



PACIFIC STATES MARINE FISHERIES COMMISSION
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Request for Proposals

Pacific States Marine Fisheries Commission Data Analytics and Business Intelligence Support

Actual Issue Date: **Nov 21, 2017**

Deadline for Submissions: **Dec 18, 2017**

“To promote the conservation, development and management of Pacific coast fishery resources through coordinated regional research, monitoring and utilization”

Schedule

- November 21, 2017** Request for Proposal (RFP) issued and distributed
- November 28, 2017** Deadline for written questions regarding this RFP
Please email questions to Michael_Arrenondo@psmfc.org
- December 4, 2017** Deadline for when responses to questions will be made available
Responses to questions will be posted on the Pacific States Marine Fisheries Commission RFP webpage.
- December 18, 2017** Deadline for submission of proposals
Proposals need to be submitted by e-mail to:
Michael_Arrenondo@psmfc.org
Subject line for submissions: **2017 Data analytics and BI support RFP**
Faxed and hard copy proposals **will not** be accepted.
- December 18-22, 2017** Proposal review and selection

Purpose

The Pacific States Marine Fisheries Commission (PSMFC) maintains multiple databases that consolidate fisheries-dependent and independent data from various state and federal agencies on the fisheries of Alaska and the West Coast. PSMFC programs associated with these databases include the Alaska Fisheries Information Network (AKFIN), the Pacific Fisheries Information Network (PacFIN) and the Recreational Fisheries Information Network (RecFIN). These data sets are used by managers and stock assessors to estimate population sizes, detect trends and examine the effects of different management activities. Fishing activity plays an important role in local and regional economies and PSMFC maintains data that helps economists and industry better understand the role of fisheries in the economy. PSMFC is seeking proposals to assist with data analytics and business intelligence (BI) support.

Key responsibilities include:

- Maintain and update BI reports, APEX based applications and products needed to meet agency staff and scientists needs.
- Work with PSMFC staff, data users, and agency staff to determine reporting needs, translate needs into business rules/report logic, design and create BI reports, and work with users to alter the reports as additional needs arise.
- Visualizations are an important tool to understanding and communicating results of an analysis and are an increasing focus of many BI tools. Currently, most of our BI reports contain few graphics and are often not configurable by end users. Contractor will be familiar with newer BI visualization tools, their implementation, ways to share the visualizations with end users and ways to let them alter or refine the graphic.
- Provide ongoing technical support to maintain any reports, graphics, or other products. Train PSMFC staff to maintain and update projects.
- Use BI tools and knowledge about fisheries to develop BI reports to meet user needs.
- Communicate with users to determine needs, demonstrate a report or product and seek clarification on questions that arise during development.
- Provide detailed documentation of analysis creation, updates and user guides.

Examples of completed and planned projects:

- Communities Analyses – PSMFC has developed data sets that integrate data from various government agencies, including the Census Bureau, the Bureau of Economic Analysis, and state and federal fisheries management agencies, to present demographic, economic, and fisheries-related information on communities throughout Alaska and the West Coast. Economists, social scientists, and fisheries managers use this data to examine communities' engagement with and reliance on fishing activities. Development of these datasets entailed, among other tasks: working with staff scientists to understand data needs; communicating with agency staff to obtain data and understand underlying business rules; developing processes to annually compile, standardize, and summarize data at the community level;

developing data models and database objects; and creating BI tools in OBIEE for data reporting.

- Big Data Analysis – PSMFC partners are interested in leveraging available social network data to learn more about fisheries businesses, such as marine tourism-related operations. An example of this data is the Yelp Dataset, which includes business, review, and user data for use in personal, educational, and academic purposes. Initial contractor support for this area of work would entail determining the extent to which relevant data exist in the dataset, including organizing and visualizing the relevant data and compiling basic statistical summaries. This project would require familiarity with SQL and/or JSON file formats and methods for parsing such data, as well as with statistical software for developing statistical and graphical summaries.

Background

Formed by Congress in 1947, PSMFC helps resource agencies and the fishing industry sustainably manage our public Pacific Ocean resources in a five-state region along the West coast of the United States. PSMFC is one of only three interstate fishery commissions in the United States today.

PSMFC's primary goal is to promote and support policies and actions to conserve, develop, and manage our fishery resources in California, Oregon, Washington, Idaho, and Alaska. We accomplish this through coordinating research activities, monitoring fishing activities, facilitating a wide variety of projects and collecting, processing and disseminating fisheries-related data. These data are maintained in regional databases and are accessed by fishery managers, fishing industry staff, stock assessors, and state agency personnel either directly via the databases or through reporting tools.

PSMFC's activities are funded through federal grants, special contracts, and dues from its member states. PSMFC regularly serves as a primary contractor on grants, projects, and contracts for states and other organizations in large part due to our low overhead and our proven management ability. Because most of PSMFC's operating funds are from Federal grants and contracts, PSMFC must adhere to federal accounting rules and cost principles.

Scope of Work

PSMFC maintains a state of the art IT infrastructure with experienced network administrators in the main office located in Portland, Oregon. PSMFC staff for the programs have various levels of BI and DB experience and in some cases work remotely. It is not required that the contractor have a local office, though it is desirable.

To address both the legacy and emerging needs we require contractors that: (a) are dependable and available within short notice, (b) have a deep understanding of West Coast and Alaska fisheries data, (c) can complete assigned projects in a timely manner with strict deadlines, and (d) have the necessary senior level knowledge and resources to complete the projects on time and within budget.

Our shop primarily uses Oracle software for data storage and reporting needs, but other applications are also needed at times. A successful candidate would have expertise in:

- Oracle Business Intelligence Enterprise Edition (OBIEE)
- Oracle Application Express (APEX)
- Oracle SQL and PL/SQL
- Microsoft SQL Server
- Analytical software (e.g. R, Python, SAS, SPSS, etc.)

The focus of this contract is for data analysis and support for BI tools, but to be successful the contractor will need to have a strong working knowledge of SQL and PL/SQL. It is not uncommon for a report or APEX reporting application to rely on database queries or other stored database procedures that utilize SQL or PL/SQL. We currently have templates for BI report styling, and the contractor would be responsible for following or modifying those guidelines, as appropriate.

Portions of the data maintained by PSMFC are confidential. In particular, personally identifiable information and business identifiable information cannot be released to the public. The contractor will need to ensure the security of such data stored on their own systems and observe confidentiality requirements for data presented in public reports.

Proposal Requirements and Scoring

Requirements

To successfully respond to this RFP the applicant must:

- A demonstrated ability to design and implement BI reports for users with confidential data access, as well as public data users.
- Describe any work done on the analysis and reporting of fisheries data. Please describe any complications that arose due to the fishery and/or source data and how these complications were resolved.
- A demonstrated ability to conduct analyses and create reports based on data that may
 - change over time as regulations, reporting requirements, market demands and/or environmental conditions shift
 - contain noise and/or errors
 - use subsampling to apply corrections to the larger data set
- A demonstrated ability to explore new data sets, identify and follow up on data quality issues and caveats, identify logical relationships among tables within a dataset, identify logical relationships between a data set and other data sets, perform ETL processes on data sets, and to create analyses or reports based on the data.
- Knowledge of the visualization options available in BI tools and analytical software, and the ability to advise PSMFC staff on the options available and the pros and cons of each. Preference will be given to contractors that can demonstrate or describe BI projects that made extensive use of visualizations.
- Provide a detailed response to the technical question below.

Scoring

- **Business Experience (50 percent)** – The contractor must demonstrate an expertise in data analysis and BI report design. A preference will be given to applicants with experience working with commercial and/or recreational fisheries data, and those with extensive experience with OBIEE and APEX. BI experience in other applications will also be considered.
- **Cost (30 percent)** – Provide a breakdown of total cost per hour by resource.
- **Technical Approach (20 percent)** – A dataset identifies fishery landings by vessels and buyers. To meet confidential reporting requirements, any publicly reported data point must represent at least 3 distinct vessels and 3 distinct buyers. How might you implement these rules in a report that summarizes landings by species, gear, and port? How would you address ports that had fewer than 3 dealers? How would you ensure confidentiality when scale factors such as time can vary? For example, how would you ensure confidentiality is protected when a report can summarize at the monthly, quarterly or annual level? How would you prevent users from running the report at different levels of aggregation to back-calculate values that are confidential?

Questions

Questions regarding this solicitation must be submitted via email to Michael Arredondo (marredondo@psmfc.org) by 11/28/2017. Responses to all questions containing information that is not covered in this solicitation will be distributed to all known offerors and posted on the PSMFC Internet web site at <http://www.psmfc.org/procurements/blog>.

Amendments to Solicitations

If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

Extension of Solicitation

PSMFC reserves the right to extend the submission times specified in this solicitation. Potential offerors desiring an extension must submit a written request to the Contracting Officer prior to the time specified in this solicitation for receipt of proposals that includes the amount of additional time requested and an explanation of why such an extension is required. If an extension is granted, PSMFC will notify all known offerors and will post a notice of such extension on its Internet website at <http://www.psmfc.org/procurements/blog>.

Submission, Modification, Revision and Withdrawal of Proposals

Proposals and modifications to proposals must be submitted via email to Michael Arredondo at marredondo@psmfc.org.

The proposal must show--

1. The name of the solicitation;
2. The name, address, telephone and email address of the offeror;
3. Names, titles, telephone and email addresses of persons authorized to negotiate on the offeror's behalf with the PSMFC in connection with this solicitation; and
4. Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
5. A description of the offeror's company and employee experience profile.
6. A technical proposal that includes information on how the project is to be organized, staffed, and managed.

Offerors are responsible for submitting proposals, and any modifications or revisions, so as to reach the designated PSMFC Contracting Officer by 5:00 p.m., Pacific, on 12/18/2017.

Late proposals:

Any proposal, modification, or revision received at the PSMFC office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

- There is acceptable evidence to establish that it was received at the PSMFC installation designated for receipt of offers and was under the PSMFC's control prior to the time set for receipt of offers; or
- It is the only proposal received.

However, a late modification of an otherwise successful proposal that makes its terms more favorable to the PSMFC, will be considered at any time it is received and may be accepted.

Acceptable evidence to establish the time of receipt at the PSMFC installation includes the time/date stamp of the PSMFC email server, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of PSMFC personnel.

If an emergency or unanticipated event interrupts normal PSMFC processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent PSMFC requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal PSMFC processes resume.

Proposals may be withdrawn by written notice received at any time before award.

Offerors shall submit proposals in response to this solicitation in English and in U.S. dollars.

Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

Offerors may submit proposals that depart from stated requirements. Such proposals shall clearly identify why the acceptance of the proposal would be advantageous to the PSMFC. Any deviations from the terms and conditions of the solicitation, as well as the comparative advantage to the PSMFC, shall be clearly identified and explicitly defined.