

Peer Review Plan

Fort Laramie Can No. 2 Failure Mode Analysis

**Date:** August 13, 2019

**Originating Office:** Bureau of Reclamation, Great Plains Region, 2021 4<sup>th</sup> Avenue North Billings, MT 59101

**Reclamation Roles:**

Director: Michael Black, Regional Director, Great Plains Region, Bureau of Reclamation

**Subject and Purpose:** The Great Plains Region (GP) and the Technical Service Center are developing a failure mode analysis associated with the July 17 failure of a tunnel and canal near Ft. Laramie Wyoming. The analysis is evaluating the singular or series of events that led to the tunnel failure and canal breach that ultimately resulted in an interruption of the project’s ability to deliver water to approximately 140,000 acres of irrigated agriculture in Nebraska and Wyoming.

**Impact of Dissemination:** The paper is considered 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 technical opinion of the factors leading to the failure of the Ft. Laramie Canal Tunnel No. 2. This failure mode analysis may influence decisions surrounding repayment associated with repair as well as operations and maintenance of the tunnel and canal in the future, as well as provide information to other State and Federal agencies making financial assistance currently assumed not to exceed a \$500 million threshold.

**Peer Review Scope:** The subject of this peer review is to consider the available information about the failure of Ft. Laramie Canal Tunnel No. 2, including information developed from recent site visits, original construction information, recent material investigations, evaluation, and conclusions developed by the failure mode analysis team between July 19, 2019 and August 13, 2019.

Specific Questions for Peer Review:

Is the assessment, analysis, and conclusions contained within appropriate given the available data?

**Timing of Review:**

Document Development	August 9, 2019 – August 13, 2019
Peer Review Plan Posting to Reclamation Website	August 14, 2019
Peer Review	August 14, 2019 – August 20, 2019
Peer Review Report Published to Reclamation Website	September 15, 2019

**Methodology of Review:** Internal review by the Bureau of Reclamation’s Technical Service Center will be utilized comprised of technical experts in failure analysis of hydraulic structures.

**Number of Peer Reviewers:** It is anticipated that 2 peer reviewers will be utilized.

**Reviewer Selection Process:** The peer reviewers will have at least 10 years' experience with expertise in civil and geotechnical design and analysis of hydraulic structures and Dam Safety process for risk analysis. They will be technical experts in the field of civil engineering and geotechnical engineering and hold Professional Engineering licensure. Peer reviewers in this case will be internal to Reclamation, however, full efforts will be taken to ensure there is no conflict of interest associated with the peer review. Further, the final report will be made public such that external entities will have full and transparent access to the document.

**Delivery of Findings:** The peer reviewers will each submit a document to the author by the end of the review period identifying their review of the materials within the peer review scope identified above.

**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):** FACA is not applicable.

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