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: Herring Research and Monitoring – Coordination and Logistics

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

Primary Investigator(s): W. Scott Pegau, Prince William Sound Science Center

Study Location: Prince William Sound

Project Website (if applicable): http://pwssc.org/research/fish/pacific-herring/

Abstract*:

This project is for the coordination and logistics aspects of the proposed program titled, "Herring Research and Monitoring". The long-term goal of the program is to improve predictive models of herring stocks through observations and research. The objectives of the program are 1) *Provide information to improve input to the age-structure-analysis* (ASA) model, or test assumptions within the ASA model, 2) Inform the required synthesis effort, 3) Address assumptions in the current measurements, and 4) Develop new approaches to monitoring. The Coordination and Logistics project objectives are to 1) ensure coordination between projects to achieve the program objectives, 2) Provide a synthesis from existing results, and 3) provide logistical support to the various projects.

Coordination includes scheduling of projects to ensure the maximum sharing of vessel time and ensuring that projects dependent on results or samples from another project are in the correct order. Coordination will be primarily through email and teleconference, but each year all the investigators are required to meet in person. Coordination is also taking place with the existing Herring Survey program, the Long-Term monitoring program, and ADF&G herring sampling.

Logistics is primarily in providing vessel time.

The synthesis to be provided by this project is leveraging the required synthesis of the existing Herring Survey program. We intend to update that effort with new results and add a section on how environmental conditions affect herring growth.

Estimated Budget:

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

FY12	FY13	FY14	FY15	FY16	TOTAL
364,126	510,261	388,136	339,007	338,583	1,940,113

Non-EVOSTC Funds to be used:

FY12	FY13	FY14	FY15	FY16	TOTAL
20,000	21,000	22,000	24,000		

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

Date: 15 August 2014

I. EXECUTIVE SUMMARY

This project is for the coordination and logistics aspects of the proposed program titled, "Herring Research and Monitoring" (HRM). The long-term goal of the program is to improve predictive models of herring stocks through observations and research. The objectives of the program are 1) *Provide information to improve input to the age-structure-analysis* (ASA) model, or test assumptions within the ASA model, 2) Inform the required synthesis effort, 3) Address assumptions in the current measurements, and 4) Develop new approaches to monitoring. In support of the program the Coordination and Logistics project objectives are to 1) ensure coordination between projects to achieve the program objectives, 2) Provide a synthesis from existing results, and 3) provide logistical support to the various projects.

Coordination includes scheduling of projects to ensure the maximum sharing of vessel time and ensuring that projects dependent on results or samples from another project are in the correct order. Coordination is primarily through email and teleconference, but each year all the investigators are required to meet in person. Coordination is also taking place with the existing Herring Survey program, the Long-Term monitoring program (Gulf Watch Alaska, GWA), and Alaska Department of Fish and Game (ADF&G) herring sampling. This coordination is accomplished through attendance in the Gulf Watch Alaska principal investigator (PI) meetings and teleconferences. The aerial surveys are also coordinated between the two programs to maximize benefit to both programs. This was the first year of the coordinated aerial survey project and we were able to achieve our objectives and find new approaches that may help refine our future protocols.

Logistics is primarily in providing vessel and aircraft time. It also includes setting up PI meetings for all projects to share information.

The synthesis to be provided by this project is leveraging the required synthesis of the Herring Survey program that was submitted in 2013. We intend to update that effort with new results and add a section on how environmental conditions affect herring growth.

II. COORDINATION AND COLLABORATION A. Within a EVOTC-Funded Program

Coordination within the HRM program includes scheduling of projects to ensure the maximum sharing of vessel time so that projects dependent on results or samples from another project are in the correct order. Coordination is primarily through email and teleconference, but each year all the investigators are required to meet in person.

Coordination between the HRM and GWA programs is accomplished through attendance in the Gulf Watch Alaska principal investigator (PI) meetings and teleconferences. The aerial surveys are also coordinated between the two programs to maximize benefit to both programs. This was the first year of the coordinated aerial survey project and we were able to achieve our objectives and find new approaches that may help refine our future protocols. The forage fish project provided equipment and protocols and the herring program provided observers. The aerial surveys also provided the summertime observations to the humpback whale project. The HRM growth and energetics are working with investigators in the environmental drivers portion of GWA to examine relationships between the environmental conditions and herring growth and condition.

B. With Other EVOSTC-funded Projects

We do not have collaborative work with EVOSTC-funded projects outside of the HRM and GWA programs.

C. With Trustee or Management Agencies

The HRM program is conducted in close collaboration with ADF&G. The long-term goal and objectives of the program are designed to benefit ADF&G by improving information and testing assumptions of the age-structure-analysis model. Steve Moffitt in Cordova (local area biologist) and Sherri Dressel in Juneau (statewide herring coordinator and member of the HRM oversight group) are our primary two contacts in ADF&G. The HRM program includes a project that is scanning in a portion of the ADF&G scale library so it is preserved in a form that can be used within and external to ADF&G. HRM provides some aerial survey time to document herring spawn in areas or at times that ADF&G are unable to fly. We coordinated with them the location of remote cameras for testing their ability to provide an indication of when spawn may occur in remote locations. We have also supported the collection of herring at Kayak Island the past two years and at Montague Island to provide some indication of the age structure at those locations. ADF&G has provided an opportunity for the HRM disease project to sample the adult spawning population. The prevalence of the three major diseases are then reported back to ADF&G. We also coordinate with ADF&G in providing acoustic estimates of the adult herring spawning biomass.

The National Oceanographic and Atmospheric Administration (Ron Heintz) and the United States Geological Service (Paul Hershberger) also are participants in the HRM program. As participants in the program they are involved in the coordination efforts.

III. PROJECT DESIGN – PLAN FOR FY15 A. Objectives for FY15

This projects objectives are:

- 1) Ensure coordination between projects to achieve the program objectives.
- 2) Provide a synthesis from existing results.
- 3) Provide logistical support to the various projects.

B. Changes to Project Design

We are not anticipating any large changes to the design of the Coordination and Logistics project. The meeting with the EVOSTC Science Panel to discuss the synthesis and design is scheduled to occur in FY15 although in the original proposal we expected that to occur in FY14. The Coordination and Logistics project is now also providing personnel to be the observer and data recorder on the aerial survey flights in June and July.

IV. SCHEDULE

A. Project Milestones for FY 15

Objective 1. Ensure coordination between projects to achieve the program objectives. *Continuing objective.*

Because of the coordination required for synthesis and science meeting we may choose not to hold another PI meeting in the spring. We anticipate meeting in November 2014 and January 2015.

Objective 2. Provide a synthesis from existing results.

Synthesis due in December 2014, but presentation to the EVOSTC staff and science panel in February 2015.

Objective 3. Provide logistical support to the various projects.

Continuing objective

B. Measurable Project Tasks for FY 15

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

February: Attend EVOSTC Science workshop

Submit annual report

March: Support spring collection of juvenile herring

Support expanded adult survey cruises

April: Support Aerial surveys of herring spawn

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

May: Conduct Annual PI meeting (tentative)

June: Support Aerial surveys of juvenile herring

July: Support Aerial surveys of forage fish

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

August: Submit FY16 proposal

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

November: Support fall juvenile herring survey

January: Attend Alaska Marine Science Symposium

V. PROJECT PERSONNEL - CHANGES AND UPDATES

No personnel changes are anticipated

VI. BUDGET

A. Budget Forms (Attached)

Provide completed budget forms.

B. Changes from Original Proposal

The FY 15 budget has funding in contractual for the "Aerial Survey Support" project that wasn't part of the original proposal. All other categories remain the same.

C. Sources of Additional Funding

OSRI provides up to two months (\$24,000) of additional support for salary to Dr. Pegau to complete the coordination efforts.