RECLAMATION
Managing Water in the West

U.S. Department of the Interior
Bureau of Reclamation

NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the Bureau of Reclamation's intention to fund the following project activities without full and open competition.

ABSTRACT	
Funding Announcement	BOR-UC-18-N019
Project Title	Development of High-Throughput Markers for Rio Grande Silvery Minnow
Recipient	University of New Mexico
Principal Investigator / Program Manager	Dr. Thomas Turner & Dr. Megan Osborne Department of Biology, College of Arts and Sciences University of New Mexico Albuquerque, NM 87131
Anticipated Federal Amount	$346,728.06
Anticipated Non-Federal Amount	$0.00
New Award or Continuation?	New award
Anticipated Period of Performance	October 1, 2018 – September 30, 2020
Award Instrument	Grant
Statutory Authority	Public Law 85-624, as amended through Public Law 107-136
CFDA # and Title	15.517 Fish and Wildlife Coordination Act
Single Source Justification Criteria Cited	(4) Unique Qualifications
Reclamation Point of Contact	Eric Gonzales

OVERVIEW

Monitoring of the genetics of the endangered Rio Grande silvery minnow (RGSM) has been ongoing since 1999, using nine microsatellite loci and the mitochondrial ND4 gene. From these nine microsatellite loci and ND4 gene, genetic diversity metrics are calculated and recommendations for genetic management decisions are made. The ongoing silvery minnow genetic monitoring program is a requirement in the 2016 Final Biological and Conference Opinion for Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Management and Maintenance Activities on the Middle Rio Grande in New Mexico (BO). Development of high throughput markers will help meet the BO requirement. This effort is also in response to the recommendations of the Peer Review Panel that examined the RGSM genetic monitoring program in 2016.

The purpose of this project is the development of a Single Nucleotide Polymorphisms (SNP) panel via Restriction Site-Associated DNA Sequencing that will allow for a thorough evaluation of various genetic metrics within silvery minnow. The project objectives are to:

1. Develop a SNP panel that provides sufficient loci to monitor genetic diversity (spatiotemporal), effective population size, population structure, and relatedness within or among in situ and ex situ populations.
2. develop sex-specific markers that will allow genetic determination of sex.
3. provide plans, updates, and reports for review and approval, including a draft study plan, oral presentations, and draft/final reports.

RECIPIENT INVOLVEMENT

Recipient will develop a panel of SNP via Restriction Site-Associated DNA Sequencing that will allow for a thorough evaluation of various genetic metrics within RGSM. The recipient will monitor genetic diversity (spatiotemporal), effective population size, population structure, and relatedness within or among in situ and ex situ populations. In addition, the recipient will: 1) develop sex-specific markers that will allow genetic determination of sex and 2) provide plans, updates, and reports for review and approval, including a draft study plan, oral presentations, and draft/final reports

RECLAMATION INVOLVEMENT

No substantial involvement on the part of Reclamation is anticipated for the successful completion of the objectives to be funded by this award. It is anticipated that Reclamation's involvement will consist of standard federal stewardship responsibilities such as monitoring project performance, technical assistance at the request of the recipient, etc.

SINGLE-SOURCE JUSTIFICATION

DEPARTMENT OF THE INTERIOR
SINGLE SOURCE POLICY REQUIREMENTS

Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.

In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria:

(1) Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives;

(2) Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity;

(3) Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress' intent to restrict the award to a particular recipient of purpose;

(4) Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications;

(5) Emergencies – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.

Reclamation did not solicit full and open competition for this award based the following criteria:

(4) UNIQUE QUALIFICATIONS

Single Source Justification Description:

The UNM has provided genetics support for RGSM since the inception in 1999 of the monitoring program. This extensive technical experience with RGSM genetics is not available at other universities or commercial entities and makes UNM uniquely suited to conduct the research needed for SNP development. Additionally, this work is an enhancement and continuation of genetics monitoring that UNM is currently performing for Reclamation.

STATUTORY AUTHORITY

P.L. 107–136

[16 U.S.C. 661] The Secretary of the Interior is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat; (2) to make surveys and investigations of the wildlife of the public domain.

SEC. 2. [16 U.S.C. 662] (b) In furtherance of such purposes, the reports and recommendations of the Secretary of the Interior on the wildlife aspects of such projects, and any report of the head of the State agency exercising administration over the wildlife resources of the State, based on surveys and investigations conducted by the United States Fish and Wildlife Service and such State agency for the purpose of determining the possible damage to wildlife resources and for the purpose of determining means and measures that should be adopted to prevent the loss of or damage to such wildlife resources.