

DEPARTMENT OF THE ARMY PERMIT

Permittee:

Tualatin Valley Water District
1850 SW 170th Ave.
Beaverton, OR 97003

City of Hillsboro
150 E. Main Street
Hillsboro, OR 97123-4028

Permit No: NWP-2015-0041

Issuing Office: U.S. Army Corps of Engineers, Portland District

NOTE: The term "you" and its derivatives as used in this permit means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the U.S. Army Corps of Engineers (Corps) having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The project is the Willamette Water Supply System Project and involves completing seismic and capacity upgrades at an existing intake within and along the Willamette River, construction of a new water treatment plant, construction of new water storage tanks, and construction of water transmission lines. The project will permanently impact 0.86 acres of wetland and 13 square feet of non-wetland waters, and temporarily impact 4.51 acres of wetland, 0.28 acre of non-wetland waters and 1.58 acres of roadside ditches. Approximately 0.47 acre of temporary impacts will result in a conversion of palustrine forested wetland to palustrine emergent or palustrine scrub shrub wetland in the area directly over the transmission pipeline. Approximately 0.40 acres of indirect impact to palustrine forested wetland would occur due to loss of forested buffer at the proposed water treatment plant. The project infrastructure would allow for the withdrawal of up to 150 million gallons of water per day.

The project consists of the following elements:

- Existing 66-inch diameter fish screens will be replaced with new 78-inch diameter fish screens. The old screens will be un-bolted and new screens will be bolted on. Divers will perform the work and a barge mounted crane will maneuver the screens.

- Up to 10 H-piles will be modified to accommodate the larger fish screens. The contractor may complete one of the following to accommodate the larger screens: 1) The existing H-pile would be cut by divers and attached to brackets to extend the area protected by the pile; or 2) the existing H-pile will be removed using a vibratory hammer and replaced with either a steel H-pile designated HP 24 or smaller, or wood pile that has not been treated with preservatives or pesticides. The existing H-pile may be cut at 2-feet below the mud line if it is unable to be completely removed. New pile will be installed using vibratory methods until refusal and finished with an impact hammer.

- The project includes site seismic improvements to protect the intake, pump station, and associated structures. Sixteen (16) 4-foot diameter concrete tangent piles will be constructed on the bank of the Willamette River to provide seismic stabilization at the intake. Of the sixteen piles, one will be constructed below the ordinary high water mark (OHWM) of the Willamette River. The tangent piles will extend approximately 50 feet deep. Existing access roads will be upgraded using geotextile fabric and crushed rock to access the site.

- Approximately thirty-seven (37) 10-foot diameter piles and a jet grout block will be constructed above the OHWM of the Willamette River near the intake pipe. Jet grouting consists of injecting liquid concrete into the soil to create a soil/concrete mixture below the ground surface. The piles and jet grout block will extend 450 feet in length at the top of the slope in two segments.

- Pump station facilities will be constructed in the City of Wilsonville in uplands and will not involve work in waters of the United States.

- A new water treatment plant (WTP) will be constructed near the City of Sherwood. The new WTP will permanently impact a total of 0.86 acres of wetland for site grading, construction of a retaining wall, construction of an access road, and building construction. Construction will also temporarily impact 0.10 acre of forested wetland. Loss of forested buffer will result in indirect impacts to 0.40 acres of palustrine forested wetland.

- New reservoir facilities will be constructed on South Cooper Mountain. The reservoir facilities, staging, and stockpile areas, will all be constructed in uplands.

- Construction of the water transmission pipelines will impact wetlands, non-wetland waters, and ditches. The transmission pipe will convey water from the pump station, to the WTP near Sherwood, Oregon, to the new water storage tanks on South Cooper Mountain, and to connections with existing Tualatin Valley Water District and City of Hillsboro water distribution systems. The transmission pipeline will be installed using trench excavation and trenchless construction (jack and bore, pipe ramming, shielded tunneling, and microtunneling).

Detailed Project impacts are included in Attachment 1.

Purpose: To provide an increased amount of drinking water that is resilient to seismic events and drought, and provides water source redundancy for the water customers of the City of Hillsboro and the Tualatin Valley Water District.

Project Location: The project is located in the Willamette River, the Tualatin River and several of its tributaries, multiple wetlands, and ditches in the cities of Wilsonville, Sherwood, Beaverton, Tigard, Tualatin, and Hillsboro, in Clackamas and Washington Counties, Oregon.

Drawings: Seventy Eight (78) Drawings and Figures (Attachment 2)

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on November 9, 2028. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition No. 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions (Attachment 3).

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

a. Upon starting the activities authorized by this permit, Permittee shall notify the U.S. Army Corps of Engineers, Portland District, Regulatory Branch that the work has started. Notification shall be provided at the start of each construction year, detailing the work packages that will be constructed and the approximate start dates. Notification shall be provided by e-mail to cenwp.notify@usace.army.mil and the email subject line shall include: NWP-2015-41, Washington County.

b. Permittee must allow representatives from the Corps of Engineers to inspect the authorized activity and any mitigation, preservation, or avoidance areas at any time deemed necessary to ensure that the authorized activity is being or has been accomplished in accordance with the terms and conditions of your permit.

c. The following special condition is a part of all Department of the Army permits that provide authorization under Section 10 of the Rivers and Harbors Act, regardless whether the permit provides such authorization under Section 10 alone, or in combination with authorization under other laws:

The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the U.S Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

d. Permittee shall complete all in-water work, to the maximum extent practicable, within the preferred time period (i.e., work window) specified in Oregon Department of Fish and Wildlife's (ODFW) "Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources," June 2008, or most current version, available at: <http://www.dfw.state.or.us/lands/inwater/>.

If work cannot be completed within the preferred timing window, despite every attempt to do so, permittee shall submit a written request to work outside of the preferred window to the District Engineer. The request can be made by means of the joint-agency In-water Work Period Variance Request for Previously Permitted Authorizations form which can be found at <http://www.oregon.gov/dsl/WW/Pages/WWforms.aspx>. Permittee shall not begin any in-water work outside of the preferred window until they have received written approval from the District Engineer.

e. This Corps permit does not authorize you to take an endangered species, in particular the USFWS Animal Trust Species or USFWS Plant Trust Species or NMFS Trust Species. In order to legally take a listed species, you must have separate authorization under the ESA (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed BiOp prepared by the National Marine Fisheries Service (NMFS) dated October 1, 2018 contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO (NMFS Reference Number WCR-2017-7795). Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the attached BO, which terms and conditions are incorporated by reference in this permit (Attachment 4). Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute noncompliance with your Corps permit. The NMFS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

f. Permittee shall conduct species surveys to determine Streak Horned lark (*Eremophila alpestris strigata*) presence within suitable habitat if work will occur within the habitat during nesting season (typically April through August). The surveys should occur the year prior to planned construction and occur during the nesting season. For construction beginning in 2019 within areas determined to be suitable habitat, species surveys should be completed and submitted to the Corps for review prior to work commencing. Permittee shall provide the results of the survey to the address listed in Special Condition a. to allow the Corps to determine if the lark may be impacted by the proposed project.

g. Permittee shall implement and abide by the Programmatic Agreement (PA), entitled "PROGRAMMATIC AGREEMENT AMONG THE UNITED STATES ARMY CORPS OF ENGINEERS AND THE OREGON STATE HISTORIC PRESERVATION OFFICE AND TUALATIN VALLEY WATER DISTRICT, and CITY OF HILLSBORO" in its entirety. The U.S. Army Corps of Engineers has been designated the lead federal agency responsible for implementing and enforcing the Programmatic Agreement as signed. If you fail to comply with the implementation and associated enforcement of the PA, the Corps may determine you are out of compliance with the conditions of the Department of the Army permit or authorization and suspend the permit or authorization. Suspension may result in modification or revocation of the authorized work.

h. Permittee shall obtain 1.73 credits from the Butler Mitigation Bank. Prior to performing work in waters of the U.S. authorized by this permit, permittee shall submit documentation of the completed mitigation bank transaction to the U.S. Army Corps of Engineers, Portland District, Regulatory Branch. Documentation shall be submitted by e-mail to cenwp.notify@usace.army.mil and the email subject line shall include: NWP-2015-41, Washington County.

i. Permittee shall re-vegetate disturbed areas at the project site during the earliest appropriate planting season after activity is completed. The vegetation shall consist of native, non-invasive herbs, shrubs, and trees.

j. Permittee shall submit detailed restoration plans for the areas where open-trench crossing is proposed across a stream for each work package prior to the discharge of fill into Waters of the U.S. The restoration plans should be consistent with the guidance outlined in the plan titled "Willamette Water Supply Program – Conceptual Post-Construction Site Restoration Plan" dated February 28, 2017.

k. Permittee shall provide a copy of the permit transmittal letter, permit form, and permit drawings to all contractors performing any work authorized by Corps No. NWP-2015-41.

l. Permittee shall complete and sign the enclosed Compliance Certification (Attachment 5). Permittee shall submit the completed certification to the U.S. Army Corps of Engineers, Portland District, Regulatory Branch by December 31st of each year construction activities occur. The certification should be accompanied with a description of the work that was completed.

m. Permittee shall submit an as built report to the Corps at the address shown in Special Condition (a) by December 31 of the year a work package is completed. An as built report shall be submitted for each completed work package. The report shall contain photographs of the site and the initial grading survey of resource areas within the work package. A map identifying the locations and directions of the photographs shall be included in the as-built report.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- Section 404 of the Clean Water Act (33 U.S.C. 1344).
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this Authorization:

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability: In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

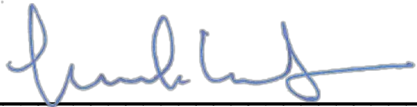
b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain

situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions: General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit. Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.



(PERMITTEE SIGNATURE)

December 6, 2018

(DATE)

Mark Knudson

(PRINTED NAME)

Chief Executive Officer

(TITLE)



(PERMITTEE SIGNATURE)

December 6, 2018

(DATE)

Kevin Hanway

(PRINTED NAME)

Director

(TITLE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

**FOR THE COMMANDER, AARON L. DORF, COLONEL, CORPS OF ENGINEERS,
DISTRICT COMMANDER:**

for _____
(DISTRICT COMMANDER)

(DATE)

William D. Abadie
Chief, Regulatory Branch

When the structures or work authorized by this permit are still in existence at the time the property is transferred , the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign below.

PERMIT TRANSFEREE:

Transferee Signature

DATE

Name (Please print)

Address

City, State, and Zip Code