

Request for Proposals (RFP)

**Development of a User-Friendly Web-Based Interface for a Fish Passage
Barrier Remediation Tool**



Issue Date: November 16, 2017
DEADLINE FOR PROPOSALS: December 15, 2017

RFP Process Schedule

- November 16, 2017** Request for Proposal (RFP) issued and distributed
- December 1, 2017** Deadline for written questions regarding this RFP
Please email questions to Michael Arredondo at marredondo@psmfc.org
- December 6, 2017** Q&A document, including the answer to the written questions posted on the PSMFC website at: <http://www.psmfc.org/procurements/blog>
- December 15, 2017** Deadline for submission of proposals
Proposals need to be submitted by e-mail to: marredondo@psmfc.org
Subject line for submissions: *Web-Based Fish Passage Barrier Tool RFP*
Faxed and hard copy proposals **will not** be accepted.
- December 18-22, 2017** Proposal review
- January 1, 2017** Projected Start Date

Problem Statement

Structures that block movement of fish through river networks are built to serve a variety of societal needs, including transportation, hydroelectric power, and exclusion of exotic species. Because of their abundance, road crossings and dams reduce the amount of habitat available to fish that migrate from the sea or lakes into rivers to breed. The benefits to fish of removing any particular barrier depends on its location within the river network, its passability to fish, the relative position of other barriers within the network, and the amount of potential upstream habitat. Balancing the trade-offs between ecological and societal values makes choosing among potential removal projects difficult. To facilitate prioritization of barrier removals, Dr. Jesse O'Hanley of the University of Kent developed an online decision support tool (DST) called *OptiPass* with three functions: (1) filter existing barriers at various spatial scales; (2) modify information about barriers, including removal costs; and (3) run optimization models to identify portfolios of removals that provide the greatest amount of habitat access for a given budget. When the number of barriers in a watershed exceeds what is feasible to remove, this tool may be used to produce an optimal "portfolio" of barriers whose removal would reconnect the maximum amount of high-quality stream habitat while remaining within the limits of a specified budget. This optimization considers the impacts of removing multiple barriers, barrier passability scores, upstream vs. downstream barrier passability, barrier removal costs, and barrier removal budgets.

The California Fish Passage Forum began working with the *OptiPass* tool in 2013, and has modified the tool to meet the needs of fish practitioners in the State of California, and specifically those practitioners addressing the needs of anadromous fish. *OptiPass* is a decision support tool intended to support the strategic removal of fish passage barriers. It assists in identifying cost-efficient mitigation actions to maximize the amount of accessible habitat above barriers, using a mixed integer linear programming formulation. The tool integrates information on barrier passability, upstream potential habitat, and estimated mitigation costs and accounts for spatial structure of barrier networks as well as interactive effects of mitigation decision on longitudinal connectivity. GIS pre-processing provides the *OptiPass* tool with valid input; including information on the spatial structure of fish passage barriers and their relationship to the available upstream fish habitat.

Project Objectives/Scope of Work

Develop a user-friendly web-based interface for *OptiPass*, a decision support tool used by the California Fish Passage Forum, by November of 2018.

A project-scoping phase of the proposal will be important to design the user interface based on input from a focus group of potential end-users and the authors of *OptiPass*. An end-user testing phase will also be very important. As a guideline, we envision the interface will support the following functionality:

- Provide an interactive map and tabular view of fish passage barrier data (from readily available web map and feature services)
- The map interface should provide standard functionality available in modern map applications:
 - layer display controls (transparency and layer order)
 - metadata links associated with layers
 - a dynamic legend

- printable and exportable map layouts
- search and bookmarking functions
- a tabular data view that supports sorting, filtering and exporting of selected records.
- An easy to use interface that allows users to explore barrier data and select a subset of barriers (through the map or attribute table) to be analyzed in an *OptiPass* model run.
- A function that passes the user selected barriers as input to *OptiPass* and displays the results of the model run in the interface.

Support saving *OptiPass* results as downloadable files (excel) and printable summary reports (pdf).

Background and access to the California fish passage assessment database (Optipass) is available at: <https://nrm.dfg.ca.gov/PAD/>.

Proposal Requirements and Scoring

The proposal should describe the methods and technical platform that will be used to meet the project requirements as well as the overall approach that will be used to keep the project on schedule and within the stated budget. Proposers are encouraged to identify their project design and implementation strengths. Examples of related work products that use a similar technological platform will be very useful to the selection committee. Proposals should lay out a clear budget and timeline and should include a description of team member qualifications.

Proposals will be evaluated according to the criteria listed and described below.

Scoring

Quality of proposal (20 points)

- Consistency with the objectives
- Demonstrating an understanding of the project
- Fulfilling proposal requirements as described in the RFP
- Overall presentation

Business Experience (30 points)

- Technical ability and track record of the proposed project team
- Background, qualifications, experience and expertise of the team in similar projects
- Examples of similar work completed by bidder

Technical Approach (30 points)

- Organization, structure and responsibilities of the project team
- Proposed approach
- Proposed strategies to manage tool design, development, review and release within time and cost constraints.
- Consideration of maintenance needs associated with the proposed technological platform and resulting product.
- Documentation and training needs associated with the proposed solution.

Cost (20 points)

- Reasonableness of the proposed project budget
- The selection will *not necessarily* be based solely on the “lowest bid.” The selection committee intends to select the best overall proposal package to achieve the project goals.

Questions

Questions regarding this solicitation must be submitted via email to Michael Arredondo (marredondo@psmfc.org) by 12/1/2017. 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 12/15/2017.

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.