

ATTACHMENT B. Annual Project Report Form (Revised 11.21.19)

1. Project Number:

20200114-P

2. Project Title:

Long-term Monitoring of Lingering Oil in Prince William Sound

3. Principal Investigator(s) Names:

Mandy Lindeberg, NOAA NMFS Alaska Fisheries Science Center, Auke Bay Laboratories

Ron Heintz, Sitka Sound Science Center

4. Time Period Covered by the Report:

February 1, 2020-January 31, 2021

5. Date of Report:

March 2021

6. Project Website (if applicable):

www.gulfwatchalaska.org

7. Summary of Work Performed:

The “Long-term Monitoring of Lingering Oil in Prince William Sound” project was proposed and funded for FY20. However, this project was unable to launch due to state and federal restrictions associated with the COVID-19 pandemic. Project principal investigators (PIs) and staff were simply not able to safely conduct fieldwork during the summer of 2020. The project PIs submitted an FY21 Work Plan to the *Exxon Valdez* Oil Spill Trustee Council (EVOSTC) proposing a year delay, which they graciously approved.

This project is to build upon previous lingering oil projects funded by the EVOSTC and recommendations to revisit monitoring sites approximately once every five years. Previous EVOSTC-funded studies had demonstrated that, on some beaches, subsurface oil persisted in a relatively unweathered state longer than expected with an unknown long-term fate. The overall goal of this lingering oil project is to extend previous efforts to track *Exxon Valdez* oil (EVO) occurrence and chemical composition in Prince William Sound (PWS) and maintain the long-term time series. The main objectives for this project are to: 1) maintain surveillance of lingering oil by conducting a

survey at select monitoring sites, and 2) collect and archive biomarkers for future analysis from oiled residues found on these sites.

Despite delays, project PIs intend to follow through with the original proposed tasks and perform work on the following schedule:

| | |
|------------------|---|
| February 2021 | Submit an FY20 annual report to the EVOSTC |
| Summer 2021 | Conduct a lingering oil survey in PWS and collect oil samples |
| August 2021 | Submit FY22 Work Plan to the EVOSTC if needed |
| Summer/Fall 2021 | Complete data analysis |
| Fall 2021 | Attend and present at the Gulf Watch Alaska (GWA)/Herring Research and Monitoring (HRM) annual PI meeting; update lingering oil webpage on program website (www.gulfwatchalaska.org) |
| December 2021 | If possible, submit data to Alaska Ocean Observing System (AOOS)/Axiom (not actually due until the following year) |
| January 2022 | Present at the Alaska Marine Science Symposium; draft article for Delta Sound Connections |
| March 2022 | Submit draft final report to the EVOSTC; final data available to public on AOOS and is published to DataONE by Axiom with the rest of the program datasets on schedule. |

8. Coordination/Collaboration:

A. Long-term Monitoring and Research Program Projects

1. Within the Program

This project falls under the Lingering Oil component of the GWA program (originally in FY12-16) and continues monitoring conducted by project 16120114-S. Results from the lingering oil survey will be presented at the joint GWA/HRM annual PI meeting in the fall of 2021. The Nearshore component of GWA historically has been closely linked with the Lingering Oil component, given that lingering oil occurs in nearshore habitats and affects nearshore species. Results from this project will be of interest to the nearshore PIs. Data collected by the Nearshore component are relevant for understanding ecosystem recovery with respect to the presence of lingering oil. In particular, the Nearshore component monitors mussels for the presence of a broad suite of contaminants including polycyclic aromatic hydrocarbons (PAH).

2. Across Programs

a. Herring Research and Monitoring

Currently there is one other project associated with lingering oil research that has recently moved under the HRM program. The project is titled Immunological Expressions of PAH Exposure in Fish (project 20170115) and the PI is Andrew Whitehead. This project is looking to interrogate the genome structure and genome function of PWS fish to test

hypotheses about the causes and consequences of the PWS herring population collapse, by revealing ecological, evolutionary, and genetic mechanisms governing the demographic trajectory of PWS fish over the past ~30 years. These results coupled with previous survey results have the potential to be highly valuable for assessing long-term impacts of persistent EVO.

b. Data Management

This project will coordinate with the Data Management Program preparing metadata and data for publication on the Gulf of Alaska Data Portal and DataONE by the end of the project in 2021.

B. Individual Projects

This project will coordinate with other EVOSTC-funded projects as appropriate by providing data, discussing the relevance and interpretation of data, and collaborating on reports and publications.

C. With Trustee or Management Agencies

Interested state, federal, and non-governmental organizations (NGOs) would benefit from the information provided by continued monitoring. Lingering EVO persisting in the spill area has ramifications for agencies and NGOs related to their mandates (e.g., National Park Service, Regional Citizens' Advisory Councils, Oil Spill Recovery Institute, Alaska Department of Health and Human Services, and Alaska State Parks). The report would bring awareness about the long-term outcomes of the EVOS and the lessons learned that could be incorporated into their operational plans in the region and wherever oil spills may occur.

9. Information and Data Transfer:

A. Publications Produced During the Reporting Period

1. Peer-reviewed Publications

No new contributions for this reporting period due to COVID-19 delays.

2. Reports

No new contributions for this reporting period due to COVID-19 delays.

3. Popular articles

No new contributions for this reporting period due to COVID-19 delays.

B. Dates and Locations of any Conference or Workshop Presentations where EVOSTC-funded Work was Presented

1. Conferences and Workshops

No new contributions for this reporting period due to COVID-19 delays.

2. Public presentations

No new contributions for this reporting period due to COVID-19 delays.

C. Data and/or Information Products Developed During the Reporting Period, if Applicable

No new contributions for this reporting period due to COVID-19 delays.

D. Data Sets and Associated Metadata that have been Uploaded to the Program’s Data Portal

No new contributions for this reporting period due to COVID-19 delays.

10. Response to EVOSTC Review, Recommendations and Comments:

Science Panel Comments (FY21): No comments or concerns.

GWA PI Response (FY21): If further delays are experienced due to COVID-19 a request to roll over funds into FY22 will be made to complete the original project objectives.

11. Budget:

Please see provided program workbook. Cumulative spending to date consists of \$46.5K. As stated in the comments box of the budget spreadsheet, these funds went to a National Oceanic and Atmospheric Administration grant and the grantee is expected to start spending these funds in spring 2021 for summer fieldwork. These funds were not spent in FY20 due to COVID-19 restrictions.

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

| Budget Category: | Proposed FY 17 | Proposed FY 18 | Proposed FY 19 | Proposed FY 20 | Proposed FY 21 | TOTAL PROPOSED | ACTUAL CUMULATIVE |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|
| Personnel | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| Travel | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| Contractual | \$0.0 | \$0.0 | \$0.0 | \$46.5 | \$12.0 | \$58.5 | \$46.5 |
| Commodities | \$0.0 | \$0.0 | \$0.0 | \$1.4 | \$0.0 | \$1.4 | \$0.0 |
| Equipment | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| SUBTOTAL | \$0.0 | \$0.0 | \$0.0 | \$47.9 | \$12.0 | \$59.9 | \$46.5 |
| General Administration (9% of subtotal) | \$0.0 | \$0.0 | \$0.0 | \$4.3 | \$1.1 | \$5.4 | N/A |
| PROJECT TOTAL | \$0.0 | \$0.0 | \$0.0 | \$52.2 | \$13.1 | \$65.3 | |
| Other Resources (Cost Share Funds) | \$0.0 | \$0.0 | \$0.0 | \$11.2 | \$11.2 | \$22.4 | |