Exxon Valdez Oil Spill Trustee Council

Procedures for the Preparation and Distribution of Reports

Adopted: November 14, 2017

Revised: January 30, 2018

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***Exxon Valdez* Oil Spill Trustee Council**

Procedures for the Preparation and Distribution of Reports

I. INTRODUCTION

These *Procedures for the Preparation and Distribution of Reports* provide instructions regarding the preparation, peer review, printing and distribution of reports for scientific and technical programs and projects funded by the *Exxon Valdez* Oil Spill Trustee

Council. For projects that are not scientific or technical, please contact the EVOSTC office regarding any reporting requirements.

A. Additional Guidelines

These *Procedures for the Preparation and Distribution of Reports* update and supersede earlier versions of this document and should be read together with the report writing guidelines published by the *Journal of Wildlife Management:*

Krausman et al. 2016. Journal of Wildlife Management Author Guidelines.

http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1937-2817/homepage/ForAuthors.html

To the extent that there are any inconsistencies between these *Procedures for the Preparation and Distribution of Reports* and the guidance provided by Krausman, et al. 2016, the instructions provided in these *Procedures* shall be followed.

B. Project Numbers

For purposes of identification each project is assigned a unique number.

1. **Final Report Number –** The project number that appears on the final report will be the number of the final year of funding.
2. **Projects Funded from FY 2010 to Present –** These projects have eight-digit project numbers:
    a) the first two digits designate the current funding year,
    b) the second two digits represent the year the initial funding was authorized by the Trustee Council, and
    c) the last four digits are the unique project identifier.
3. **Trustee Council-Funded Programs –** Programs are given an eight-digit number that follows the same numbering scheme as described above.

Each project within a program receives the program's eight-digit number with the addition of a letter designation beginning at "A".

4. **Amendments –** Projects that submit amendments receive a designation of "Am" followed by the date of the amendment.

5. **Examples –**

a) **Projects –**

10071234 indicates the project received funding in 2010.

10071234 indicates the project was initially funded by the Council in 2007.

10071234 can be cross-referenced with projects from other funding years such as 071234, 081234, etc.

10071234-Am12.12.10 indicates an amendment to project 10071234, adoption date December 12, 2010.

b) **Programs –**

12120114 indicates the Long-Term Monitoring Program.

12120114-A indicates a project within the Long-Term Monitoring Program.

12120114-A-Am12.12.12 indicates an amendment adoption date December 12, 2012 to a project within the Long-Term Monitoring Program.

6. **Previous Numbering Conventions –** Over time the Trustee Council's project numbering system has evolved to meet the changing needs of the Restoration Program. For information on previous project numbering conventions, *See* Attachment A, *How to Find EVOSTC Project Reports*.

II. FINAL REPORTS

A. Preparation of Final Reports

1. **Content Format –** Authors shall follow the monograph style format set out below to prepare final reports. If the use of chapters are preferred, the chapters will come after the Objectives Section and replace the Methods, Results and Discussion sections described in II (A) (1). Reports shall meet normal scientific standards of completeness and detail that permit an independent scientific reader to evaluate the reliability and validity of the methods, data and analyses. Submissions must be in electronic format, as a Microsoft Word document with any figures and tables embedded, and watermarked "DRAFT".

   a) **Report Cover –** An example of a final report cover is provided. *See*, Attachment B. A final report cover shall:

      i. identify the report, using the appropriate series title, for example:

         (a) *Exxon Valdez* Oil Spill Restoration Project Final Report,

         (b) *Exxon Valdez* Oil Spill Long-Term Monitoring Program (Gulf Watch Alaska),

         (c) *Exxon Valdez* Oil Spill Long-Term Herring Research and Monitoring Program, or

         (d) other series that may be designated by the Trustee Council.

      ii. provide report title;

      iii. include the project identification number;

      iv. identify the author(s) with appropriate affiliation(s);

      v. include the date (month and year) of publication; and

      vi. include the following non-discrimination statement toward the bottom of the page on the inside front cover:

         "The *Exxon Valdez* Oil Spill Trustee Council administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The Council administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972. If you believe you have been discriminated against in any program, activity, or facility, or if you desire further information, please write to: EVOS Trustee Council, 4230 University Drive, Ste. 220, Anchorage, Alaska 99508-4650, or dfg.evos.science@alaska.gov; or O.E.O., U.S. Department of the Interior, Washington D.C. 20240."

b) **Title Page –** The Title Page of the report shall immediately follow the report cover page and non-discrimination statement and be identical in content and format to the front of the report cover page. *See*, Attachment B.

c) **Study History, Abstract, Key Words, Project Data and Citation** – Following the Title Page, the report shall include, on not more than two pages: a study history; an abstract; key words; summary of data gathered during the project; and a recommended citation for the final report. *See*, Attachment B.

i. *Study History* **–** A brief study history shall include reference to any prior project numbers; changes in the title of the project or report over time; annual project reports or other reports which contributed to the final report; and citation of publications that have preceded publication of the final reports. Do not use abbreviations or acronyms in the abstract. If the final report includes information regarding related projects or synthesis, the study history should reference this information.

ii. *Abstract* **–** An abstract, with a maximum length of 200 words, shall enable readers to quickly identify the basic content of the report, determine its relevance to their interests and thus decide whether to read the document in its entirety. If the final report consists of several chapters or manuscripts, the abstract shall summarize the entire report. *See*, Use of Manuscripts for Final Report Writing, II (A) (3). Do not use abbreviations or acronyms in the abstract. This abstract is submitted by the Alaska

Resources Library and Information Services (ARLIS) to the National Technical Information Service.

iii. *Key Words* – A short list of key words, up to 12 **in alphabetical order**, shall be provided. Include words from the title and others that identify:

(a) common and scientific names of principal organisms, if any;

(b) geographic area or region;

(c) phenomena and entities studied (e.g., behavior, reproduction);

(d) methods (only if the report describes a new or improved method); and

(e) other words not covered above but useful for indexing.

iv. *Project Data* – A summary of the data collected during the project shall be provided in order to preserve the opportunity for other researchers and the public to access this data in the future. The summary shall:

(a) describe the data;

(b) indicate the format of the available data collections;

(c) identify the archive in which the data have been stored or the custodian of the data (including contact name, organization, address, phone/fax, email, and web address where data may be acquired); and

(d) indicate any access limitations placed on the data. Limiting access requires written pre-approval by the Trustee Council Office.

v. *Citation* **–** A recommended citation for the final report shall be provided. *See*, Attachment B for the correct citation format.

d) Table of Contents – including Lists of Tables, Figures and Appendices. Include subheadings if needed.

e) **Executive Summary** – The executive summary shall:

i. consolidate principal points of the report in one place and provide enough detail for the reader to understand the significance of the report without having to read it in full;

ii. be written so that it can be understood independently of the report (i.e., it must not refer to figures, tables or references contained elsewhere) and all acronyms, uncommon symbols, and abbreviations must be spelled out;

iii. not exceed four singled-spaced pages;

iv. concisely state the objectives, methods, results and conclusions of the report and reference any related projects or synthesis; and

v. be organized in the same manner as the report it summarizes.

f) **Introduction** – The introduction shall reference any related projects or synthesis, where appropriate, and:

i. clearly present the nature and scope of the problem investigated, including the general area in which field activities were conducted; and

ii. review pertinent literature, state the method(s) of investigation and briefly state principal results.

g) **Objectives** – The statement of objectives shall be the same as the objectives identified in the approved proposal. If the objectives have changed, describe what has changed and why.

i. If using chapters, the chapters for which the objectives are described will be listed in this section. For example:

Objective 1: Document location, timing, and direction of Pacific herring seasonal migrations (Chapter 1)

Objective 2: Relate large-scale movements to year class and body condition (Chapter 2)

h) **Methods** – The discussion of methods shall include a clear description of the study area, sample collection methods and data analyses. To the extent the methodology differs from that described in the proposal, explain the reason for the deviation.

i) **Results –** The presentation of results shall provide an objective and clear presentation of the data collected.

j) **Discussion –** The discussion section shall:

i. interpret the study results and explore the meaning and significance of the findings, including alternative interpretations of the results;

ii. discuss whether the study hypotheses are upheld or disproven;

iii. note where there are unanswered questions; and

iv. where appropriate, cite relevant findings from other *Exxon Valdez* oil spill restoration studies, including published literature.

k) **Conclusions –** This shall be a brief, clear statement of the conclusions that are apparent from the discussion. Major unanswered questions shall be identified.

l) **Acknowledgments**

m) **Literature Cited**

n) **Peer-Reviewed Publications –** Provide a list of all peer-reviewed publications that were published based on work completed by this specific project.

o) **Other References –** List any presentations (indicate oral or poster and name of conference and date), reports, or outreach materials that were created based on the work of this project. Provide links to the materials that are publicly available and the location and audience for any listed presentations. For example:

Cushing, D., K. Kuletz, R. Hopcroft, S. Danielson, and E. Labunski. 2017. Shifts in cross-shelf distribution of seabirds in the northern Gulf of Alaska under different temperature regimes, 2007-2015. Poster Presentation. The 44th

Meeting of the Pacific Seabird Group, Tacoma, WA. 25-29 January.

2. **Technical Format –** The following guidelines shall help provide consistent formatting:

a) Word Processing Conventions

i. *Standard Settings*

<u>Line</u>

Line spacing:	single
Hyphenation:	off (i.e., do not hyphenate at right margin)
Justification:	left (i.e., do not right-justify margins)
Margins:	1 inch at top, bottom 1 inch at left, right
Tabs:	every 0.5 inch
Widow Protection:	yes

<u>Page</u>

Page numbers:

Position:	bottom center
No numbers:	cover, OEO/ADA page (inside of front cover), title page
Roman numerals:	lower case (i, ii, iii, iv, v, vi, etc.); front matter, includes Study History, Table of Contents, List of Tables, List of Figures, and List of Appendices.
Arabic numbers:	(1, 2, 3, etc.); narrative, beginning with the Executive Summary.

Header:	none
Watermark:	**DRAFT** (all pages)

<u>Font</u>

Times:	12 point

Note: If Times is not available, some other serif font shall be used (e.g., Palatino, Bookman or New Century Schoolbook).

ii. *Literature Citations –* For citations, use the format below. Start each citation with a hanging indent as shown:

Byrd, G.V., D. Gibson, and D.L. Johnson. 1974. The birds of Adak Island, Alaska. Condor 76:288-300.

b) Other Conventions

i. *Electronic Format* **–** Submissions must be in electronic format. An electronic report or summary shall be submitted as a Microsoft Word document with all figures and tables embedded.

ii. *Italics –* Use italics, rather than underlining, for Latin names and for *Exxon Valdez*.

iii. *Terms for oil spill –* When referring to the oil spill that occurred because the *Exxon Valdez* ran aground, use *Exxon Valdez* oil spill. After the first mention of the *Exxon Valdez* oil spill, refer to it simply as the spill.

iv. *Acronyms –* Clearly define any acronyms. Avoid the use of acronyms completely in the Abstract and Executive Summary.

v. *Terms –* Use the terms “damages” and “injury” as defined by CERCLA regulations (*See*, 43 CFR 11.14):

(a) *“Damages”* means the amount of money sought by the natural resource trustee as compensation for injury, destruction or loss of natural resources.

(b) *“Injury”* means a measurable adverse change, either long or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge of oil. Injury encompasses the phrases “destruction” and “loss”.

(c) *“Destruction”* means the total and irreversible loss of a natural resource.

(d) *"Loss"* means a measurable adverse reduction of a chemical or physical quality or viability of a natural resource.

vi. *Spelling –* Use American English and not British English (i.e., color vs. colour, analyzed vs. analysed).

3. **Use of Manuscripts for Final Report Writing –** The Trustee Council encourages Principal Investigators to publish the results of their work in peer-reviewed journals. With the written approval of the Trustee Council's Science Coordinator, and on a project-by-project basis, manuscripts or journal articles may be used to satisfy project final report writing requirements.

a) **Authority to Use Manuscripts –** Principal Investigators shall contact the Science Coordinator to request written approval to use a manuscript(s) as the body of a final report.

b) **Objectives –** Because final reports are the primary and permanent record of how Trustee Council funds have been spent and what has been accomplished with those funds, it is necessary that these reports address all of the objectives for which the Trustee Council has provided funds.

i. If all of the project's objectives are completely described within one or more manuscripts being prepared for publication, a copy of the manuscript(s) may be submitted as the entire body of the report. *See*, Standard Format requirements, II (A) (3) (c).

ii. If a project's objectives are not all described completely within one or more manuscripts, the manuscript(s) may serve as a portion of the report. For example, if only two of five objectives are addressed in a manuscript, the report shall include – in addition to the manuscript – information on the three objectives not covered in the manuscript. The two objectives covered by the manuscript shall be referenced in the report as appropriate (e.g., in the Methods and Results sections) and substantially integrated into the Discussion section, where there shall be an overall discussion of the project. In such cases, the combination of the manuscript and additional report material shall present an organized, integrated and complete account of the project activities and results.

c) **Standard Format –** Every report, regardless of whether it is in the standard format or includes manuscripts, shall adhere to the formatting prescribed for the Report Cover, Title Page, Study History, Abstract, Key Words, Project Data and Citation. *See*, Content Format, II (A) (1).

d) **Copyright and Publication Rights –** When a manuscript is used to fulfill report writing requirements, it must be in a form that can be duplicated freely and posted on the Trustee Council website. This may require obtaining permission from the publisher. When appropriate:

i. the author shall provide the Trustee Council Office with a copy of the publisher's written permission to duplicate and post the article as part of the report.

ii. the statement "This article is reprinted with permission from the publisher." shall precede the journal article(s) in the report.

e) **Disclaimer Statement –** Investigators seeking to publish the results of Trustee Council-sponsored projects shall include the following statement with all manuscripts:

> "The research described in this paper was supported by the *Exxon Valdez* Oil Spill Trustee Council. However, the findings and conclusions presented by the author(s) are their own and do not necessarily reflect the views or position of the Trustee Council."

f) **Reprints –** Investigators who publish the results of Trustee Council-sponsored projects shall provide the Trustee Council Office (attention: Science Coordinator at dfg.evos.science@alaska.gov) an electronic copy with reprint rights.

4. Due Date

a) **Due Dates –** Unless a different date is specified in the approved proposal or contract, draft final reports shall be submitted for peer review by March 1 in the year following the fiscal year in which project work was completed. For a February 1-January 31 fiscal year, the report is due by March 1 immediately following the end of the fiscal year. Submissions must be in an electronic format, and shall be submitted as a Microsoft Word document with any figures and tables embedded, and watermarked "DRAFT".

b) **Request for Extension –** If the due date cannot be met, the Principal Investigator shall file an extension request with the Science Coordinator at least 15 days prior to the due date. The request must be in writing and state a reason the report will be late. With approval of the Executive Director, an alternative final report due date may be identified.

B. Review Process: Final Reports

1. **For Projects which are not in a Trustee Council-funded Program -** The Principal Investigator's Agency Liaison or Institution Liaison will conduct a review for completeness, provide comments, identify questions, and suggest revisions as appropriate for the draft final report. If applicable, draft final reports will also go through an agency or institution internal review.

2. **For Projects within a Trustee Council-funded Program –** Program Leads, and if applicable, the Program Coordinator or similar member(s) of a program leadership team will conduct a review for completeness, provide comments, identify questions, and suggest revisions as appropriate for the draft final report. It is also strongly suggested that a member of the Program's Science Review Panel conduct a review of the draft final report.

3. **Revision and Submission**

   a) **Revision –** Within 30 days of receiving review comments, Principal Investigators will revise their draft final reports to address review comments.

   b) **Submission –** After revision, Principal Investigators will submit one (1) electronic copy of the revised draft final report to the Science Coordinator via email (dfg.evos.science@alaska.gov) or via Research Workspace for review. The electronic copy shall be submitted as a Microsoft Word document with any figures and tables embedded, and watermarked "DRAFT". If needed, the Science Coordinator may request a copy of the reviewers' comments and authors' responses.

   c) **Format Review –** Once the content of the report is accepted by the Science Coordinator, the Science Coordinator will send an electronic copy of the final report as a Word file to EVOSTC's Librarian at ARLIS for format review.

d) **Revisions –** Within 15 days of receipt of the draft final report, EVOSTC's Librarian shall review it for compliance with the report format standards, remove all references to "draft", and make any revision needed for format compliance. If necessary, the draft final report may be returned to the Principal Investigator for completion of required revision.

e) **Approval –** the Science Coordinator shall notify the Principal Investigator, Project Manager, EVOSTC's Librarian at ARLIS, and Program Leads, where applicable, by email of final report acceptance and format approval, and will include an attachment of the final copy of the report.

C. Printing and Distribution Process

1. **Reproduction and Number of Copies –** Printed hard-copies of final reports will be produced by ARLIS. After emailed confirmation to the Principal Investigator indicating acceptance of the final report and format, ARLIS staff will produce five (5) two-sided, bound copies of the report.

2. **Binding –** ARLIS staff will bind copies of the final reports using comb binding.

3. **Distribution of Final Reports –** ARLIS staff shall add three copies of final reports to the ARLIS collection and send two bound copies of final reports to the Trustee Council Office for the Science Coordinator and the Trustee Council's Official Record. Final reports, in locked PDF format, shall be posted on the Trustee Council website at www.evostc.state.ak.us. ARLIS will provide URLs for final reports to the Alaska State Library and National Technical Information Service (NTIS) to fulfill state and federal depository requirements. *See*, Attachment A, *How to Find EVOSTC Project Reports*.

III. ANNUAL PROJECT REPORTS AND ANNUAL PROGRAM STATUS SUMMARY

A. Projects not in a Trustee Council-Funded Program

1. **Annual Project Report –** The Principal Investigator for a project is responsible for the submission to the Trustee Council of an annual project report.

2. **Multi-Year Projects –** An annual project report shall be submitted each year until the project is completed, at which time a final report shall be submitted.

3. **Due Date –** Unless a different date is specified in the approved proposal or contract, annual project reports shall be submitted for each fiscal year for which a project received funding. For a February 1-January 31 fiscal year, annual reports are due by March 1 immediately following the end of the fiscal year. Submissions must be submitted as a Microsoft Word document with any figures and tables embedded.

B. Trustee Council-Funded Programs and Projects within a Program

1. **Annual Project Reports –** The Principal Investigator for a project within a Trustee Council-funded program is responsible for production of an annual project report for submission to the Trustee Council by the Program Leads, as required in III (B) (3) (b).

2. **Multi-Year Projects –** An annual project report shall be submitted each year until the project is completed, at which time a final report shall be submitted.

3. **Program Lead Submission –** Program Leads are responsible for:

    a) collecting, reviewing and collating the annual project reports from the individual projects within the program, including any agency projects;

    b) submission to the Trustee Council of:

        i. the annual project reports from the individual projects within the program; and

        ii. an annual program status summary.

4. **Due Date –** Unless a different due date is specified in the approved proposal or contract, annual project reports and annual program status summaries shall be submitted for each fiscal year for which a project within a Trustee Council-funded program received funding. For a February 1-January 31 fiscal year, the annual project report and annual program status summary are due by March 1, immediately following the end of the fiscal year. Submissions must be submitted as a Microsoft Word document with any figures and tables embedded. Documents can be submitted to Science Coordinator either by email (dfg.evos.science@alaska.gov) or via the Research Workspace digital platform.

C. **Annual Project Report Content –** Content of annual project reports, including for projects within a Trustee Council-funded program, shall include the information listed below and be submitted on the appropriate form. *See*, Attachment C for the report form and Attachment E for the budget form, as appropriate.

1. **Project Number**

2. **Project Title**

3. **Principal Investigator's Name(s) –** Include the Principal Investigator's name and the names of any researchers submitting the report.

4. **Time Period Covered by the Report–** The annual reports will report on the prior fiscal year's work.

5. **Date of Report –** Specify month and year.

6. **Project Website –** If applicable.

7. **Summary of Work Performed –** This section shall include a brief summary of work performed during the reporting period, including any results available to date, scientific findings, and their relationship to the original project objectives. Discuss the evolving status of the working hypothesis in light of the research findings obtained to date. Any deviation from the original project objectives, procedures or statistical methods, study area, or schedule shall be included. Any known problems or unusual developments, and any other significant information pertinent to the project shall also be described. Detail or highlight any noteworthy finding relating to the project. Budget issues can be detailed in the Budget section (11), below.

8. **Coordination and Collaboration –** For this section, provide information on coordination and collaboration with:

   a) **Projects Within a Trustee Council-Funded Program –** Provide a list and clearly describe the functional and operational relationships, where applicable, with other Trustee Council-funded program projects that occurred during the reporting period. This includes what form the coordination took (e.g., shared field sites or researchers, research platforms, sample collection, data management, equipment purchases, etc.). Suggested subheadings:

      (1) Within the Program

      (2) Across Programs

(a) Gulf Watch Alaska

(b) Herring Research and Monitoring

(c) Data Management

(d) Lingering Oil

b) **Projects not Within a Trustee Council-funded Program –** Indicate how the project relates to, complements or includes collaborative efforts with other projects funded by the Trustee Council that are not part of a Trustee Council-funded program.

c) **With Trustee or Management Agencies –** Please discuss if there are any aspects of the project which have supported EVOSTC trust or other agency work or which have received EVOSTC trust or other agency feedback or direction, including the contact name(s) of the agency staff. Please include specific information as to how the subject area assisted the EVOSTC trust or other agency work. If the project required or included collaboration with other agencies, organizations or scientists to accomplish this work, such arrangements should be fully explained and the names of agency or organization representatives involved in the project should be provided. If the project is in conflict with another project, note this and explain why.

9. **Information and Data Transfer –** This section shall list, for the reporting period:

a) publications produced during the reporting period;

b) dates and locations of any conference or workshop presentations where EVOSTC-funded work was presented. Indicate oral or poster presentation. For example:

Cushing, D., K. Kuletz, R. Hopcroft, S. Danielson, and E. Labunski. 2017. Shifts in cross-shelf distribution of seabirds in the northern Gulf of Alaska under different temperature regimes, 2007-2015. Poster Presentation. The 44th Meeting of the Pacific Seabird Group, Tacoma, WA. 25-29 January.

c) data and/or information products developed during the reporting period, if applicable; and

d) data sets and associated metadata that have been uploaded to the program's data portal.

10. **Response to EVOSTC Review, Recommendations and Comments –** Describe how the project has addressed recommendations from EVOSTC reviews, including from the EVOSTC Trustees, Science Panel and Staff.

11. **Budget –** For this section,

    a) for a project not within a Trustee Council-funded program, complete the column 'Actual Cumulative' on the Summary Page of the Project Budget Proposal and Reporting Form, submitted with the original proposal, form available on the EVOSTC website and at Attachment E;

    b) for a project within a Trustee Council-funded program, complete the column 'Actual Cumulative' on the Summary Page of the Program Project Budget Proposal and Reporting Form, submitted with the original proposal, form available on the EVOSTC website and at Attachment E; and

    c) on the Annual Project Report Form, form at Attachment C, provide any information required by the Financial Policy Section II regarding budget adjustments from the authorized level of funding.

D. **Annual Program Status Summary Content –** Content of the annual program status summary shall include the information listed below and be submitted on the appropriate form. *See*, Attachments D and F.

1. **Program Number**

2. **Program Title**

3. **Program Lead Name(s) –** Include the name of the Program Lead submitting the summary.

4. **Time Period Covered by the Summary –** The annual project reports and annual program status summary will report on the prior fiscal year's work.

5. **Date of Summary –** Specify month and year.

6. **Program website –** If applicable.

7. **Overview of Work Performed during the Reporting Period –** Include any results available to date; the overview of work shall contain, for the reporting period:

    a) progress toward addressing hypotheses and achieving goals;

b) detail or highlight of any noteworthy issues or findings relating to the program and projects within the program;

c) description of efforts undertaken to achieve the community involvement/traditional ecological knowledge (TEK) and resource management application provisions of the proposal, if applicable;

d) any known problems or unusual developments; and

e) any other significant information pertinent to the program.

8. **Coordination and Collaboration –** For this section, provide information on coordination and collaboration with:

a) **Projects within a Trustee Council-Funded Program –** Provide a list and clearly describe the functional and operational relationships, where applicable, with other Trustee Council-funded program projects that occurred during the reporting period. This includes what form the coordination took (e.g., shared field sites or researchers, research platforms, sample collection, data management, equipment purchases, etc.). Suggested subheadings:

(1) Within the Program

(2) Across Programs

(a) Gulf Watch Alaska

(b) Herring Research and Monitoring

(c) Data Management

(d) Lingering Oil

b) **Projects not within a Trustee Council-Funded Program –** Indicate how the program relates to, complements or includes collaborative efforts with other projects funded by the Trustee Council that are not part of a Trustee Council-funded program.

c) **With Trustee or Management Agencies –** Please discuss if there are any aspects of the program which have supported EVOSTC trust or other agency work or which have received EVOSTC trust or other agency feedback or direction, including the contact name(s) of agency staff. Please include specific information as to how the subject area assisted the EVOSTC trust or other agency work. If parts of the program required or included collaboration with other agencies, organizations or scientists to accomplish the work, such arrangements should be fully explained and the names of agency or organization representatives involved should be provided. If the program is in conflict with another program or project, note this and explain why.

9. **Information and Data Transfer –** For this section, list, for the reporting period:

   a) publications produced;

   b) dates and locations of any conference or workshop presentations. Indicate oral or poster presentation. For example:

      Cushing, D., K. Kuletz, R. Hopcroft, S. Danielson, and E. Labunski. 2017. Shifts in cross-shelf distribution of seabirds in the northern Gulf of Alaska under different temperature regimes, 2007-2015. Poster Presentation. The 44th Meeting of the Pacific Seabird Group, Tacoma, WA. 25-29 January.

   c) data and/or information products developed, if applicable; and

   d) data sets and associated metadata that have been uploaded to the program's data portal.

10. **Response to EVOSTC Review, Recommendations and Comments –** Describe how the program has addressed recommendations from EVOSTC reviews, including those from the EVOSTC Trustees, Science Panel and Staff.

11. **Budget –** For this section, complete the column 'Actual Cumulative' on the Summary Page of the Program Budget Proposal and Reporting Form, submitted with the original proposal, form available at the EVOSTC website and at Attachment E, first worksheet.

E. Submission, Review and Distribution

1. **Submission for Review –** The Principal Investigator, or Program Lead, as applicable, shall electronically submit each report as a separate electronic document to the Science Coordinator, at dfg.evos.science@alaska.gov or via the Research Workspace digital platform.

   a) **Subject Line –** The subject line of the e-mail transmitting the annual project report or summary must include the project number and the words "annual project report" (e.g., "035620 Annual Project Report), or "annual program status summary" (e.g., "035620 Annual Program Status Summary").

b) **Electronic Format –** Submissions must be in electronic format. An electronic report or summary shall be submitted as a Microsoft Word document with all figures and tables embedded.

2. **Review Process –** Annual project reports and annual program status summaries shall be reviewed by the Science Coordinator. These reports and summaries shall also be reviewed by the Program's Science Review Panel and the Trustee Council's Science Panel. The review process may be used to determine whether continued funding of the project is warranted and to guide further work on the project. Any written comments on a report or summary shall be provided to the Principal Investigator(s) or Program Lead(s), as applicable, and kept on file at the Trustee Council Office, available upon request.

3. **Distribution –** Annual project reports and annual program status summaries shall be kept on file as public documents at the Trustee Council Office, available upon request. These reports and summaries shall also be posted on the Trustee Council's website at www.evostc.state.ak.us.

ATTACHMENT A *How to Find EVOSTC Project Reports*

A list of EVOS Trustee Council (EVOSTC) final reports and annual (prior to 2002) reports is maintained at the EVOSTC website at www.evostc.state.ak.us/Publications/bibliographies.cfm. EVOSTC reports are available as listed below. Reports are also submitted to the Alaska State Library and the National Technical Information Service in fulfillment of state and federal depository requirements.

Final project reports are available full-text at:

- EVOSTC website. The Trustee Council's database of restoration projects is searchable via Project Search by project number, researcher, or project title.

- ARLIS catalog. The catalog is searchable by title, project number, Principal Investigator, additional authors, series title, subject heading, and key words. A searchable notes field in the catalog record may describe the report and provide additional access points. When available from the catalog record, a link takes the researcher to the full-text report. Paper copies of reports are available for check-out at ARLIS and are loaned worldwide through interlibrary loan.

- National Technical Information Service (NTIS). Copies of most final reports can be purchased in electronic, paper or microfiche formats through NTIS at (703) 487-4650 or www.ntis.gov.

Annual project reports are available full-text at:

- EVOSTC website. The Trustee Council's database of restoration projects is searchable via Project Search by project number, researcher, or project title.

- ARLIS catalog. Annual reports for projects funded prior to 2002 are available full-text through the ARLIS catalog. Paper copies are available for check-out and are loaned worldwide through interlibrary loan.

Program Status Summaries are available full-text at the EVOSTC website. The Trustee Council's database of restoration projects is searchable via Project Search by project number, researcher, or project title.

Report Numbers: When locating a report, it may be helpful to understand how the reports are numbered. For purposes of identification each project is assigned a unique number. The project number that appears on the final report is the number of the final year of funding. Over time the Trustee Council's project numbering system has evolved to meet the changing needs of the Restoration Program.

- Natural Resource Damage Assessment (NRDA) Studies: Funded in 1989 to 1992, these studies were designated by alpha-numeric study numbers (e.g., MM6 for "Marine Mammal Study 6" or FS2 for "Fish/Shellfish Study 2"). These reports were published in the series, *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Annual Report, or *Exxon Valdez* Oil Spill State/Federal Natural Resource Damage Assessment Final Report.

- Restoration Projects: In 1993 the Trustee Council shifted the program emphasis from damage assessment to restoration, and projects were given five-digit numbers. The first two digits indicate the funding year and the last three digits identify the individual project. Initially, continuing projects received a new project number each year, but in 1995 the Trustee Council began using the unique project identifier, and the same last three digits were used to identify an individual project each year it was funded. Large projects were divided into several smaller subprojects, and numbers and/or letters were added to the project number to identify these subprojects (e.g., 95320S or 95139C1). Some NRDA studies focused on restoration activities were continued as restoration projects in 1993. From 1993 to 2001 restoration project annual reports were published in the series, *Exxon Valdez* Oil Spill Restoration Project Annual Report. Beginning in 2002, annual reports were no longer published, but are available in electronic format at the EVOSTC website. Restoration project final reports are published in the series, *Exxon Valdez* Oil Spill Restoration Project Final Report.

- *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Program (GEM): These projects were funded between FY 2002 and FY 2006. GEM projects funded in 2002 have five-digit numbers as described above. GEM projects funded after FY 2002 have six-digit project numbers (e.g., 030647). The first two digits identify the fiscal year in which the project was funded, and the last four digits are the unique project identifier. Some early GEM report numbers are preceded by a "G", but this practice was discontinued. These final reports were published in the series, *Exxon Valdez* Oil Spill Gulf Ecosystem Monitoring and Research Project Final Report.

- Restoration Projects funded in 2003 to 2009: These projects have six-digit project numbers. The first two digits represent the fiscal year of funding and the last four digits are the unique project identifier. These final reports were published in the series, *Exxon Valdez* Oil Spill Restoration Project Final Report.

- Projects funded from FY 2010 to present: The projects have eight-digit project numbers: the first two digits designate the current funding year, the second two digits represent the year the initial funding was authorized by the Trustee Council, and the last four digits are the unique project identifier. Trustee Council-funded programs are given an eight-digit number that follows the same numbering scheme. Each project within a program receives the program's eight-digit number with the addition of a letter designation beginning at "A". Projects that submit amendments receive a designation of "Am" followed by the date of the amendment. These project final reports are published in the series, *Exxon Valdez* Oil Spill Restoration Project Final Report. Reports from projects within a program are published in the series, *Exxon Valdez* Long-Term Monitoring Program (GulfWatch Alaska), *Exxon Valdez* Long-Term Herring Research and Monitoring Program, or other series that may be designated by the Trustee Council.

For assistance in locating EVOSTC final and annual reports, contact ARLIS at:

Alaska Resources Library and Information Services (ARLIS)
3211 Providence Drive, Suite 111 Library Building
Anchorage, AK 99508
(907) 27-ARLIS (272-7547)
reference@arlis.org   www.arlis.org

Exxon Valdez Oil Spill
Restoration Project Final Report

Responses of River Otters to Oil Contamination:
A Controlled Study of Biological Markers

Restoration Project 99348
Final Report

*This example cover page shows how to indicate the authors' (Ben-David, Bowyer, Duffy) affiliation when the report was done at the direction of an agency (ADF&G) and the agency wants to be acknowledged.

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September 1999

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Exxon Valdez Oil Spill
Restoration Project Final Report

Responses of River Otters to Oil Contamination: A Controlled Study of Biological Markers

Restoration Project 99348
Final Report

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Responses of River Otters to Oil Contamination:
A Controlled Study of Biological Stress Markers

Restoration Project 99348
Final Report

<u>Study History</u>: Project 99348 originated from the need to better understand the effects of contamination by crude oil on biomarkers in river otters (*Lontra canadensis*). Previous studies demonstrated elevated levels of biomarkers in river otters from oiled areas compared with those from non-oiled areas throughout Prince William Sound, Alaska, shortly following the *Exxon Valdez* oil spill (EVOS). Although the data collected to date strongly indicated a correlation between oil contamination and physiological stress in river otters, this evidence required verification through controlled experiments as identified by the EVOS Trustee Council review process (1997). This 2-year project was conducted at the Alaska SeaLife Center in Seward, Alaska, USA, between April 1998 and March 1999. Additional funding was provided by the Council for completion of 3 manuscripts in FY 2000 for publication in a peer-reviewed journal.

<u>Abstract</u>: In this study, we experimentally determined the effects of oil contamination on river otters. Fifteen wild-caught male river otters were exposed to 2 levels of weathered crude oil (i.e., control, 5 ppm/day/kg body mass, and 50 ppm/day/kg body mass) under controlled conditions in captivity at the Alaska SeaLife Center in Seward, Alaska. Responses of captive river otters to oil ingestion provided mixed results in relation to biomarkers. Although hemoglobin, white blood cells, alkaline phosphates, and possibly interleukin–6 immunoreactive responded in the expected manner, other parameters did not. Aspartate Aminotransferase Alanine Aminotransferase haptoglobin did not increase in response to oiling or decrease during rehabilitation. In addition, although expression of P450-1A increased in captive river otters during oiling, several inconsistencies in the data complicated data interpretation. Nonetheless, we were able to establish that reduction in hemoglobin led to increase in energetic costs of terrestrial locomotion, decrease in aerobic dive limit, and potential increase in foraging time due to a decrease in total length of submergence during each foraging bout. We offer a theoretical physiological model to describe interactions between the different biomarkers and advocate the exploration and development of other biomarkers that will be independent of the heme cycle.

<u>Key Words</u>: Aerobic dive limit, Alaska, captivity, crude oil, CYP1A, hemoglobin, immuno-histochemistry, liver enzymes, *Lontra canadensis*, lymphocytes, oxygen consumption, quantitative RT-PCR.

<u>Project Data</u>: *Description of data* – data was collected from live animals held in captivity at the Alaska SeaLife Center. Blood and other tissues were sampled and processed in different laboratories. Additional samples are archived at the Institute of Arctic Biology, UAF. *Format* – All data were entered as Excel spreadsheets. *Custodian* – contact Merav Ben-David, Institute of Arctic Biology, 311 Irving Building, University of Alaska Fairbanks, Fairbanks, Alaska 99775.

<u>Citation</u>:

Ben-David, M., R.T. Bowyer, and L.K. Duffy. 1999. Responses of river otters to oil contamination: A controlled study of biological stress markers, *Exxon Valdez* Oil Spill Restoration Project Final Report (Restoration Project 99348), *Exxon Valdez* Oil Spill Trustee Council, Anchorage, Alaska.

ATTACHMENT C *EVOSTC Annual Project Report Form*

Form Rev. 9.14.17

*Please refer to the Reporting Policy for all reporting due dates and requirements.

1. Project Number: *See,* Reporting Policy at III (C) (1).

Text

2. Project Title: *See,* Reporting Policy at III (C) (2).

Text

3. Principal Investigator(s) Names: *See,* Reporting Policy at III (C) (3).

Text

4. Time Period Covered by the Report: *See,* Reporting Policy at III (C) (4).

Text

5. Date of Report: *See,* Reporting Policy at III (C) (5).

Text

6. Project Website: *See,* Reporting Policy at III (C) (6).

Text

7. Summary of Work Performed: *See,* Reporting Policy at III (C) (7).

Text

8. Coordination and Collaboration: *See,* Reporting Policy at III (C) (8).

Text

9. Information and Data Transfer: *See,* Reporting Policy at III (C) (9).

Text

10. Response to EVOSTC Review, Recommendations and Comments: *See,* Reporting Policy at III (C) (10).

Text

11. Budget: *See,* Reporting Policy at III (C) (11).

Text

We appreciate your prompt submission and thank you for your participation.

ATTACHMENT D *EVOSTC Annual Program Status Summary Form*

Form Rev. 9.14.17

*Please refer to the Reporting Policy for all reporting due dates and requirements.

1. Program Number: *See,* Reporting Policy at III (D) (1).

Text

2. Program Title: *See,* Reporting Policy at III (D) (2).

Text

3. Program Lead Name(s): *See,* Reporting Policy at III (D) (3).

Text

4. Time Period Covered by the Summary: *See,* Reporting Policy at III (D) (4).

Text

5. Date of Summary: *See,* Reporting Policy at III (D) (5).

Text

6. Program Website: *See,* Reporting Policy at III (D) (6).

Text

7. Overview of Work Performed during the Reporting Period: *See,* Reporting Policy at III (D) (7).

Text

8. Coordination and Collaboration: *See,* Reporting Policy at III (D) (8).

Text

9. Information and Data Transfer: *See,* Reporting Policy at III (D) (9).

Text

10. Response to EVOSTC Review, Recommendations and Comments: *See,* Reporting Policy at III (D) (10).

Text

11. Budget: *See,* Reporting Policy at III (D) (11).

Text

We appreciate your prompt submission and thank you for your participation.

ATTACHMENT E *EVOSTC Program Project Budget Proposal and Reporting Form*

Form Rev. 1.30.18

For this Excel document, please see the Reporting Procedures page at the EVOS Trustee Council website. The Program form is the first worksheet, the Project forms are the second and third worksheets.