

**Scope of Work and Agreement  
Between  
the United States Fish and Wildlife Service and  
the National Oceanic and Atmospheric Administration  
for the  
Rocky Intertidal Habitat Protection Program  
Related to the Torch Platform Irene Natural Resource Damage Assessment  
February 1, 2010**

**Project Principals: Laura Francis & Julie Bursek,  
Channel Islands National Marine Sanctuary**

**I. PROJECT BACKGROUND:**

On September 28, 1997, a discharge of crude oil occurred from a rupture in a 20-inch pipeline owned or operated by several Responsible Parties including the Torch Operating Company (the "Torch Spill"). The Torch Spill released at least 163 barrels of petroleum product into the Pacific Ocean resulting in the contamination of approximately 17 miles of northern Santa Barbara County coastline.

The Torch/Platform Irene Oil Spill Natural Resources Trustee Council (the "Trustees" or "Trustee Council") prepared a Final Restoration Plan and Environmental Assessment ("RP/EA") to identify and select restoration proposals to compensate the public for natural resource injuries resulting from the Torch Spill. The Trustees are comprised of the United States Fish and Wildlife Service ("USFWS"), the United States Air Force at Vandenberg Air Force Base ("USAF VAFB"), the California Department of Fish and Game, Office of Spill Prevention and Response ("CDFG OSPR"), and the California State Lands Commission. Funding for restoration projects comes from settlement funds paid by the Responsible Parties and placed into the Natural Resources Damage Assessment and Restoration Fund ("NRDAR Fund") maintained by the U.S. Department of the Interior. The Trustees have the authority and responsibility to use the Torch Spill funds placed into the NRDAR to restore natural resources injured by the Torch Spill.

Approximately 85 acres of rocky intertidal habitat were in the Torch Platform Irene oil spill exposure zone. Based upon observations of black abalone (*H. cracherodii*) covered with oil at Point Arguello, the pathway of oil on surface waters, the mixing of oil in the surf zone, as well as the projected slow recovery time for abalone, the Trustees estimate that black abalone resources suffered a 10-15% loss in the Spill area. Other rocky intertidal organisms likely suffered similar injuries due to exposure to oil from the Torch Spill.

The Trustees selected the Rocky Intertidal Habitat Protection Program ("Program") described in the Final RP/EA to compensate for the injuries to the rocky intertidal habitat resulting from the Torch Spill. The Trustees have allocated approximately \$136,500 of the NRDAR Torch Spill funds for the Program and have selected the Channel Islands National Marine Sanctuary

("CINMS") to be the lead organization for Program implementation. The CINMS is managed within the National Oceanic and Atmospheric Administration ("NOAA").

The goals of the Program are to provide local community outreach and education regarding the sensitivities of rocky intertidal habitats and to reduce the impacts from human disturbance on tidepools. Tidepools and other components of rocky intertidal shores represent a species-rich habitat which attracts a wide array of visitors and collectors. Human disturbance of tidepool areas is of concern and includes trampling of the resources, turnover of rocks, displacement of both living and nonliving resources, and collecting of intertidal species or shells that can provide habitat. In addition to direct losses from trampling and collecting, secondary changes may result from changes in distribution, prey availability and competition. Under heavy use, patches of habitat become more frequently disturbed, allowing less time for recovery.

The Program components include 1) educational outreach to minimize human impacts on tide pools, 2) collaboration with private and government sector organizations, and 3) monitoring. The primary target audience will be the Santa Barbara County community and visitors to the area's beaches. If funds and timing allows, the geographic extent of this project may be extended (*e.g.*, into San Luis Obispo and/or Ventura Counties). This project will also include a monitoring component to evaluate visitor use patterns and resource impacts at select high use rocky intertidal locations in Santa Barbara County such as Jalama Beach County Park.

## II. PROJECT TASKS

**Task 1 - Needs Assessment.** Task 1 consists of two components: an initial Needs Assessment which has already been conducted by CINMS, and CINMS' continuing outreach to identify other potential partners within the study region. From January through March 2009, the CINMS Education Coordinators, Julie Bursek and Laura Francis conducted a Needs Assessment with education/outreach partners in the study region to determine what programs/products exist and to determine additional needs for development. Collaborating organizations and agencies surveyed in this initial Needs Assessment included:

- **Monterey Bay National Marine Sanctuary** (contacts: Dawn Hayes, Liz Love). Monterey Bay NMS has developed and installed rocky intertidal interpretive signs at popular beaches in Monterey and San Luis Obispo counties. Monterey Bay NMS provided CINMS with templates of the signs they created that can be adapted for beaches in Santa Barbara County.
- **Gulf of the Farallones National Marine Sanctuary** (contact: Carol Preston). The Gulf of the Farallones NMS has partnered with the California Academy of Sciences to develop a volunteer rocky intertidal interpretation training course that could be adapted to our region. This course trains volunteers to interpret and assist with monitoring visitor use patterns and resources impacts to rocky intertidal shores.
- **Jalama Beach County Park** (contact: Clay Garland). The Jalama Beach County Park is a popular camping/surfing destination that serves approximately 800

campers/week during the summer months. The park has interpretive signs about the creek and sand beach environment. Many of the signs were initially designed and installed in 1986 and the head park ranger indicated that new signs would definitely be welcome. Jalama Beach County Park is a great location for interpretive signs about the rocky intertidal habitat that is located southeast of the main sand beach. Many visitors explore the tidepools during low tide and, according to park staff, there are still some black abalone individuals found there. Information on the signs would cover natural history of black abalone, current threats to their survival and tidepool etiquette techniques for low impact exploration. Potential locations for interpretive signs about points of interest at Jalama Beach County Park and interpretation about the natural and cultural resources would include a welcome kiosk at the park entrance (where campers pay their fees) and at the main Jalama beach access point within Jalama Beach County Park. Jalama Beach County Park is also interested in converting a portion of the park ranger office into a visitor center to interpret natural and cultural resources – currently there is no visitor center at the site. Jalama Beach County Park is remotely located, so it is not an ideal site to set up LiMPETS monitoring or a volunteer interpretive program.

- **Orange County Marine Protected Area Network** (contacts: Calla Allison, Jeff Rosaler, Harry Helling). This group has implemented a visitor use survey tool to assess how visitors utilize the rocky shores of different south Orange County Beaches. CINMS received copies of the datasheet and protocol that can be adapted for visitor use surveys at Santa Barbara county beaches.
- **Ty Warner Sea Center** (contact: Amanda Hendrickson). The Ty Warner Sea Center is interested in expanding their abalone exhibit to feature black abalone and create an interactive component (develop abalone models that depict both a healthy individual and one suffering from withering foot syndrome) and adding powerful imagery and explanatory/interpretive graphic panels. The Sea Center is also interested in supporting teacher trainings for LiMPETS rocky intertidal monitoring at Santa Barbara county beaches.
- **Discovery Museum** (contacts: Cindy Ransick, Carrie Rosing). The Discovery Museum caters mainly to pre-K and family education experiences. They have an annual visitation of 30,000 and service north Santa Barbara county 5-cities traffic and Lompoc and Arroyo Grande School districts. Museum staff members are interested in providing interpretation of the rocky intertidal environment to families visiting the museum. Potential exhibits include creating an interpretive panel display near front entrance and across from the large aquarium and interactive beach dig play area. The panel display would feature photographs of rocky intertidal habitat and black abalone (*H. cracherodii*). Messages for the panel display include tidepool etiquette techniques and black abalone life history highlights including threats to their survival (recent listing as Federal endangered species) and current research efforts. The museum is also interested in developing an interpretive exhibit underneath the interpretive panel display that would feature

interactive tide pool models where children could learn how to inventory what they find in the space as well as learn how to safely interact with the tide pools and protect the black abalone. The museum could also potentially support outreach about black abalone and importance of rocky intertidal habitats to area schools. The museum works with Jim Morrow, a retired professor from Hancock College, (805-937-8624), to provide outreach to schools within 5 cities and suggested contacting him about developing a rocky intertidal outreach program for schools

- **Hancock Community College** (contact: Tammy Brannon). Hancock Community College regularly takes classes to Spyglass rocky intertidal by Pismo/Shell Beach. This is a good location for outreach and public interpretation. There is a public access pathway that empties onto rocky intertidal bench. They teach a marine biology course and could incorporate LiMPETS rocky intertidal monitoring protocols into student labs. CINMS could potentially utilize college students as field assistants for schools that want to participate in LiMPETS. Staff members at Hancock are also interested in student intern programs to provide interpretation during low tide days.
- **MARINE Network** (contact: Jack Engle). MARINE is a partnership of agencies, universities and private groups committed to determining the health of the rocky intertidal habitat and providing this information to the public. MARINE's objectives include: developing a long-term monitoring program with standardized protocols; develop a shared database; promote research projects; develop biological indices of measurement; and make MARINE findings available to the public. MARINE and CINMS discussed potential rocky intertidal beaches in Santa Barbara County that would be ideal for implementing LiMPETS rocky intertidal protocol and visitor use surveys and determined that Coal Oil Point and Campus Point are the best rocky intertidal beaches to focus on for these purposes. Shell Beach is also one of the sites that the MARINE network monitors.
- **UC Santa Barbara Marine Science Institute** (contact: Scott Simon). UCSB MSI is interested in setting up a visitor use survey for use at Campus Point and Coal oil Point rocky intertidal areas. They would utilize UCSB students to implement survey tool. UCSB MSI runs a Research Experience and Education Facility (REEF). The REEF provides marine science education support to undergraduate courses, such as Oceanography, Geology and Biology and outreach support through other departments and programs including: Materials Research Lab, Summer Sessions, Chemistry and Physics. The REEF program also supports 5-10 students, grades 8-12, with the opportunity to work alongside UCSB undergraduates to learn more about careers in marine and aquarium science at the REEF. Participants learn about research, animal husbandry, public speaking and the college experience. Because of high visitation by university students and K-12 students participating in REEF field trips, this is a great location for rocky intertidal interpretive signage and a black abalone exhibit. Also, REEF program could train volunteers to provide interpretive enforcement during low-tides at both

of these locations. There is a UCSB graduate student doing studies of black abalone settling cues and they are currently setting up a black abalone aquarium in the Research Experience and Education Facility on campus which serves 10,000 students per year.

- **Coal Oil Point Reserve** (contact: Leeza Charleboix). Coal Oil Point Reserve works with volunteers to provide interpretation about rocky intertidal species during low tide days. They would be interested in implementing a visitor use survey at this popular tidepooling site and providing interpretation about tidepool etiquette techniques and black abalone. Coal Oil Point Preserve is another potential location to feature rocky intertidal interpretive signs.
- **Cabrillo High School Aquarium** (Contacts: Greg Eisen, Michelle Poquette). The aquarium receives 5,000 visitors per year from the Lompoc region. Aquarium staff are interested in developing a black abalone exhibit that includes interpretive panels on natural history, current status as endangered species, and threats to their survival (contact Dan Richards for black abalone images (including historical shots at Channel Islands), Channel Islands National Park Rocky Intertidal data showing decline of species and current research efforts. Cabrillo Aquarium would develop educational activities that support the exhibit and would include rubber models of black abalone (one that includes a replica of an abalone suffering from withering foot disease), and a monitoring activity where students identify different rocky intertidal species including black abalone and assess relative abundance in a quadrat. The aquarium is an ideal location to host teacher workshops to train Northern Santa Barbara county teachers on LiMPETS rocky intertidal monitoring techniques. Staff is interested in building more LiMPETS rocky intertidal kits for teachers to check out from Cabrillo High School Aquarium. The aquarium currently supports LiMPETS monitoring program at Vandenberg Air Force Base.

As the Program progresses, additional collaborating organizations and agencies will likely be surveyed/contacted by CINMS as part of an ongoing Needs Assessment (e.g., Bureau of Land Management's Seabird Colony Enhancement Project, also funded by the Torch Trustee Council, may have related educational/outreach components). The results of this ongoing Needs Assessment will be provided in the quarterly progress reports for this Program (described below) and will be used to adaptively manage this Program to meet the Program goals.

**Task 2 - Action Plan Development and Implementation.** This section provides an outline for an Action Plan to develop educational and outreach components. The Action Plan links to partners described above that will work with CINMS to complete educational/outreach components listed below. As the Program develops, the Action Plan elements outlined below may be modified and may include, but are not necessarily limited to, the elements outlined below. However, changes to this Scope of Work, including the Action Plan, are subject to the conditions set forth below in Section V.

- **Hire Torch Oil Spill Rocky Intertidal Education Outreach Project Coordinator.** This position will coordinate with partners identified in the needs assessment to develop the different deliverables. This position will also provide administrative support to implement LiMPETS program as part of this project.  
**Cost estimate:** \$44,000 (part-time).
  
- **Development/Fabrication/Installation of Rocky Tidal Interpretive Signs.** These signs would provide natural history information about black abalone (*H. cracherodii*) and their adaptations to surviving in the rocky intertidal zone. Information about current research efforts underway to protect remaining “relic” populations along Santa Barbara County coast will be highlighted. The signs will also feature “tidepool etiquette techniques” to gently explore tidepool communities without impacting them. **Potential locations:** Jalama Beach County Park, Coal Oil Point, Campus Point, and Shell Beach (San Luis Obispo County).  
**Cost estimate:** \$ 14,000 (\$3500/sign x 4 signs - includes design, fabrication and installation)
  
- **Development of Outreach Graphics, Messages and Outreach Materials.** These materials will highlight the importance of protecting black abalone, current research underway to understand threats to their survival and ocean etiquette techniques to minimize impacts to remaining populations.
  1. **Black abalone (*H. cracherodii*) models** (healthy individual vs. diseased individual). These models would be used in interactive exhibit displays and outreach programs for visitors and students to identify different anatomical features of abalone and assess the differences between a healthy individual and a diseased individual.  
**Potential locations:** Ty Warner Sea Center, UC Santa Barbara MSI REEF program, Cabrillo High School Aquarium, Santa Maria Discovery Museum plus one traveling set for outreach events.  
**Cost estimate:** \$750 per set x 5 sets = \$3,750
  
  2. **Interpretive graphic panels.**
    - i. **Discovery Museum.** Up to four interpretive panels to be placed in the windows near the shark tank. These panels would be photo-mosaics.  
**Cost estimate:** \$4,000 (2K per panel x 2 panels).
    - ii. **Ty Warner Sea Center.** Interpretive and graphic panels that highlight current research underway to protect black abalone and natural history information.  
**Cost estimate:** \$3,500
    - iii. **UCSB MSI REEF Program.** Interpretive and graphic panels that highlight current research underway to protect black abalone and natural history information. These panels would be located in the REEF touch tank area.  
**Cost Estimate -** \$3,500

- iv. **Jalama Beach County Park.** Interpretive wayside exhibits (next to welcome kiosk at camper check in point) that feature natural and cultural history of area and interpretation about sand beach and rocky intertidal communities including black abalone. Interpretive panels for visitor center that highlight natural history of black abalone and rocky intertidal resources found at Jalama Beach County Park.  
**Cost estimate:** \$5,000 (wayside exhibit panels)
      - v. **Cabrillo High School Aquarium.** Interpretive and graphic panels that highlight current research underway to protect black abalone and natural history information.  
**Cost Estimate -** \$3,500
- 3. **Intertidal habitat models.**
  - i. **Discovery Museum.** Children could learn how to inventory what they find in the rocky intertidal as well as learn how to safely interact with the tide pools and protect the black abalone.  
**Cost estimate:** \$7,000
  - ii. **Cabrillo High School Aquarium.** Students visiting aquarium could learn to inventory intertidal species and understand the role of monitoring in understanding overall health of system. This model would incorporate using quadrats and other tools to assess abundance and distribution of intertidal organisms.  
**Cost estimate:** \$7,000
- 4. **Black Abalone Aquaria.** **Aquaria** to feature black abalone (*H. cracherodii*).  
**Cost Estimate:** \$6000 (\$4,000 for UCSB tank, \$2000 for Cabrillo High School tank)  
**Potential locations:** UCSB REEF building and Cabrillo High School Aquarium.
- **Train volunteers to interpret and assist with outreach and monitoring to evaluate visitor use patterns and resource impacts** at popular Santa Barbara County rocky intertidal locations. CINMS estimates training 25 volunteers to conduct visitor use surveys.
  - 1. **Adaptation and development of a rocky intertidal field interpretive course** developed by California Academy of Sciences and Gulf of the Farallones NMS that trains volunteers to interpret and assist with monitoring visitor use patterns and resources impacts.  
**Cost estimate:** \$4,000 (travel, training materials and stipend for trainer from Cal Academy of Sciences)  
**Potential training participants:** UCSB REEF staff, Coal Oil Point volunteers, Hancock Community College students, Cabrillo High School Aquarium staff and students

2. **Visitor Use Surveys** including Campus Point, Coal Oil Point and Shell Beach and Jalama.  
**Cost Estimate:** \$60.00/volunteer (\$20.00/hour @ 3 hours) x 25 = \$1,500  
**Potential partners:** UCSB, Coal Oil Point Reserve, Hancock Community College.
- **Expansion of Long-term Monitoring and Experiential Training Programs for Students (LiMPETS)** to include educational partners that will work with teachers/students to monitor rocky intertidal sites in northern Santa Barbara County. In 2000, the Channel Islands National Marine Sanctuary worked with four other west coast National Marine Sanctuaries: Olympic Coast in Washington, Cordell Bank, Gulf of the Farallones, and Monterey Bay in California and UC Santa Cruz to develop LiMPETS. LiMPETS provides authentic, hands-on classroom and coastal field monitoring experiences that connect teachers, students and the community to the ocean. LiMPETS provides training and support in scientific methods and protocols, builds a long-term quantitative rocky intertidal and sandy beach online database, maintains a network of trained data collectors and monitoring sites along the California coastline, develops a cadre of citizen scientists that support the National Marine Sanctuary System, and inspires ocean awareness and science literacy. Currently over 65 teachers actively participate in LiMPETS (whole network) and the LiMPETS network impacts approximately 3,500 students. In LiMPETS, CINMS collaborates with other sanctuaries, universities, informal education centers, K-16 teachers, other government agencies to implement this program. Sanctuary educators have written and published articles about LiMPETS in educational journals such as *NMEA Currents* and educational publications of the Long Term Ecological Research program. For more information about LiMPETS, visit <http://limpetsmonitoring.org> For this project, CINMS will include monitoring of black abalone (*H. cracherodii*) during their total organism counts. This funding will allow CINMS to target and train 10 new teachers in North Santa Barbara County to participate in monitoring rocky intertidal communities using LiMPETS protocols. Funding will support teacher trainings, kit development bus money to transport students to monitoring sites and an annual LiMPETS symposium.
  1. **Fabrication of LiMPET rocky intertidal kits.**  
**Cost Estimate:** \$3,200 (\$400/kit – (2) kits per location – total 8 kits)  
**Potential locations:** Ty Warner Sea Center, UCSB MSI, Cabrillo High School Aquarium, Hancock Community College.
  2. **Conduct LiMPETS teacher trainings.** Host two (2) LiMPETS rocky intertidal trainings (one at Cabrillo High School and another at UCSB MSI) to recruit Santa Barbara county teachers to participate in rocky intertidal monitoring of black abalone and other rocky intertidal indicator species. Participating teachers would adopt one of the rocky intertidal beaches that is part of this project (Campus Point, Coal Oil Point, Jalama and Shell Beach Rocky intertidal) and would need to commit to monitoring that site one time per year.

**Cost estimate:** \$3,000 for one year (\$1,500 per workshop covers teacher stipends (\$100/teacher for 10 teachers) and workshop materials

3. **Funding to support bus transportation.** Provide bus transportation for teachers to access Campus Point, Coal Oil Point, Vandenberg Air Force Base, and Shell Beach rocky intertidal,

**Cost estimate:** \$7,500 for one year (\$750.00/bus x 10 buses)

4. **LiMPETS symposium.** This symposium would feature keynote speakers who are experts in aspects of rocky intertidal ecology to discuss current resource issues and the importance of monitoring to understand overall rocky intertidal ecosystem health. The symposium would also provide an opportunity for participating LiMPETS network educators to interact with each other and share lessons learned/issues with implementing LiMPETS protocols with their students. A lab practicum is also included to provide more training on species taxonomy.

**Cost estimate:** \$5,000 for one year – includes travel and stipends for keynote speakers (\$3000), stipends for participating LiMPETS teachers to attend symposium and workshops (\$2,000 - \$100/teacher x 20)

**Project partners:** UCSB MSI and Hancock Community College

- **Santa Maria Discovery Museum Outreach Program.** Rocky Intertidal habitat outreach program focusing on black abalone for 50 classrooms in northern Santa Barbara County.

**Cost estimate:** \$1,500 for instructor and \$2,500 for outreach kit = \$4,000 per year

### **Task 3 - Establish Project Performance Criteria & Conduct Monitoring/Surveys:**

Specific performance criteria will be developed as part of project implementation, and will measure things such as types of visitor uses, locations visited, and visitor use patterns will be evaluated, including evaluating level of awareness of tidepool etiquette. Effects on the biological resources will also be evaluated at sites that differ in their levels of visitor use.

The effectiveness of the different education and outreach strategies outlined in Task 2 (rocky intertidal interpretive sign plan, exhibits at different Santa Barbara County informal science centers and volunteer interpretive enforcement programs) will be assessed at (3) popular rocky intertidal beaches (Campus Point, Coal Oil Point, Shell Beach and Jalama) through both biological and human use surveys. An additional rocky intertidal beach within the Vandenberg Air Force Base will also be assessed as a control site for biological and visitor use monitoring. The LiMPETS program (described in task 2) will be the main biological monitoring program used to monitor key indicator species (including *H. cracherodii*) of rocky intertidal communities. Visitor use surveys will be developed to quantify different human behaviors (beach combing, collecting etc) in rocky intertidal communities. Both survey techniques will be applied at the (4) rocky intertidal locations before establishment of different education and outreach strategies to determine a baseline and then monitoring at these different sites will continue as different education and outreach strategies are implemented. The Torch Oil Spill Rocky Intertidal Education Outreach Project Coordinator will coordinate and implement this

work with guidance and oversight from Julie Bursek and Laura Francis, Channel Islands NMS Education Coordinators.

**Professional Evaluation of Torch Oil Spill Rocky Intertidal Education Program.** CNMS will commission an outside professional evaluator to help evaluate signage, exhibits, teacher and student programs and visitor surveys to determine the success of these programs.

**Cost Estimate:** \$7,050. (Usually, this would cost 10% of total project budget or \$13, 650, but CINMS (Bursek and Francis) will do some of the work as an in-kind contribution with professional assistance). The evaluation will be phased in over the life of the project, and as warranted project changes may be incorporated through adaptive management of the project.

### III. DELIVERABLES

Deliverables under this Scope of Work include:

- Quarterly progress reports summarizing previous quarter's project accomplishments, lesson's learned, budget summary, and Needs Assessment results summary report from Task 1. Additionally, the quarterly progress report shall contain a statement explaining any problems, delays or adverse conditions significantly impairing the ability of CINMS to meet the Program objectives. The statement should include efforts undertaken to resolve the problem, and any proposed changes in the tasks, budget or schedule under this Scope of Work (with justification).
- Draft and Final Action Plan (Task 2)
- Interpretive materials (Task 2)
- Educational materials (Task 2)
- Monitoring/Survey Plan (Task 3)
- Monitoring/Survey results (Task 3)
- Final Report, including Program evaluation (Task 3), summarizing project accomplishments, lesson's learned, budget summary, a description of any problems, delays or adverse conditions that significantly impaired the ability of CINMS to meet the Program objectives and any efforts undertaken to resolve the problem, and any changes in the tasks or budget under this Scope of Work.

**IV. PROJECT TASK SCHEDULE AND BUDGET**

<b>PROJECT TASK</b>	<b>SCHEDULE</b>	<b>BUDGET</b>
Needs Assessment & development of project SOW	Completed Winter/Spring 2009	(Completed: In Kind support from CINMS education and outreach coordinators – value = \$2500)
Development & Implementation of Action Plan	Months 1-12 after Agreement is signed	\$25,000 project coordinator time to coordinate development of interpretive sign plan, teacher and volunteer trainings \$6,200 LiMPETS kit development & teacher trainings, \$4,000 volunteer training program \$ 43,250 abalone exhibits and rocky intertidal interpretive panel development, fabrication, and installation for informal science centers and Jalama Beach Park \$14,000 Outdoor Interpretive sign development, fabrication and installation \$4,000 – Santa Maria Discovery Center Outreach Program
Establish Project Performance Criteria & Conduct Monitoring	Months 12-36 after Agreement is signed	\$19,000 project coordinator time to coordinate and implement LiMPETS and coordinate visitor use survey techniques \$7,500 bus transportation \$5,000 LiMPETS symposium (2011) \$1,500 visitor use survey implementation Project Evaluation: \$7,050
<b>Total Project Cost</b>		<b>\$136,500</b>

## V. AGREEMENT

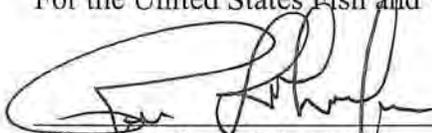
1. The Torch Trustee Council plans to enter into a Trustee Council Resolution authorizing \$136,500 of the Torch Spill funds in the NRDAR Fund be released to NOAA for use by the CINMS for implementation of the Program. A fully executed copy of this Scope of Work and Agreement will be included as an attachment to the Trustee Council Resolution. The Trustee Council Resolution will incorporate the terms of this Scope of Work and Agreement therein. The USFWS will be the lead federal agency for oversight and coordination with NOAA during implementation of the Program. USFWS and NOAA (the "Parties"), hereby agree to the provisions contained in this Scope of Work and Agreement.
2. NOAA agrees to use the \$136,500 of Torch Spill funds consistent with the tasks, schedule and budget set forth in this Scope of Work and any modifications thereto made in accordance with the provisions in this Agreement governing modifications.
3. All deliverables outlined in Section III of this Scope of Work will be provided to the Trustee Council in a timely manner. NOAA agrees to provide all educational/outreach materials produced for this project to the Trustee Council for review and approval prior to their use (although, the Trustee Council may delegate review and approval of these materials to the USFWS).
4. NOAA agrees to provide quarterly progress reports and a Final Report as outlined above. The quarterly reports will be provided to the Trustee Council beginning at the end of the first quarter of the Program and continuing on a quarterly basis thereafter for the duration of Program. Quarterly progress reports will be provided to the Trustee Council no later than ten business days into the following quarter. NOAA will provide these quarterly progress reports in a form which clearly shows the progress of the activities, and which provides clear and accurate information about the budget. NOAA may use its standard format for such reporting. The Final Report will be provided to the Trustee Council no later than thirty business days after completion of the final task of the Program.
5. Upon Trustee Council review of the quarterly progress reports, in the event the Trustee Council has concerns about the CIMNS implementation of the Program, NOAA agrees to work with the Trustee Council to make a reasonable and good faith effort to address and resolve these concerns.
6. This Scope of Work may be modified by either Party upon written request and the Trustee Council's written approval of the change. The request should include a summary of the suggested changes and any resultant changes in the budget. Any changes to the Scope of Work should be documented in the quarterly progress reports and the Final Report. The USFWS may determine that a change is minor, routine or non-substantive and may agree to modify the Scope of Work without the entire Trustee Counsel written approval. The USFWS will provide written notification (email will suffice) of any such proposed modifications to the Trustee Counsel and if feasible, the written notification will be at least 10 business days prior to implementation of the modification.

7. The Parties anticipate that this Scope of Work and Agreement will be successfully executed. However, in the event that there arises some conflict between NOAA and the Trustee Council which cannot be resolved as described above, the Trustee Council shall provide NOAA notification of its intent to terminate. NOAA shall have every opportunity to cure any deficiencies, and the Trustee Council shall work in good faith to resolve any such issue. If The Trustee Council or NOAA determine that any such conflict cannot be resolved after reasonable and good faith efforts, this Scope of Work and Agreement may be terminated. Such termination must be in writing by NOAA and the Trustee Council. At such time as the termination occurs, NOAA shall refund any unexpended funds to the USFWS or to the NRDAR Fund, as appropriate.

8. NOAA's projected timeline for completion on the tasks set forth in this Scope of Work is three years. The \$136,500 of Torch Spill funds disbursed to NOAA for the Rocky Intertidal Protection Program will be available to NOAA for a period not to exceed five years, unless the Program term is extended upon written agreement of the Trustee Council and NOAA. Upon completion of the tasks set forth in this Scope of Work, or five years after the date of the disbursement to NOAA of the Torch spill funds from the NRDAR account, whichever occurs first, NOAA will refund any unexpended funds to the USFWS or to the NRDAR Fund, as appropriate, unless the Program term is extended by written agreement of the Trustee Council and NOAA.

9. The effective date of this Agreement is the date of the last signatory to this Agreement. This Agreement will remain in effect during the life of the Program for a period not to exceed five years, unless renewed by written agreement of the Trustee Council and NOAA.

For the United States Fish and Wildlife Service:

  
\_\_\_\_\_  
Ren Lohofener, Director  
Region 8 - Pacific Southwest Region

March 10, 2010  
Date

For the National Oceanic and Atmospheric Administration:

\_\_\_\_\_  
Dan Basta, Director  
Office of National Marine Sanctuaries

\_\_\_\_\_  
Date

7. The Parties anticipate that this Scope of Work and Agreement will be successfully executed. However, in the event that there arises some conflict between NOAA and the Trustee Counsel which cannot be resolved as described above, the Trustee Counsel shall provide NOAA notification of its intent to terminate. NOAA shall have every opportunity to cure any deficiencies, and the Trustee Counsel shall work in good faith to resolve any such issue. If The Trustee Council or NOAA determine that any such conflict cannot be resolved after reasonable and good faith efforts, this Scope of Work and Agreement may be terminated. Such termination must be in writing by NOAA and the Trustee Council. At such time as the termination occurs, NOAA shall refund any unexpended funds to the USFWS or to the NRDAR Fund, as appropriate.

8. NOAA's projected timeline for completion on the tasks set forth in this Scope of Work is three years. The \$136,500 of Torch Spill funds disbursed to NOAA for the Rocky Intertidal Protection Program will be available to NOAA for a period not to exceed five years, unless the Program term is extended upon written agreement of the Trustee Council and NOAA. Upon completion of the tasks set forth in this Scope of Work, or five years after the date of the disbursement to NOAA of the Torch spill funds from the NRDAR account, whichever occurs first, NOAA will refund any unexpended funds to the USFWS or to the NRDAR Fund, as appropriate, unless the Program term is extended by written agreement of the Trustee Council and NOAA.

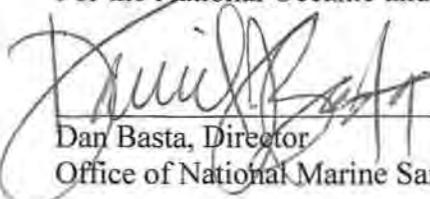
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For the United States Fish and Wildlife Service:

\_\_\_\_\_  
Ren Lohoefer, Director  
Region 8 - Pacific Southwest Region

\_\_\_\_\_  
Date

For the National Oceanic and Atmospheric Administration:

  
\_\_\_\_\_  
Dan Basta, Director  
Office of National Marine Sanctuaries

3/19/10  
\_\_\_\_\_  
Date