Science Coordination and Synthesis - Holderied (NOAA KBL, 15120114-H)

FY15 PROJECT PROPOSAL SUMMARY PAGE Continuing, Multi-Year Projects

Project Title: Science Coordination and Synthesis for the Long Term Monitoring Program

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

Primary Investigator(s): Kris Holderied, NOAA Kasitsna Bay Laboratory, Kris. Holderied@noaa.gov, 907-235-4004, 2181 Kachemak Drive, Homer, AK 99603

Study Location: North-central Gulf of Alaska region from Katmai National Park to Prince William Sound

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

Abstract*: This project is a component of the integrated Long-term Monitoring of Marine Conditions and Injured Resources and Services submitted by McCammon et al (2011). This project explicitly provides for science coordination and syntheses of data from our long-term monitoring program, as well as incorporating an interdisciplinary framework into program development and implementation. The science coordination and synthesis component of our integrated program improves linkages between monitoring in different regions (Prince William Sound, Gulf of Alaska shelf, lower Cook Inlet) as well as between disciplines in a given region, as a way to better discern the impacts of environmental change on restoration and continued recovery of injured resources. Science coordination includes facilitating program planning and sharing of information between principal investigators, developing annual reports on the science program, and coordinating ongoing evaluation of the overall program. Science synthesis efforts help integrate information across the entire program and are closely coordinated with the conceptual ecological modeling and data management teams in our integrated program.

Estimated Budget:

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

FY12	FY13	FY14	FY15	FY16	TOTAL
\$221.6	\$139.0	\$148.3	\$146.1	\$164.6	\$819.6

Non-EVOSTC Funds to be used:

FY12	FY13	FY14	FY15	FY16	TOTAL		
	\$13.0	\$13.0	\$13.0	\$13.0	\$52.0		

Date: September 2, 2014

I. EXECUTIVE SUMMARY

The overarching goal of the long-term monitoring program is to provide sound scientific data and products to inform management agencies and the public of changes in the environment and the impacts of these changes on injured resources and services. The science coordination and synthesis efforts support this goal by documenting the overall science monitoring program, improving information sharing between Principal Investigators (PIs) and with the herring program, assisting in development of multi-disciplinary datasets and tools, and informing an ongoing evaluation of the long term monitoring program's effectiveness and priorities in meeting EVOSTC goals. This continuing project addresses three primary objectives: 1) improve communication and data sharing; 2) improve and document integration of monitoring results; and 3) improve communication of monitoring information to resource managers and the general public.

II. COORDINATION AND COLLABORATION

A. Within a EVOSTC-Funded Program

The first primary objective of the science synthesis project is to improve communication and data sharing between the various projects within the program. Below is a list of the projects and coordination activities that will occur in year 4 of the program:

Gulf Watch Alaska Program Management, Outreach, and Administration Activities

- Program coordination and logistics Prince William Sound Science Center (PWSSC) and Alaska
 Ocean Observing System (AOOS): The science coordinator will continue to work closely with PWSSC
 staff to assist with overall administrative activities of the program, including developing reports, and
 planning meetings and events.
- Outreach AOOS: The science coordinator will continue to participate in the Outreach Planning
 Committee and work to report and plan local events as well as assists with updates to website pages
 and publically accessible information.
- Data management –AOOS/Axiom Consulting: The science coordinator will continue to work with
 Axiom staff to develop new data management and data access tools, including participating in AOOS
 tool rating webinars and teleconferences, providing data and feedback for new access tools in the
 data portal, and providing feedback to improve metadata generation tools. The science coordinator
 also will continue to work with all project Principal Investigators within the program to ensure new
 data is loaded to the portal, has undergone QA/QC measures, and also has appropriate metadata
 available for public access.
- Historical data management and synthesis National Center for Ecological Assessment and Synthesis (NCEAS): The science coordinator will continue to facilitate communication between project principal investigators and NCEAS staff for data collection and synthesis and work to provide feedback for new data management tools and data publication.
- Conceptual ecological modeling— Alaska Sea Life Center (ASLC): The science coordinator will
 continue to work with ASLC staff to develop sub-model descriptions and updates and incorporate
 information into reports as well as plan and coordinate model development during meetings and
 workshops for the program.

Gulf Watch Alaska Field Monitoring project Coordination Activities

The science synthesis and coordination project science coordinator will continue to conduct a variety of activities to facilitate reporting, outreach, sharing, and publication of the information from the various monitoring projects. These activities will include:

- 1. Tracking and assisting with data and metadata publication in the program data portal.
- 2. Editorial review, collation, and writing the program synthesis pieces of reports and work plans.
- 3. Editorial review, website development and updates, and assistance with coordination of outreach events for each project.
- 4. Planning and documenting all quarterly teleconferences and meetings, providing notes and information to the group.
- 5. Attendance to a variety of scientific workshops to facilitate coordination of ideas and information from outside of the program.
- 6. Maintenance of program intranet site for purposes of conveying important dates and program information.

These activities will continue to be conducted as a coordinated effort for all of the monitoring projects within the program:

- Gulf of Alaska mooring (GAK1) monitoring University of Alaska Fairbanks (UAF)
- Seward line monitoring UAF
- Oceanographic conditions in Prince William Sound PWSSC
- Oceanographic monitoring in Cook Inlet Alaska Department of Fish and Game (ADFG) / Kachemak
 Bay Research Reserve (KBRR)/ KBL
- Continuous plankton recorder –Sir Alister Hardy Foundation for Ocean Science (SAHFOS)
- Ability to detect trends in nearshore marine birds USNPS Southwest Alaska inventory and monitoring Network (SWAN)
- Long-term killer whale monitoring North Gulf Oceanic Society (NGOS)
- Humpback whale predation on herring NOAA National Marine Fisheries Service (NMFS) Auke Bay Laboratory
- Forage fish distribution and abundance U. S. Geological Survey (USGS) Alaska Science Center
- Prince William Sound marine bird surveys U.S. Fish and Wildlife Service (USFWS)
- Nearshore benthic systems in the Gulf of Alaska USGS Alaska Science Center/ USNPS SWAN,
 Coastal Resources Associates
- Ecological Communities in Kachemak Bay UAF
- EVOS oil exposure of harlequin ducks and sea otters USGS Alaska Science Center
- Oil level and weathering tracking NOAA/NMFS Auke Bay Laboratory

B. With Other EVOSTC-funded Projects

The Science Coordination and Synthesis project science coordinator will continue to work closely with the Herring Research and Monitoring program PIs to maintain reporting consistencies and share information. The science coordinator and HRM program coordinator continue to participate in annual meetings, teleconferences and work closely to encourage information sharing and address shared questions between the programs.

C. With Trustee or Management Agencies

III. PROJECT DESIGN - PLAN FOR FY15

A. Objectives for FY15

This project addresses three primary objectives that are ongoing: 1) improve communication and data sharing; 2) improve and document integration of monitoring results; and 3) improve communication of monitoring information to resource managers and the general public.

B. Changes to Project Design

No changes are planned.

IV. SCHEDULE

A. Project Milestones for FY 15

Objective 1. Improve communication, data sharing and coordinated field work planning between principal investigators of the individual monitoring projects, as well as with other agencies and research organizations.

Ongoing throughout project.

Objective 2. Improve and document integration of science monitoring results across the LTM program - working with the PIs, data management and modeling teams as well as other agencies and research organizations.

Ongoing throughout project.

Objective 3. Improve communication of monitoring information to resource managers and the public through data synthesis and visualization products and tools – working with the data management, conceptual ecological modeling and outreach teams, as well as other agencies and research organizations

Ongoing throughout project.

B. Measurable Project Tasks for FY 15

Many of the Science Coordination and Synthesis tasks and activities are ongoing throughout the year and will continue as proposed. These include:

- 1. Coordinate with Team Lead, PIs, administrative team and EVOSTC staff on overall LTM program planning, reporting and evaluation.
- 2. Plan agendas and facilitate program and small working group meetings and teleconferences.
- 3. Maintain program field work schedule and tracking of outreach and research activities.
- 4. Coordinate with the herring program lead on program implementation and joint information needs.
- 5. Coordinate with groups outside the LTM program (NPRB GOAIERP, NPS, GINA, LCCs etc.) on joint synthesis of information.
- 6. Coordinate with PIs to improve integration of multi-disciplinary monitoring activities within geographic regions (PWS, outer Kenai Peninsula coast, lower Cook Inlet) and of monitoring within single disciplines between different regions.
- 7. Assist in development and refinement of conceptual ecological models with the modeling team, herring program lead, and outside groups.

- 8. Work with data management team, modeling PI, and outreach team to develop data exploration and visualization tools.
- 9. Assist with internal "beta" testing of initial data visualizations and tools developed by the data management team.
- 10. Network with other monitoring programs and regional stakeholders to identify information needs that may be met by improved data visualization tools for the LTM program data.

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

February: Participate in Joint Science Workshop with Herring Program.

Compile, edit, annual reports for Year 3 EVOSTC and annual NOAA report.

March: Submit annual reports for EVOSTC Year 3 and annual NOAA report.

April: Plan and coordinate quarterly program teleconference

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

May: Prepare and disseminate work plan templates to group June-July: Plan and facilitate quarterly program teleconference

Prepare Year 5 work plan for Science Synthesis and for Program

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

August: Compile and edit program work plans for Year 5 and mid-year reports for NOAA

September 1: Year 5 work plans submitted to EVOSTC and mid-year report to NOAA

October: Plan annual PI meeting and workshops

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

November: Annual PI meeting and workshops

December-January: Preparation for and attendance to AMSS

Plan and facilitate quarterly program teleconference

Begin compilation of Year 4 annual report.

V. PROJECT PERSONNEL – CHANGES AND UPDATES

No changes are proposed.

VI. BUDGET

D. Budget Forms (Attached)

Please see included program workbook for budget forms.

E. Changes from Original Proposal

No changes proposed.

F. Sources of Additional Funding

Identify non-EVOSTC funds or in-kind contributions used as cost-share for the work in this proposal. List the amount of funds, the source of funds, and the purpose for which the funds will be used. Do not include funds that are not directly and specifically related to the work being proposed in this proposal.