$0.0 | \$0.0 | \$0.0 | \$4,000.0 | \$ 4,000 |
| Equipment | \$18,000.0 | \$0.0 | \$0.0 | \$0.0 | | \$18,000.0 | \$ 3,000 |
| Indirect Costs (<i>will vary by proposer</i>) | | | | | | | |
| SUBTOTAL | \$449,500.0 | \$433,500.0 | \$409,100.0 | \$285,000.0 | \$0.0 | \$1,577,100.0 | \$ 1,191,720 |
| General Administration (9% of subtotal) | \$40,455.0 | \$39,015.0 | \$36,819.0 | \$25,650.0 | \$0.0 | \$141,939.0 | N/A |
| PROJECT TOTAL | \$489,955.0 | \$472,515.0 | \$445,919.0 | \$310,650.0 | \$0.0 | \$1,719,039.0 | |
| Other Resources (Cost Share Funds) | \$350,000.0 | \$335,000.0 | \$360,000.0 | \$240,000.0 | \$0.0 | \$0.0 | |

COMMENTS:

This summary page provides an five-year overview of proposed funding and actual cumulative spending. The column titled 'Actual Cumulative' should be updated each fiscal year to provide information on the total amount actually spent for all completed years of the project. On the Project Annual Report Form, if any line item exceeds a 10% deviation from the originally-proposed amount; provide detail regarding the reason for the deviation.

FY12-16

**Project Title: Harbor Protection and Marine Restoration, Marine Debris Removal
Primary Investigator: C. Pallister, (GoAK)**

**NON-TRUSTEE AGENCY
SUMMARY PAGE**

**EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
PROGRAM PROJECT BUDGET PROPOSAL AND REPORTING FORM**

| Personnel Costs: | | Months Budgeted | Monthly Costs | Overtime | Personnel Sum |
|-------------------------|---------------|-----------------|---------------|----------|---------------|
| Name | Project Title | | | | |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | Subtotal | 0.0 | 0.0 | |
| Personnel Total | | | | | \$0.0 |

| Travel Costs: | Ticket Price | Round Trips | Total Days | Daily Per Diem | Travel Sum |
|----------------------|--------------|-------------|------------|----------------|--------------|
| Description | | | | | |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| | | | | | 0.0 |
| Travel Total | | | | | \$0.0 |

FY15

Project Title:
Primary Investigator:

**FORM 3B
PERSONNEL & TRAVEL
DETAIL**

