

Peer Review Plan

Invasive Mussel Research Roadmap

EN-2020-8240-02

Date: April 14, 2020

Originating Office: Hydraulic Investigations and Lab Services Group, Technical Service Center, Bureau of Reclamation, Denver, CO

Reclamation Roles:

Delegated Manager: Robert Einhellig, Supervisor, Hydraulic Investigations and Lab Services Group, Technical Service Center, Bureau of Reclamation

Peer Review Lead: Sherri Pucherelli, Invasive Species Research Coordinator, Hydraulic Investigations and Lab Services Group, Technical Service Center, Bureau of Reclamation

Subject and Purpose: A research roadmap has been prepared for the Reclamation Science and Technology (S&T) Program to help direct and prioritize invasive mussel research. This roadmap was developed with input from subject matter experts from all Reclamation Regions and the Technical Service Center and also incorporates research priorities that have been established by interagency invasive mussel working groups throughout the United States. Research and monitoring of invasive zebra and quagga mussels became a priority for Reclamation in 2007 when quagga mussels were detected at Reclamation hydropower facilities along the lower Colorado River. Invasive dreissenid mussels (quagga and zebra mussels) are prolific breeders and are capable of settling on any hard surface they encounter. This behavior is problematic for hydropower facilities because the mussels settle on submerged surfaces like water intakes, trashracks, pipes, and other hydraulic equipment that are utilized for water delivery and hydropower production. When mussel populations are dense, mussels will begin to settle on top of each other which can restrict flow in critical systems leading to increased maintenance and unplanned outages. Along with the impact to hydropower facilities, mussels also negatively impact the ecosystem. As filter feeders, mussels can cause shifts in the natural ecosystem by disrupting the food chain, concentrating toxic substances, and degrading critical habitat which can all lead to the decline of native species and potentially the proliferation of disadvantageous species such as weeds or toxic algae. This invasive mussel research roadmap is intended to serve as a multi-year outlook of research needs that will help to prioritize future work and address invasive mussel issues that are pertinent to Reclamation.

Impact of Dissemination: The Invasive Mussel Research Roadmap is not considered influential or highly influential scientific information as defined by Office of Management and Budget Final Information Quality Bulletin for Peer Review (70 FR 2664-2677) and the Reclamation Manual Policy CMP P14 Peer Review of Scientific Information and Assessments. The nexus of this determination is that this document may provide a clearer understanding of the concerns associated with this topic, however there is no known decision or policy that will be affected by its dissemination. This peer review is considered discretionary based upon Reclamation Manual Policy CMP P14.

Peer Review Scope:

The subject of this review will consider the research needs established in the roadmap. Reviewers are to provide comment solely on the scientific information being reviewed, and not on any agency decision or policy. Reviewers may focus on the following three questions:

1. Do the needs listed in the draft roadmap seem like a reasonably representative collection of science and technology needs facing your management and technical community?
2. Are there other science and technology needs facing your management and technical community that are not listed in the draft roadmap?
3. For the needs listed in the draft roadmap and those you may have listed in response to question 2, are you aware of ongoing research and development activities to address those needs? If yes, please briefly describe (e.g., title) and identify organizational lead (e.g., agency, university, etc.).

Timing of Review: The review period is expected to be May 5 to June 5, 2020. The final Peer Review Report is expected to be available on the Bureau of Reclamation peer review public website (<http://www.usbr.gov/main/qoi/peeragenda.html>) by May 5, 2020. No time deferrals are involved.

Methodology of Review: Review will be conducted by individuals. The identities of the reviewers will be disclosed in the final Peer Review Report. Review findings/comments will be attributed to the individual reviewer.

Number of Peer Reviewers: It is anticipated that 3-5 peer reviewers will be utilized

Reviewer Selection Process: Peer reviewers will have professional experience in the field of biology, ecology, integrated pest management and will likely have direct experience with invasive mussel research and management or be familiar with agency needs for application of invasive mussel control, monitoring, and management. Reclamation staff will identify reviewers to meet the Peer Review Scope and required expertise identified above. The public will not be asked to nominate reviewers.

Delivery of Findings: Peer reviewers should submit a digital copy of peer review comments that address one or more of the supplied reviewer questions. The report will include a brief description of their findings and recommendations in a comment matrix. Comments should be submitted to the peer review lead by the end of the review period.

Response to Peer Review: At the conclusion of receiving peer review comments, the Peer Review Lead will submit a final Peer Review Report to Reclamation's peer review website (<http://www.usbr.gov/main/qoi/peeragenda.html>), which will summarize the findings of the peer review and list the comments provided by the reviewers, as well as Reclamation's response to the comment.

Federal Register Notice: Federal Register notices will not be provided announcing the formation of a peer review team and completion of the final report.

Applicability of the Federal Advisory Committee Act (FACA): This peer review is not subject to the Federal Advisory Committee Act (FACA) because the review does not involve open meetings or committee chartering and reviewers are being asked to provide individual reviews on the subject matter. Reclamation is not seeking consensus advice from the reviewers as a group.

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