

FY23-33 Proposal Funding Recommendations

The funding described in this document is for the EVOSTC Annual Budget and the 2222LTRM Program Management Project which were submitted in FY22 in response to the FY22-31 Invitation. FY22 funding was approved at the January 18, 2022, Trustee Council meeting. FY23-FY31 funding requests for both projects and FY32-FY33 EVOSTC Annual Budget will be decided on at the October 5, 2022, Trustee Council meeting. Please note that the Work Plan is a working document and may be revised as needed throughout the fiscal year. Please contact the EVOSTC office if you would like exact funding amounts.

Trustee Council Administration

Trustee Council Administration									FY22-33 Funding Amount Recommended			Trustee Council Approved
Page	Project Number	Principal Investigator	Project Title	# Years Proposed	FY23-26 Requested	FY27-31 Requested	FY32-33 Requested	Total Requested	Science Panel	PAC	Executive Director	
10	23220100	EVOSTC Admin	EVOSTC General Operating Budget	11	\$6,193,844	\$7,095,951	\$2,950,634	\$16,240,430	Not Applicable	\$16,240,430	Not Applicable	\$6,193,844

Long-Term Research and Monitoring (LTRM) Program

Page	Project Number	Principal Investigator	Project Title	# Years Proposed	FY23-26 Requested	FY27-31 Requested	FY32-33 Requested	Total Requested	Science Panel	PAC	Executive Director	Trustee Council Approved
18	2322LTRM	Lindeberg	LTRM Science Administration	9	\$734,634	\$1,810,073	\$0	\$2,544,707	Did not review	\$2,544,707	\$734,634	\$734,634
18	2322LTRM	Hoffman	LTRM Fiscal & Outreach Administration	9	\$2,260,170	\$3,204,731	\$0	\$5,464,901	Did not review	\$5,464,901	\$2,260,170	\$2,260,170
73	23120114-N	Matkin	Killer Whale Monitoring	4	\$385,359	0	0	\$385,359	\$385,359	Did not review	\$385,359	\$126,000
105	23170113*	Janzen	Data Management Program	1	\$12,780	0	0	\$12,780	Did not review			
2222LTRM TOTAL					\$3,392,943	\$5,014,804	\$0	\$8,407,746	\$385,359	\$8,009,608	\$3,392,943	\$3,120,804

*This request is for required data management services for project 23120114-N which was approved for funding for FY23 at the October 5, 2022 Trustee Council Meeting.

	FY23-26 Requested	FY27-31 Requested	FY32-33 Requested	Total Requested	Science Panel	PAC	Executive Director	Trustee Council Approved
FY23 TOTAL (Fall 2022 Meeting Cycle)	\$9,586,787	\$12,110,755	\$2,950,634	\$24,648,175	\$385,359	\$24,250,038	\$3,392,943	\$9,314,648

Project Number: 22170113

Project Title: Data Management Program

Primary Investigator(s): Carol Janzen, Rob Bochenek

PI Affiliation: AOOS, Axiom Data **Project Manager:** NOAA
Science

EVOSTC Funding Requested for LTRM Program (includes 9% GA)

Actual funding amount is based on total proposals funded by TC

FY22	FY23	FY24	FY25	FY26	FY22-26 Total
\$379,716	\$394,207	\$411,819	\$401,524	\$373,476	\$1,960,742
FY27	FY28	FY29	FY30	FY31	FY27-31 Total
\$328,449	\$335,485	\$344,195	\$351,708	\$360,903	\$1,720,740

Non-EVOSTC Funding

FY22	FY23	FY24	FY25	FY26	FY22-26 Total
\$0	\$0	\$0	\$0	\$0	\$0
FY27	FY28	FY29	FY30	FY31	FY27-31 Total
\$0	\$0	\$0	\$0	\$0	\$0

Total Past EVOSTC Funding Authorized (FY12-22): \$4,279,942

Total EVOSTC Funding Authorized (FY12-22) and Requested (FY23): \$4,659,658

Total Non-EVOSTC Funding (FY12-23): \$2,978,600

Abstract:

**This abstract is excerpted from the PI's Proposal, dated 01.24.22, budget updated 01.24.22.*

The Exxon Valdez Oil Spill Trustee EVOSTC (EVOSTC) requires a data management approach composed of methods covering the entire data lifecycle, from immediately after data collection, to long-term preservation, to discovery and reuse. Since 2012, the Alaska Ocean Observing System (AOOS) and its technical partner, Axiom Data Science (Axiom), have provided data management services for both the "Long-Term Monitoring of Marine Conditions and Injured Resources and Services" Program (i.e., Gulf Watch Alaska (GWA)) and the "Herring Research and Monitoring" (HRM) Program. These two programs have leveraged the existing data management capacity of AOOS, and have also helped inform and improve the overall AOOS data management, access, and visualization tools. Beginning in FY20, AOOS and Axiom also began providing data management services for individual EVOSTC-funded Non-Program Projects (NPP) using the same approach and infrastructure that leverages the existing data management capacity of AOOS. Going forward in

2022-2031, the EVOSTC requested that a single program proposal be submitted for data management services to support the GWA and HRM Programs (now combined into a single program - the Gulf Watch of Alaska Long-term Research and Monitoring (GWA LTRM) Program), the continuing NPPs, and any newly-funded NPPs funded under the FY22-31 Invitation for Proposals. The AOOS-Axiom team and mature infrastructure remain best situated to continue providing data services to EVOSTC-funded programs and projects to maintain continuity and build upon the ongoing data management efforts. AOOS and Axiom Data Science propose to continue providing access to the tools and services for which the principal investigators (PIs) of the GWA LTRM Program and the continuing NPPs depend. Among these are the Research Workspace, a web-based data management platform; the AOOS Gulf of Alaska (GOA) Data Portal, where project data will be shared publicly; and the DataONE Member Node where final data sets will be archived for long-term preservation and broad access across multiple data repositories. Building upon these prior efforts, the AOOS-Axiom team is well poised to deliver continued success in facilitating the access and curation of EVOSTC data to support decision-making related to Spill affected ecosystems.

Funding Recommendations (Fall 2022):

Science Panel	PAC	Executive Director	Trustee Council
Did not review			

Funding request is for FY23 data management services for the Project 23120114-N Killer Whale long-term monitoring project which was approved for reduced funding for FY23 at the October 5, 2022 Trustee Council meeting. Cost is \$11,725, GA is \$1,055, Total Cost with GA is \$12,780.

Science Panel Comments

Date: November 2022

Did not review

PAC Comments

Date: November 2022

The PAC meeting is scheduled for November 29, 2022.

Executive Director Comments

Date: November 2022

Funding Recommendations (Fall 2021):

Science Panel	PAC	Executive Director	Trustee Council
Fund	Fund	Fund	Fund

Science Panel Comments

Date: May 2021

The goal of the 2022-2031 data management project is to provide critical data management to support all EVOSTC-funded LTRM program and individual Non-Program projects in order to assist study teams in efficiently meeting their objectives and ensuring data collected or consolidated through the effort is organized, documented, and available for their use and for future use by the larger scientific community. Future EVOSTC-funded Non-Program projects outside of the LTRM program and current Non-Program projects being proposed can be added to the data management effort during the next 10-years upon request by the EVOSTC with modified appropriations. The AOOS-Axiom team proposes to be successful in meeting the goal of this project by leveraging the extensive cyberinfrastructure and data management capacities of both Axiom and AOOS, and utilizing the existing collaborative relationships with both GWA LTRM program and Non-Program PIs to ensure continuity in the data collected across all efforts. The Science Panel agrees with all of this. However, some questions arose regarding the budget and the “new” 45% overhead charge by Axiom. There needs to be a clear agreement that the overhead rate will not change for the duration of the 10 year project. We also need assurance that data management for new education and outreach, and mariculture projects will be included in the Data Management proposal or in the individual new projects.

PI Response:

Regarding: “There needs to be a clear agreement that the overhead rate will not change for the duration of the 10-year project.”

Effective 2019, Axiom Data Science moved to a federally approved indirect cost rate of 45%. This is a modified total direct cost rate that excludes direct costs, equipment, supplies, and subcontracts in excess of \$25,000. Many of Axiom’s services intricately overlap outside of the direct scope of work for our partners. Thus, Axiom’s partners benefit from a much more comprehensive suite of services and systems than is written into our contracts. The indirect cost rate covers the cost of operating Axiom’s data center and other utilities, as well as administration and indirect project personnel such as software engineers who may be responsible for a component in the Axiom suite that supports the project but is not directly included in the scope of work. Administration includes accounting services, audit services, grant services, office space, and human resources support. Indirect project personnel may include data analysts, data coordinators, data scientists, software engineers, and senior software engineers. Axiom agrees to a fixed indirect rate of 45% for the duration of the 10-year project. This agreement has been included in our letter of commitment that is enclosed with our revised proposal.

Regarding: “We also need assurance that data management for new education and outreach, and mariculture projects will be included in the Data Management proposal or in the individual new projects.”

As per communications with Shiway Wang, Acting Executive Director EVOSTC, on June 29, 2021, Axiom Data Science is reviewing all new Non-Program project proposals (including new education and outreach, GWA-LTRM, habitat restoration, and mariculture projects) which have a relevant data collection component. Based on these reviews, Axiom will determine a cost estimate for data management services that leverages the existing Council data management infrastructure, as well as provide a detailed data management plan in support of the new project proposals. The data management cost estimates will be submitted by project PIs for review and consideration for funding. Below is a copy of the email sent to project PIs relative to data management plan requirements for EVOSTC proposals:

From: Wang, Shiway W (EVOSTC sponsored) <shiway.wang@alaska.gov>
Sent: Tuesday, June 29, 2021 2:51 PM
To: Wang, Shiway W (EVOSTC sponsored) <shiway.wang@alaska.gov>
Cc: Carol Janzen <janzen@aos.org>; Stacey Buckelew <stacey@axiomdatascience.com>; Kilbourne, Linda L (EVOSTC) <linda.kilbourne@alaska.gov>; Adams, Lauri (EVOSTC sponsored) <lauri.adams@alaska.gov>
Subject: Data management plan requirement for EVOSTC proposals

[External]

Good afternoon

This is a friendly reminder that your proposal review included information regarding the Council's data management policy with instructions to contact Carol Janzen (AOOS/Axiom) to determine a cost estimate for data management services by the Council's Data Management infrastructure, if you are submitting a revised proposal for Council review this fall.

*Please email your proposal to Carol Janzen and Stacey Buckelew (cc'd on this email) by **Monday, July 6, 2021** so they are able to determine a cost estimate for data management services for your project.*

A detailed data management plan that addresses the Council's Data Management Procedures and Data Policy is required in your proposal (see pg 24, FY22-31 Invitation rev12921 and pg 6, FY22-26 Invitation General Restoration rev12921) regardless of who you decide to manage your project data. This plan must be included for review and consideration for funding.

Please ignore this email if you have already reached out to Carol and Stacey. And please don't hesitate to contact us if you have any questions.

Best,

~~~~~

Shiway Wang, PhD  
Acting Executive Director  
Science Director  
Exxon Valdez Oil Spill Trustee Council  
4230 University Drive, Suite 220  
Anchorage, AK 99508  
Office: (907) 265-9328  
shiway.wang@alaska.gov

Overall, we are pleased with the Axiom-AOOS team and the progress that has been made with the web data portal over the past 10 years.

*PI Response:*

*Thank you! We are pleased to have the opportunity to continue to provide data management services to EVOSTC-funded programs and projects in order to assist study teams in efficiently meeting their objectives and ensuring data is organized, documented, and available for their use and for future use by the larger scientific community.*

**Date: September 2021**

The Program Lead's response gives confidence that any data produced by new proposals will be correctly managed, archived and published according to the Council's data policy. We thank the Council for retaining the Data Management infrastructure as a separate program. This provides additional assurance that all data will be properly managed and made publicly available. Over the past 10 years, the existing Data Management program has evolved into an efficient, effective, and well-structured program, which has resulted in less oversight and maintenance for the Council and Council staff.

**PAC Comments****Date: September 2021**

The PAC meeting was held on September 28-29, 2021. Any specific comments from that meeting will be added to the Work Plan when the comments are finalized in the meeting notes. It is noted that the PAC requested that the Trustees prioritize the ongoing projects with long-term data sets. It is also noted that a PAC member mentioned the good work being done by this program. Another member also noted that this effort is something that the Council should be extremely proud of.

**Executive Director Comments****Date: Fall 2021**

I concur with the Science Panel and PAC. I also note that this program has continually evolved through the leadership of skilled and experienced staff to adapt to current information needs and remains the best-situated to continue to provide data services to Council-funded programs and projects. Data Management through a stand-alone program funded by the Council ensures that the Council's Data Policy is adhered to and that Council data and metadata from a diverse collection of sources is professionally curated, archived, indexed, and made available in a consistent manner. These quality products will be a lasting legacy of the Council's science programs and projects. Concerns were brought forth by the Council to staff regarding the existing program's cost-effectiveness. To provide context, the National Science Foundation recommends 10-20% of the total research award to support data management activities. The EU Commission recommends 5% of overall research costs should go towards data stewardship (Nature, Feb 2020, <https://doi.org/10.1038/d41586-020-00505-7>). If all proposals submitted in response to both the 5- and 10-year Invitations that require data management were to be funded by the Council, only 4.3% of the total funding over 10 years would be dedicated toward the Data Management program. *This 4.3% is less than if not on par with the current national and international guidance on research funding to support data management.* This, along with the Science Panel and PAC's assessment of the Data Management program over the last 10 years should provide the Council and the public that this program is cost-effective, efficient, and valuable.