



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
441 G STREET, NW  
WASHINGTON, DC 20314-1000

JUL 11 2019

CECW-NWD

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

SUBJECT: The Willamette Falls Locks (WFL), Willamette River Oregon Section 216  
Disposition Study with Integrated Environmental Assessment (Study)

1. Purpose. Request your support to fund operation and maintenance activities to prepare WFL for deauthorization and disposition. This decision document provides evidence that the current WFL no longer serves its federally authorized purpose and is recommended for Congressional deauthorization and disposal. The report additionally recommends that prior to disposal/transfer, the U.S. Army Corps of Engineers (Corps) implement minimal safety improvements to a portion of the project to reduce risk of a failure that could impact the upstream pool elevations and Endangered Species Act (ESA) listed species.
2. Authorization. This study is authorized under Section 216 of the Flood Control Act of December 31, 1970, 84 Stat. 1830, Public Law (P.L.) No. 91-611. The law authorizes the Corps to review the operation of completed civil works projects constructed by the Corps when found advisable due to significantly changed physical or economic conditions to report to Congress recommendations on the advisability of modifying a project or its operation.
3. Project Background.
  - a. The WFL are the oldest multi-lift bypass navigation lock in the nation. They include a six chamber lock system with a 41 feet elevation change between the first and last chambers. The WFL were originally constructed by the Willamette Falls Canal and Lock Company with financial help from the State of Oregon between 1868 and 1872, with the WFL opening 1 January 1873. Various entities owned and operated the project before Congress authorized the Corps to purchase the WFL for \$300,000, contingent on the State of Oregon appropriating the same amount, by the Rivers and Harbors Act of June 25, 1910, 36 Stat. 630, 664, P.L. No. 61-264. The Corps purchased the WFL from the Portland Railway Light and Power Company in order to improve navigation along the Willamette River. The Corps signed the deed in 1913 and formally took over operation and maintenance in 1915.
  - b. The facility was placed in "Caretaker" status in 2006 due to the persistent decline in commerce moving through the WFL. Caretaker status denotes a limited preservation status, with minimal personnel employed to safeguard the facility (against fire, theft, and damage) and conduct minimal maintenance activities. Funding, at approximately

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\$75,000 annually, for Caretaker activities continues today and is expected to continue unless the facility is transferred.

c. A Facility Evaluation Report (FER) completed in 2011 revealed structural deficiencies related to corrosion of gudgeon anchors that hold the gates to the walls, seismic stability issues with the lock walls and gate monoliths and seepage issues with many of the lock chambers. As a result of the FER, the WFL were closed to all vessel operations since December 2011 due to life safety risks for vessels proceeding through the WFL.

d. Since the late 1990's the commercial tonnage through the WFL dropped to be less than 10,000 tons/year. This low commercial value and high cost of repairs has led to the Corps need for the disposition study.

e. The region has expressed considerable interest in acquiring the site and using it for navigation. In 2017, Oregon State Senate Bill 256 established the Willamette Falls Locks Commission (WFLC) with the purpose to advise state and local government agencies on the development and implementation of state policies relating to the repair, reopening, operation and maintenance of the WFL. Currently, it is assumed that, through the efforts of the WFLC, a state, regional, or local authority would purchase the WFL site in order to rehabilitate and maintain the WFL to an operational status.

4. Study Plan and Alternatives. The study followed the interim guidance on conduct of Disposition studies dated 22 August 2016 as well as the Real Estate Policy Guidance letter No. 33 – Interim Guidance on Disposition Studies dated 28 September 2016. The Study is also compliant with planning guidance ER 1105-2-100.

a. Planning Constraint: The District's Project Delivery Team established a project constraint that there will be no adverse effect upon the Willamette Falls. That is, the project shall:

(1) Avoid adverse impacts to the aquatic species listed as Threatened or Endangered under the ESA, 16 U.S.C. §§ 1531–1544, within the migration corridor near and around the Willamette Falls so that the associated functional fish ladders will continue to operate as intended.

(2) Avoid adverse impacts to benefits derived from upstream Corps fish passage and ecosystem restoration investments. To date over \$194 million has been spent for adult and juvenile fish passage and collection; and an additional \$500 million is

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anticipated to be invested in future Reasonable and Prudent Alternative measures required by the 2008 Biological Opinion.

b. Alternatives. The initial study started with seven alternatives to compare with the no action alternative. Alternatives were developed from combination of measures that were developed to reduce life safety concerns, structure stability and environmental risk reductions. Three alternatives were moved forward for more detailed analysis: the no action alternative (Alternative 1), placing a concrete wall near upstream end with minor seismic improvements (Alternative 7), and seismic improvements of upstream walls and gate sections (Alternative 3).

c. Selected Plan. The recommended plan (Alternative 3) includes Congressional deauthorization and disposal of the project, through either direct transfer by the Corps to an interested party or through the standard disposal authorities and procedures of the General Services Administration (GSA). Along with obtaining deauthorization and disposal authority, this alternative would address the primary seismic and safety risks associated with concerns of loss of the pool with measures that do not impede future owner/operators from returning the facility to operability. It includes minimal repairs required, from a federal perspective, to address the planning constraints, assuming the future owner/operator continues the base caretaker maintenance actions for the non-operational condition of the WFL. Repairs to address seismic and safety measures include installing vertical rock anchors in the gate monolith at the upstream end of the WFL and Guardlock monoliths on the riverward side, placing exclusion fencing and setting up debris and boat barriers along the west side of the WFL. If the Corps is unable to directly transfer the facility due to the lack of an interested party being identified, the Corps would look to transfer the property through GSA. If the GSA transfer process were to result in no viable options for transfer, the Corps would maintain ownership of the project as a non-operable system. This is the No Action Alternative (NAA), however the costs of the NAA are higher than the recommended alternative due to the need for continued operations and maintenance of the facility. All alternatives considered in this study include seismic retrofit measures to address structural instability of the lock walls, these measures are recommended for implementation regardless of the alternative selected and would occur prior to transfer of the facility under the recommended alternative, therefore even if the recommended plan (preferred alternative) is not implemented, the measures and associated risks are similar and the recommended alternative remains the least cost option that meets the project objectives and avoids the constraints.

5. Project Costs. The selected plan is the least cost alternative and aligns to the region and stateholders local regional goals for the area. The total cost of required modifications/repairs for the selected plan are \$2,744,000 or approximately \$104,100 on

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an average annual basis (calculated using a 2.875% discount rate over 50 years) in Fiscal Year 2019 dollars. It is estimated that an additional \$75K will be required to continue minimal O&M activities until transfer can be completed. The real estate transaction fee for the disposal action after repairs are completed is estimated at \$83K.

6. National Environmental Compliance Act (NEPA) Compliance. Signing the Finding of No Significant Impact will complete the NEPA compliance requirements for this project. The Draft Environmental Assessment was released to the public along with the draft report on 15 May 2017. Comments from this review was fully evaluated and incorporated.

7. Stakeholder Input. The planning process included extensive coordination with a wide range of potentially affected/interested parties, including federal, state, tribes and local government agencies. Input from interest groups and the general public was also solicited, and included the scoping process and public review of the draft study and final study. All comments and recommendations were reviewed and considered.

8. Technical Review. Technical review has been completed and incorporated. Several Corps offices including the Huntington District, Los Angeles District, Rock Island District, and the Cost Center of Expertise in Walla Walla District. Agency Technical review certification was completed as of 4 December 2017.

9. Recommendation. I have reviewed the report and approve the Recommended Plan as described in the report, including seeking Congressional deauthorization and approval of disposition of the WFL project, with such modifications thereof as in the discretion of the Commander, Corps may be advisable. The estimated first cost of the recommended plan is \$2,744,000. Anticipated holding costs, if transferred within the five-year timeframe is about \$75,000/year. Transaction costs are expected to be \$83,000. No operations, maintenance, repair, rehabilitation, and replacement expenses are expected after disposition occurs. All dam/damming surfaces of the WFL would be placed under Oregon state's Dam Safety Program upon transfer and all responsibility of meeting the state dam safety requirements would be placed on the transferee.



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Director of Civil Works