

## **GRANT OPPORTUNITY**

### **Request for Proposals :**

Southern Steelhead Trout Barrier Removal Feasibility Study for Zuma Creek, Santa Monica Mountains N.R.A.

### **Purpose:**

The Santa Monica Mountains Fund, in partnership with the Santa Monica Mountains National Recreation Area and the Southern California Research Learning Center, would like to evaluate the potential for re-establishing federally endangered southern steelhead trout in Zuma Creek. Many barriers to steelhead movement from the ocean up into Zuma Creek remain in both the stretch of creek that runs through private property between Zuma Lagoon and NPS property in Zuma Canyon as well as on federal property itself, excluding the two major barriers on county property at PCH and Bonsall Drive and excluding natural barriers found in the upper watershed on NPS property (estimated number of barriers to be assessed is 18 based on 2006 CalTrout Report). The Caltrout Steelhead Report identifies 17 concrete structures (dams, riprap and stream crossings) in the lower portion of Zuma Creek below NPS property and one check dam 4 kilometers upstream of the Bonsall Trailhead. The barriers are of various heights and differ greatly in terms steelhead trout passability. We are seeking qualified individuals or groups to use existing information (one prior survey has been conducted already commissioned by CalTrout), GIS data layers, aerial photography, as well as direct field surveys, to inventory current barriers to steelhead movement and provide recommendations and cost-estimates for barrier removal.

### **Process:**

RFP released July 29<sup>th</sup>

Proposals due via electronic submission by 6 PM PST on August 26<sup>th</sup>

Proposal selected for funding and applicants notified via electronic mail by September 23<sup>rd</sup>

Funding is available for one study. Available amount is \$83,000. We will not accept an overhead rate greater than 15%.

### **Background:**

Southern steelhead trout are considered a “Distinct Population Segment (DPS)” of steelhead trout by the NMFS and as such are listed as endangered under the Federal Endangered Species Act. The State of California lists southern steelhead as a Species of Special Concern. As part of its mission to preserve and protect resources within the Santa Monica Mountains, the National Park Service-Santa Monica Mountains National Recreation Area and its non-profit friends group, the Santa Monica Mountains Fund, are working to restore steelhead habitat and improve habitat connectivity for steelhead trout throughout the Santa Monica Mountains. NPS and many other

partners have conducted significant habitat and barrier removal work over the past fifteen years in Solstice Canyon. Currently all barriers on NPS lands within Solstice Canyon have been removed. Given the high quality steelhead trout habitat found within Zuma Canyon, its listing as important potential steelhead trout habitat in a summary report by CalTrout, and the protected nature of this watershed (the majority of this over 5,000 acre watershed is in public ownership), we are now interested in evaluating migration barriers in Zuma Canyon as a precursor to pursuing funding and planning for steelhead habitat work in this area.

Prior work on steelhead trout in southern California is extensive. The California Department of Fish and Game, National Marine Fisheries Service, and many non-profit watershed groups have commissioned or conducted studies of steelhead habitat, threats to the species, and recommended recovery actions throughout southern California. Available reports for background material include:

- Santa Monica Mountains Steelhead Habitat Assessment Final Project Report, January 2006. – CalTrout
- Santa Monica Mountains Steelhead Habitat Assessment: Watershed Hydrologic Analysis (Harrison, Keller, and Sallee 2005)
- Draft Southern California Steelhead Recovery Plan – 2009
- Historic Distribution of Southern Steelhead Trout in the Santa Monica Bay Region (Dagit, Drill and Meyer, 2005)
- Colonization and Persistence of a Southern California Steelhead (*Oncorhynchus mykiss*) Population (Bell, Dagit and Ligon)
- Many internal NPS planning documents related to barrier evaluation and removal in Solstice Canyon

### **Scope of Work**

We expect that this study will use the 2006 report from CalTrout and the Zuma Canyon inventory contained therein as a jumping off point for this project. We anticipate that the project will take between one year to complete and will include background research (reviewing available survey materials), field work including contacting private land owners along the river between Zuma Lagoon and NPS lands, field work to validate the status of existing barriers in the creek, analysis and recommendations (how best to remove barriers, what if anything is needed to replace them), prioritization of existing barriers for removal, cost estimates for barrier removals, and writing a final report which includes recommendations for barrier removal work and possible funding sources for funding the actual removal work.

It is unclear how much actual field examination of physical barriers will be necessary. The CalTrout report contains significant detail and may be sufficient to base removal design work and cost estimates on with only a few confirmatory field visits. In addition, gaining permission from area land owners and determining whether these land owners are willing to have the barriers located within their property removed may be a significant component of the project.

Obtaining reasonable cost estimates and recommended methods for removal of existing barriers is a key element of this study and is necessary for NPS and the Santa Monica Mountains Fund to seek funding to begin moving forward with barrier removal work. All passage recommendations

will need to comply with NMFS and DFG Fish Passage Criteria as outlined in the California Salmonid Stream Habitat Restoration Manual, Chapter 12.

Overall the Scope of Work includes the following elements:

- Assessment of state of knowledge regarding barriers and steelhead habitat in Zuma Canyon from review of the published and grey literature (this may require interviewing scientists at area non-profits who have conducted prior field work within this stream)
- Deed and title search on barrier sites and impoundment-abutting properties. As part of this project, proponents will need to create a database of private land owners along both sides of Zuma Creek from Zuma Lagoon to NPS lands including names and contact information
- Contact landowners adjacent to Zuma Creek from Zuma Lagoon to NPS lands, specifically those with impoundments on their properties or adjacent to barrier sites, to ascertain whether they are willing to have the stream surveyed on their property and whether they are open to having a stream barrier removed from their property
- Perform field survey and base mapping to confirm data found in reports and gain additional information needed to recommend removal actions and create cost estimates for barrier removal work
- Summarize existing reports and new fieldwork into an inventory of existing barriers to steelhead movement in Zuma Creek between Zuma Lagoon and the end of appropriate habitat on NPS lands in Zuma Canyon
- Existing Conditions Plan – Depict the structures, topography and impoundment bathymetry in plan view and cross section within the study area
- Analysis of existing barriers to formulate recommended removal actions and cost estimates for removal work for each barrier detected during the inventory. If necessary based on barrier survey, investigation into sediments behind barriers and discussion of pros and cons of possible sediment management options
- Hydraulic modeling of current status and post-barrier removal hydrology
- Fish passage – ensure through hydrologic modeling that the sites, if barriers are removed, will be passable to southern steelhead trout
- Assessment of compliance requirements for barrier removals and associated cost estimate for completing necessary compliance.
- Recommendation of barrier removal priority based on the severity of the barriers to passage
- Overall cost estimate for a future barrier removal study. This cost estimate should be comprehensive and include items mentioned previously (cost for barrier removal, cost for compliance) as well as costs associated with engineering services, preparation of preliminary and final construction plans and specifications, permit application processing, construction oversight, meeting attendance and facilitation, and any other costs necessary to take the project to bid
- Submission of a draft final report one month before the end of the project to allow time for NPS and partner review and comments
- A revised final report that includes
  - A summary of the state of knowledge regarding steelhead habitat and existing barriers along Zuma Creek (from Zuma Lagoon to the end of good steelhead habitat on NPS lands)

- Inventory of existing barriers to steelhead movement along Zuma Creek
- Recommendations for possible techniques to remove barriers for each barrier detected, with the preferred method identified for each barrier assessed
- Cost estimate for barrier removal for each barrier detected with sufficient detail to be used in subsequent grant proposals (see above)
- Recommendations for further habitat restoration work for this species in Zuma Creek
- Identification of potential funding sources for barrier removal work
- At least two trips to meet with park staff and partner staff with expertise in NPS activities in Zuma Canyon and past work with steelhead trout habitat within the SMMNRA
- An additional visit to the park to present the results of this research
- If possible, involvement of students or other citizen scientists any applicable portion of the research project

### **Application Process:**

Interested parties should submit the following via both electronic mail and one hard copy to Art Eck, Santa Monica Mountains Fund, Attn: Steelhead Trout Study Committee, 401 West Hillcrest Dr., Thousand Oaks, CA 91360. E-mail submissions should go to [SteelheadTroutGrant@gmail.com](mailto:SteelheadTroutGrant@gmail.com). Electronic submissions are due by 6 PM PST on August 26<sup>th</sup> in order to be considered for this project, regular mail submissions must be postmarked on or before August 27th. Applications should include:

1. Name, address, and contact information for principals in your organization
2. Proposal to complete the project as outlined in the scope of work including the process you will follow, timeline, and deliverables. The proposal should not exceed 8 pages with 12 point font.
3. A budget including overhead rates, hourly rates, and total costs for different phases of the project. The budget should not exceed three pages with 12 point font. Be sure to include a JUSTIFICATION for each item in your budget and clearly state how the item is necessary for the project.
4. Documentation of matching funds, if available (this can be included in the budget or as a separate narrative item). If this is a separate narrative it should not exceed 2 pages in length.
5. You may submit up to four examples of previously completed projects that are similar in nature to this one.
6. Please submit at least two references who can speak to the quality of your work.
7. Please submit a 1-4 page resume or C.V. for each of the project leads that you are proposing for this project.

### **Selection Process:**

A committee made up of NPS, Santa Monica Mountains Fund, and other partner and agency staff will review all submitted proposals. Proposals will be rated based on:

- Overall quality of the proposal as shown in logic, detail, clarity, and relevance of the project plan.
- Project plan clearly and adequately addresses each of the points listed in the Scope of Work.
- Deliverables and project schedule meet the general guidelines laid out in the Scope of Work in terms of proposed length for project, proposed number of site visits, necessary project components and content for final report.
- Proposal package contains all of the required elements including project plan, references, timeline, budget, and resumes and all components do not exceed length limits.
- Qualifications of proponent as demonstrated through prior work samples, resumes, and references.
- Extent of prior experience with / research on Southern California Steelhead Trout, barrier assessment, barrier removal, and other relevant research areas.
- Cost in relation to other proposals, deliverables, and project components.



Bonsall Drive Arizona Crossing. Example of one barrier in study area. Photo from CalTrout 2006 report.



Rainsford Drive Arizona Crossing. Example of one barrier in study area. Photo by NPS.