



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Brown, Carlson, Mital, Helgeson and Schlossberg  
FROM: Mark Zinniker, Generation Engineering Supervisor  
DATE: December 27, 2018  
SUBJECT: Urgent Investigations at the Leaburg Canal  
OBJECTIVE: Information Only

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## Issue

As described in the attached emergency declaration, EWEB needed to move quickly on response activities associated with excessive seepage at Station 120+00 on the Leaburg Canal. Observations of excessive seepage and soil movement in the area indicated that an internal erosion failure could develop. In response to this situation, EWEB drew down the canal and began preparations for embankment repair work.

In responding to this situation, EWEB required immediate geotechnical engineering support to provide oversight of the canal drawdown activities, prepare a subsurface investigations plan and develop conceptual repair designs. EWEB contracted with Cornforth Consultants from Portland, Oregon, to perform this work. (Contract # 18-2732Q for \$208,000.) Cornforth, a specialized geotechnical consulting firm that is well-qualified to perform these engineering services, has a long history of doing high quality work for EWEB. Their past work includes serving as the Independent Consultant (IC) for a 5-Year Dam Safety Review and numerous projects associated with the Leaburg Canal and the landslide-prone slopes above portions of the canal.

With Cornforth's support, EWEB has submitted a plan to the FERC for subsurface investigations at the area of concern. EWEB staff used that plan to solicit competitive bids from drilling contractors. A driller is currently under contract and poised to proceed with the subsurface investigations as soon as the FERC issues their approval of the plan. EWEB and Cornforth will also be working together expeditiously in 2019 to reach an agreement with the FERC on an appropriate repair strategy so that the Leaburg Canal can be returned to normal operations in a timely manner.

## Requested Board Action

Information only. No Board action requested.

## FINDINGS TO SUPPORT DECLARATION OF EMERGENCY

DATE: November 21, 2018REQUESTOR: Dan Olmstead, Generation EngineeringESTIMATED COST: \$ 208,000

**In accordance with ORS 279A.065, ORS279A.025, 279B.080, 279B.145, 279C.335(5); 279C.380(4) and all applicable EWEB Rules:**

The Purchasing Manager, with the concurrence of the General Manager and/or an affected Executive Manager, may approve award of a public contract for goods, services, or work as an emergency procurement.

**“Emergency”** means circumstances that:

- (A) Could not have been reasonably foreseen;
- (B) Create a substantial risk of loss, damage or interruption of services or a substantial threat to property, public health, welfare or safety; and
- (C) Require prompt execution of a contract to remedy the condition. (See ORS 279A.010((1)(f))

Such circumstances may also include, but are not limited to:

- (a) EWEB moving forward as quickly as possible to prevent interruption to vital services, restoration of vital services, or to
- (b) Prevention of loss to EWEB,
- (c) Protection of the quality of services, or
- (d) Other circumstances necessary to responsibly carry out EWEB's services to its customers

**279B.145 Finality of determinations.** The determinations under ORS 279B.055 (3) and (7), 279B.060 (3) and (10), 279B.075, 279B.080, 279B.085 and 279B.110 (1) are final and conclusive unless they are clearly erroneous, arbitrary, capricious or contrary to law.

### **NATURE OF THE EMERGENCY:**

Observations of a void and sediment accumulation and increasing seepage flows in the Leaburg Canal embankment indicate that a piping failure could develop. Generation staff have completely drained the canal to eliminate the immediate dam safety hazard and address various requirements from the FERC (see attached letters). The FERC has indicated that they will not allow EWEB to restore the canal to normal service until a comprehensive repair of the area between canal station 114+00 and 123+00 has been designed and constructed. Due to the canal outage, all generation at the Leaburg power plant has been suspended and will remain so until repairs are implemented and the threat to dam safety has been eliminated. The daily loss of generation revenues represents a substantial loss to EWEB. The nature of the final design of the repairs is unknown at this time, however it is critical that engineering design services proceed quickly so that the canal can be returned to service. This declaration of emergency is being requested to hire Cornforth Consultants to accommodate the FERC's requirement for licensed geotechnical engineering support, provide site geotechnical investigations support, and prepare conceptual repair designs. Cornforth has worked with EWEB since the 1980's on various Leaburg projects and is very familiar with both the Leaburg Canal and its important geological setting. The firm is located locally (Portland) and has licensed geotechnical engineers that have responded to EWEB's urgent needs quickly.