



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, WA 99205-1295 • 509-329-3400

October 24, 2019

Paul Wollman
Warden Hutterian Brethren
1054 West Harder Road
Warden, Washington 99857

RE: Determination of Nonsignificance

Dear Paul Wollman:

Enclosed is the Determination of Nonsignificance for your proposed retrofit project. According to State Environmental Policy Act (SEPA) Rules, a public notice of this determination (also enclosed) must be published in a newspaper of general circulation. We will publish this notice on October 24, 2019 and October 31, 2019 in the Adams County Journal.

Please call me at (509) 329-3458 if you have questions regarding SEPA or the public notice.

Sincerely,

Megan Rounds, PE
Water Quality Program

SJ:sj

Enclosure (3)

cc: Terri Costello, Ecology Eastern Region SWM
Cindy Anderson, Ecology Eastern Region SEA



NOTICE: ANNOUNCEMENT OF AVAILABILITY OF APPLICATION FOR STATE WASTE DISCHARGE PERMIT, DETERMINATION OF NONSIGNIFICANCE, AND APPLICATION FOR COVERAGE UNDER THE GENERAL PERMIT FOR BIOSOLIDS MANAGEMENT

APPLICANT: Warden Hutterian Brethren

FACILITY: Headquarters Lagoon Wastewater System
1054 W. Harder Road, Warden, WA 99857

Notice is hereby given that, Warden Hutterian Brethren is applying to the Washington State Department of Ecology (Ecology) for coverage under the State Waste Discharge Permit Program and General Permit for Biosolids Management.

SWD Permit: Warden Hutterian Brethren has applied for a State Waste Discharge (SWD) permit in accordance with the provisions of Chapter 90.48 Revised Code of Washington (RCW) and Chapter 173-216 Washington Administrative Code (WAC). Warden Hutterian Brethren presently owns and operates a municipal facility that discharges wastewater to two cell evaporative lagoons. The application proposes to change the municipal system from evaporative lagoons to storage lagoons with a land treatment system. The wastewater, following treatment, must meet the requirements of the Washington State Water Pollution Control Act and applicable regulations for a permit to be issued. The Department of Ecology is proposing to issue the permit and is hereby issuing public notice of its intent. Interested persons can submit their name, address, and comments regarding this permit to:

Send written comments to: Megan Rounds, WQP, Department of Ecology
4601 N. Monroe St., Spokane, WA 99205

Send email comments to: mrou461@ecy.wa.gov

All respondents to this notice will receive a copy of the draft permit and fact sheet before the final permit is issued.

DNS: Ecology issued a Determination of Nonsignificance (DNS) on October 24, 2019 for the proposal described in this notice. After review of a completed Environmental Checklist and other information on file with the agency, Ecology has determined this proposal will not have a probable significant adverse impact on the environment. Copies of the DNS and the completed Environmental Checklist are available to the public upon request. Ecology invites the public to comment on the DNS by submitting comments **no later than November 7, 2019** to:

Send written comments to: Megan Rounds, WQP, Department of Ecology
4601 N. Monroe St., Spokane, WA 99205

Send email comments to: mrou461@ecy.wa.gov

Biosolids General Permit: Biosolids are generated and accumulate over a period of years in lagoons at the Warden Hutterian Brethren wastewater treatment facility located at 1054 W. Harder Road in Warden, Washington. Application for Coverage under the General Permit for Biosolids Management addresses the management of the material at this site. Presently, the facility does not anticipate land application.

However, if future land application is proposed, it will be consistent with an approved Site Specific Land Application Plan. If needed, additional environmental review will be completed and public notice will be provided consistent with Chapter 173-308 WAC, Biosolids Management, including posting of the potential land application site for at least 30-days. At this time, the Warden Hutterian Brethren does not provide biosolids to any other facility, however maintains the option of transferring its biosolids for further treatment to any facility permitted to accept it or to have its biosolids managed by any permitted biosolids beneficial use facility.

For the Biosolids permit application: Any person wishing to comment or request a public hearing or meeting must do so in writing **no later than November 30, 2019**. If you wish to be included on an interested parties list to receive notifications of biosolids activities relating to this project, send comments or requests to:

Send written comments to: Terri Costello, SWM, Department of Ecology
4601 N. Monroe St., Spokane, WA 99205

Send email comments to: temi461@ecy.wa.gov

The Department of Ecology will provide written confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list.

This notice will publish October 24, 2019 and October 31, 2019; the event listing is located on [Ecology's Events Listing Homepage](https://ecology.wa.gov/wardenhutteriancomments) at <https://ecology.wa.gov/wardenhutteriancomments>. Ecology is an equal opportunity agency. If you need this publication in an alternate format, please contact us at (509) 329-3400 or TTY (for the speech and hearing impaired) at 711 or 1-800-833-6388.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, WA 99205-1295 • 509-329-3400

STATE ENVIRONMENTAL POLICY ACT
DETERMINATION OF NONSIGNIFICANCE

Date of Issuance: October 24, 2019

Lead Agency: Department of Ecology, Water Quality, Eastern Regional Office, Permit Unit

Agency Contact: Megan Rounds, (509) 329-3458

Description of Proposal:

The proposed project would retrofit an existing irrigation pivot with approximately 600 feet of underground and above ground piping and a series of drag tubes. The project includes the construction of a new submersible pump with screen and flow meter, constructed in the existing lagoon effluent vault for land treatment by irrigation. The septic tanks primarily collect septage material. Septage in the septic tank is pumped and hauled away by a pumping company.

The facility will eventually need to remove any biosolids accumulating in the lagoons. The biosolids will need to be removed and managed according to the General Permit for Biosolids Management.

Location of Proposal: 1054 West Harder Road, Warden, WA, on Parcel number 2831080330001, Township 18N, Range 31E, and Sections 8 SE & 18 SW.

Applicant/Proponent:

Warden Hutterian Brethern (Paul Wollman)
pkwollman@gmail.com
(509) 349-8045
1054 West Harder Road, Warden Washington 98857

The lead agency (Ecology) for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with Ecology. The Environmental Checklist is available online at <https://apps.ecology.wa.gov/separ/Main/SEPA/Search.aspx>.



Warden Hutterian Brethern
Determination of Nonsignificance
October 24, 2019
Page 2

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date of issuance. Ecology invites the public to comment on this DNS no later than November 7, 2019, by submitting written comments to Megan Rounds, Water Quality Program, 4601 N. Monroe Street, Spokane, WA 99205-1265 or by email to mrou461@ecy.wa.gov.

Responsible official:

Brook Beeler
Regional Director
Department of Ecology
4601 North Monroe Street
Spokane Washington 99205
(509) 329-3478

X


Regional Director

Date:

10/24/2019

This SEPA decision may be appealed in conjunction with an appeal on the underlying agency action. In this case, the permit, rule amendment, plan, order or other may be appealed by the applicable citation and summary of timeline.

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:

Warden Hutterian Brethren Wastewater Land Treatment Project

2. Name of applicant:

Warden Hutterian Brethren

3. Address and phone number of applicant and contact person:

**Contact: Paul Wollman
509-760-1808
1054 West Harder Road
Warden, WA 99857**

**Authorized Agent: J-U-B ENGINEERS, Inc.
Contact Person: Layne Merritt, P.E.
W. 422 Riverside, Suite 304
Spokane, WA 99201
(509) 458-3727 - Office phone
(509) 458-3762 - Fax**

4. Date checklist prepared:

August 22, 2019

5. Agency requesting checklist:

Washington State Department of Ecology (DOE)

The facility cannot discharge until Ecology issues the waste discharge permit.

6. Proposed timing or schedule (including phasing, if applicable):

Modifications to the system would begin in July 2019. The system would be ready for the first discharge in September 2019, or May 2020. 8/29/2019 MMR

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Future activity will involve the eventual removal and proper management of solids collecting in the lagoons. This will be years down the road, but could potentially involve land application or other means of Ecology approved management.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

A DOE Application for a State Waste Discharge Permit to Discharge Domestic Wastewater to Ground Water by Land Treatment will be prepared for this proposal.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No application or governmental approvals are pending for other proposals directly affecting the property covered by this proposal.

10. List any government approvals or permits that will be needed for your proposal, if known.

(1) DOE Application for a State Waste Discharge Permit to Discharge Domestic Wastewater to Ground Water by Land Treatment.

(2) Application for Coverage Under the General Permit for Biosolids Management

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The proposed project would retrofit an existing irrigation pivot with approximately 600 feet of underground and above ground piping and a series of drag tubes. A new submersible pump with screen and flow meter would be constructed in the existing lagoon effluent vault for land treatment by irrigation (Attachment 1, Project Exhibit).

Currently, solid material is primarily captured in the existing septic tank with some solid material collecting in the evaporative lagoons. The solid material collected in the septic tanks is pumped and hauled off site by a pumping company. Solids accumulating in the lagoons will eventually need to be removed. The material will be managed in accordance with Federal, State, and Local regulations at an approved facility. If the material meets biosolids standards, and will be land applied, prior approval from the Department of Ecology and coverage under the General Permit for Biosolids Management will be obtained.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The proposed project is located at 1054 West Harder Road in Warden, Washington at the Warden Hutterian Brethren (WHB) Headquarters. The proposal is contained within Section 8, Township 18 North, Range 31 East, in Adams County, Washington (Attachment 2, Vicinity Map).

**T18N, R31E, S8SE & S 18SW
Parcel 2831080330001
Lat 47.0583N / long
-118.9453W**

8/28/2019 CKA

B. Environmental Elements

1. Earth

a. General description of the site:

(circle one): Flat **rolling** hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

The site is relatively flat to rolling; the steepest slope is approximately 10%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Map, the dominate soil type found on the site is Shano silt loam, 5 to 30 percent slopes (61.6%), which is considered "Farmland of statewide importance." The remaining soils are Shano silt loam, 0 to 5 percent slopes ("Prime farmland if irrigated") (Attachment 3, Soil Survey). The proposal would not permanently remove any soils considered "farmland of statewide importance."

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Approximately 150 feet of discharge irrigation pipe would be placed below grade between the vault and the irrigation pivot. This would result in approximately 60 cubic yards of excavation.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion is expected to be minimal and could occur during construction of underground piping. Erosion control measures would be implemented.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The proposed project would not result in a net increase of impervious surfaces after project completion.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Areas disturbed by underground utility installation may be hydro-seeded to minimize dust impacts.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Dust as a result of construction operations may occur, but would be mitigated by applying water to the soil surface. Emissions would be produced from diesel powered machinery used to load materials on site. Emissions produced by the project would be temporary and would cease after project completion.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions or odor that may affect the proposal.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The proposed project would land treat wastewater to pasture crops via drag tubes. The use of drag tubes would eliminate the generation of wastewater aerosols. In addition, tubes would be periodically drained to prevent any anaerobic activity that may increase odors.

3. Water

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

In addition to the wastewater lagoons, an unnamed intermittent creek is situated along the eastern border of the site; this creek is dry much of the year. This creek was diverted in 2010 in order to construct the current wastewater lagoons. The USFWS National Wetlands Inventory (NWI) suggests that a freshwater pond is located in the center of the project area. This "pond" is the site of the decommissioned wastewater lagoon, before it was shifted to its current position (Attachment 4, NWI Map).

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

The irrigation pivot irrigates fields that are located approximately 180 feet from this intermittent creek.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No, according to the Federal Emergency Management Agency (FEMA) Floodplain Insurance Rate Map (FIRM) panel 53001C0475D the project is designated an “area of minimal flood hazard” (Attachment 5, FEMA FIRMette). Zone X per FIRM 8/23/2019 CKA

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No groundwater withdrawals would occur as a result of this project. The proposed project would land treat up to 3.5 million gallons of wastewater to the pasture crops, annually (between April to September).

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The proposed project would land treat municipal wastewater to pasture crops. Approximately 14,600 gallons of wastewater per day (average) is produced by residential/commercial sources at WHB. Municipal wastewater passes through a 6,000 gallon septic tank for solids settling before entering the evaporative lagoons.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff is expected to infiltrate through the soil of the existing agricultural field.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

Land treated wastewater would infiltrate through the soil at agronomic rates for crop consumption. Waste materials would not enter surface waters, and it is unlikely that waste materials would enter ground waters as the water table is several hundred feet below the surface. The application rate will be monitored to assure proper treatment and to prevent transfer of waste materials to groundwater.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The proposed project would not affect drainage patterns in the vicinity of the site.

- d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

A monitoring plan would be implemented that includes routine irrigated wastewater influent and effluent water quality sampling, and monitoring of soil characteristics. Given the depth to groundwater and lack of surface water in the vicinity of the site, no impacts are expected.

4. Plants

- a. Check the types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- Orchards, vineyards or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

- b. What kind and amount of vegetation will be removed or altered?

Pasture grass along an approximate 150-foot segment would be temporarily removed to place the discharge irrigation pipe. This grass would be replaced after the installation of the irrigation pipe.

- c. List threatened and endangered species known to be on or near the site.

According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database, Spalding's Catchfly – an Endangered Species Act (ESA)-listed threatened species – has the potential to occur in the project area (Attachment 6, IPaC Report). The Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) database did not indicate any recent records of occurrence of Spalding's Catchfly in the project area, or near the site (Attachment 7, PHS Report). Given the pre-disturbed nature of the site (active agricultural land), no suitable habitat for the species exists within the project area.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Disturbed pasture grass would be replanted following construction. In addition, the land application of wastewater effluent to pasture grass would provide additional nutrients that would enhance grass production.

- e. List all noxious weeds and invasive species known to be on or near the site.

No known noxious weeds or invasive species are known to be on or near the site.

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Hawks, songbirds, deer, and small mammals have been observed on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other _____

- b. List any threatened and endangered species known to be on or near the site.

The USFWS IPaC Report identified two animal species with the potential to occur on the site: Columbia Basin Pygmy Rabbit (endangered) and Yellow-Billed Cuckoo (threatened) (Attachment 6, IPaC Report). The WDFW PHS database did not indicate any records of recent occurrence of the abovementioned ESA-listed species in, or near the project area (Attachment 7, PHS Report). The project area does not contain suitable habitat for the Columbia Basin Pygmy Rabbit or Yellow-Billed Cuckoo.

c. Is the site part of a migration route? If so, explain.

The site is not part of a known migration route.

d. Proposed measures to preserve or enhance wildlife, if any:

There are no measures to preserve or enhance wildlife.

e. List any invasive animal species known to be on or near the site.

There are no known invasive animal species on or near the site.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric would be used to power the pump and float controls. Power would be provided from the existing irrigation pivot.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No, the project would not affect the potential use of solar energy by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

This project would land apply treated wastewater to pasture crops.

...apply domestic wastewater to pasture crops for final treatment.

1) Describe any known or possible contamination at the site from present or past uses.

8/29/2019 MMR

The proposed project is in the vicinity of wastewater lagoons. According to the DOE Hazardous Facility/Site database, the WHB Headquarters was cited for two final enforcements, one through the DOE Toxics program and the other through the DOE Air Quality Program. A final non enforcement was also issued to WHB Headquarters by the DOE Water Quality program. However, there is no known or possible contamination in the project

footprint from past or present uses.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no existing hazardous chemicals/conditions that might affect project development and design.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None.

- 4) Describe special emergency services that might be required.

None.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

A monitoring plan would be implemented that includes routine irrigated wastewater influent and effluent water quality sampling, and monitoring of soil characteristics. In addition, wastewater would be applied using drag tubes to eliminate aerosols and drift in public roadways and adjacent properties.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project site is located along Harder Road in a predominantly agricultural area. No noise in the area would impact the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

During construction, minor short-term noise would be created by construction equipment (60-65 dB). The project would not result in long-term noise increases.

- 3) Proposed measures to reduce or control noise impacts, if any:

Construction would be limited to established daytime working hours (Monday through Saturday, 7 a.m. to 5 p.m.). Construction equipment would have properly functioning mufflers.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is currently used for agricultural purposes. The adjacent properties immediately west of the project site are part of WHB Headquarters and consist of residential and commercial land uses. The other adjacent properties are also agricultural properties. This project would not affect current land uses on nearby or adjacent properties.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Yes, the project site contains pasture grass. No agricultural or forest land of long-term commercial significance would be converted to other uses as a result of this proposal.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

- c. Describe any structures on the site.

The project site contains an irrigation pivot and wastewater lagoons. Several buildings associated with the WHB Headquarters are located immediately west of the proposed project.

- d. Will any structures be demolished? If so, what?

No.

- e. What is the current zoning classification of the site?

The Adams County zoning classification of the site is Prime Agriculture.

- f. What is the current comprehensive plan designation of the site?

According to the Adams County Comprehensive Plan, the site is designated as Prime Agriculture.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

Zero.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Not applicable.

- b. What views in the immediate vicinity would be altered or obstructed?

None.

- b. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

Not applicable.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

None.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

No buildings, structures or sites located on the site are over 45 years old listed or eligible for listing in national, state or local preservation registers. A property determined eligible for listing is approximately 0.66 miles southwest of the project area; this property is associated with the East Low Canal (Attachment 8, WISAARD Map).

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No known landmarks, features, or other evidence of Indian or historic use or occupation exist on the project site. No known material evidence, artifacts or areas of cultural importance are on or near the site. According to the Washington Information System for Architectural & Archaeological Records Data (WISAARD) system predictive model, the project area is considered "low risk" to "moderate risk."

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The WISAARD system was used to assess the potential impacts to cultural and historic resources on and near the site. No consultation with tribes and DAHP or cultural resource surveys have been conducted for the project site.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

If construction activities uncover any materials of cultural or historical significance (i.e. bone fragments, pottery, stone tools, etc.), construction would halt and coordination with the State Historic Preservation Officer (SHPO) or the Tribal Historic Preservation Officer (TPHO), and funding agency(ies) would occur.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Harder Road serves the project site. The site is 800 feet north of the Howard/Harder Road intersection.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The project site is not currently served by public transit. The closest transit stop is approximately 16 miles northwest of the project site, in Moses Lake, Washington.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

None.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

- h. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No utilities are proposed for the project.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Name of signee Layne Merritt

Position and Agency/Organization Area Manager, J-U-B ENGINEERS, Inc.

Date Submitted: 8/22/19

D. Supplemental sheet for nonproject actions

(IT IS NOT NECESSARY to use this sheet for project actions)

Attachment 1 – Project Summary Exhibit

PARCEL
2831070000001
(WBH TRUST)

PARCEL
2831080260001 (GREENWALT,
DAVID JACOB)

PARCEL
2831090400001
(GREENWALT, DAVID
JACOB)

HOMES, KITCHEN, CLASSROOMS,
CHURCH CENTER

INFLUENT FLOW METER

6,000 GAL. SEPTIC TANK

EVAPORATIVE LAGOONS
(6.4 MG)

PARCELS
2831080330001 (WHB)
2831080340002 (WHB)
2831080340001 (LIND SCHOOL DISTRICT)

IRRIGATION PUMP VAULT

WORKSHOPS

IRRIGATION WELL BUILDING

HARDER RD

FROM COLLECTION SYSTEM
TO LAGOONS

WELL SOURCE
S-02

WELL SOURCE
S-01

PROPOSED LAND
TREATMENT AREA
(9.2 ACRES)

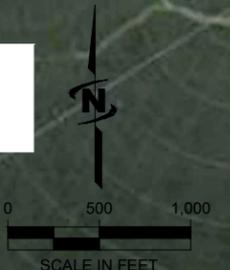
HOWARD RD

EXISTING
IRRIGATION PIVOT
(23.9 ACRES)

PARCEL
2831180100001
(WBH TRUST)

PARCEL
2831170100001 (WHB)

PARCEL
2831160000001
(WA STATE)



NOTE: PROPERTY LINES SHOWN FOR
ILLUSTRATIVE PURPOSES AND DO NOT
REFLECT A LEGAL SURVEY OF PARCEL
BOUNDARIES. INFORMATION GATHERED
FROM ADAMS COUNTY MAPSIFTER.

WARDEN HUTTERIAN BRETHREN
HEADQUARTERS WASTEWATER FACILITY
FACILITY EXTENTS EXHIBIT
JULY 2019



J-U-B ENGINEERS, INC.

Plot Date: 7/24/2019 8:24 AM, Printed By: Sam Mincer, Data Created: 7/22/2019, USPOKANE PUBLIC PROJECTS/SUB: 70-17-041, WARDEN HUTTERIAN BRETHREN ON CALL/SVCS/CAD/SHEET/70-17-041_C-102X.DWG

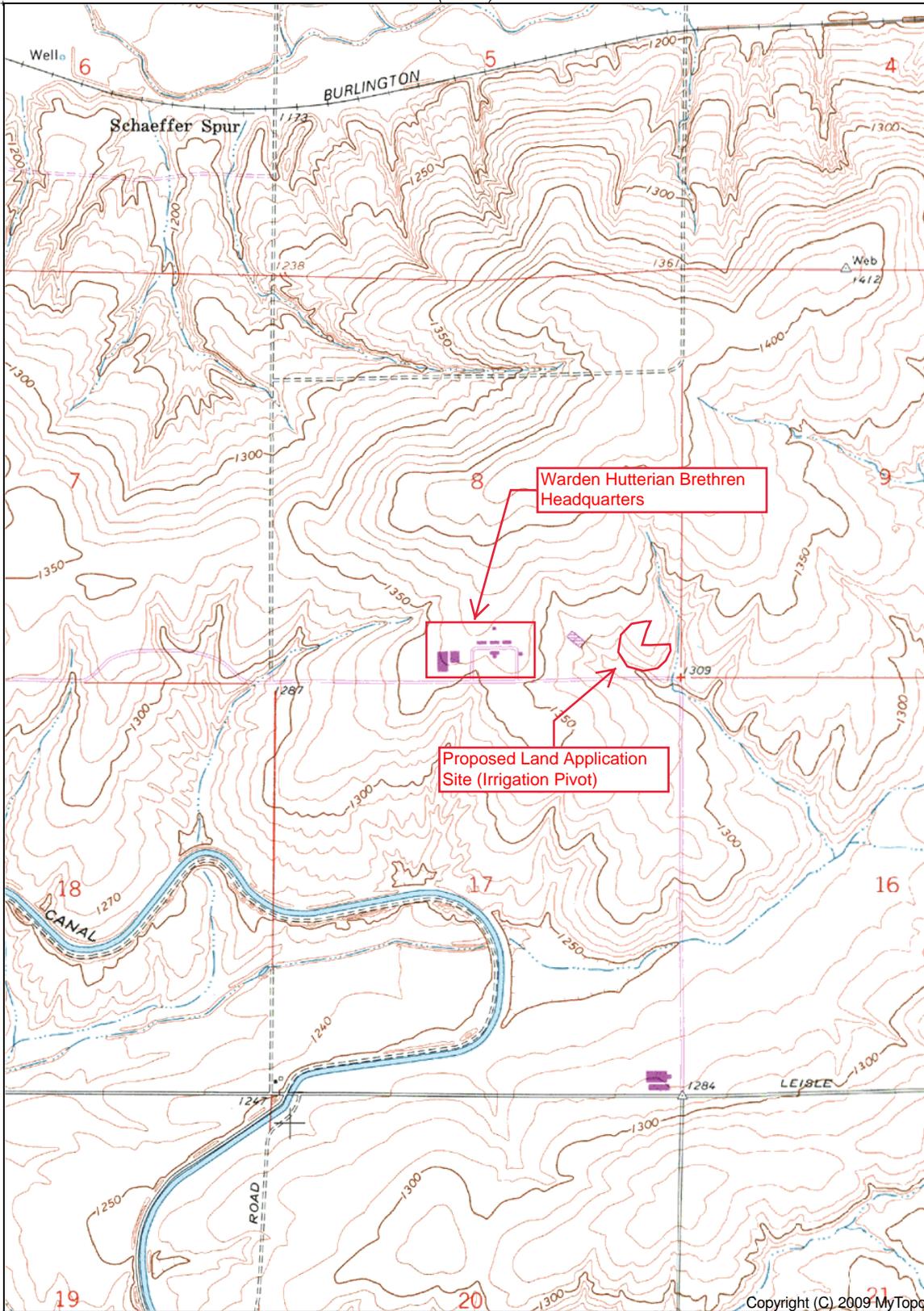
LAST UPDATED: 7/24/2019
PLOT DATE: 7/24/2019
FILE: 70-17-041_C-102X

Attachment 2 – Vicinity Map

(RUFF)

(BASSETT
 JUNCTION)

(WEBER)



Copyright (C) 2009 MyTopo

Printed: Wed Mar 07, 2018

(WARDEN)

(HATTON NW)
 SCALE 1:24000

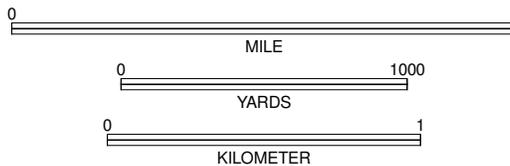
(HATTON NW)

Produced by MyTopo Terrain Navigator
 Topography based on USGS 1:24,000
 Maps

North American 1983 Datum (NAD83)
 Polyconic Projection

To place on the predicted North American
 1927 move the projection lines 15M S and
 85M W

Declination



CONTOUR INTERVAL 10 FEET
 NATIONAL GEODETIC VERTICAL DATUM 1929

WEBER, WA
 1967

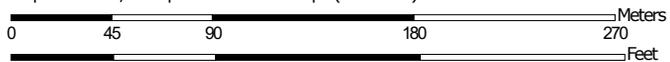
Attachment 3 – Soil Maps

Soil Map—Adams County, Washington
(Warden Hutterian Brethren Land Application)



Soil Map may not be valid at this scale.

Map Scale: 1:3,360 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Adams County, Washington

Survey Area Data: Version 19, Sep 10, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

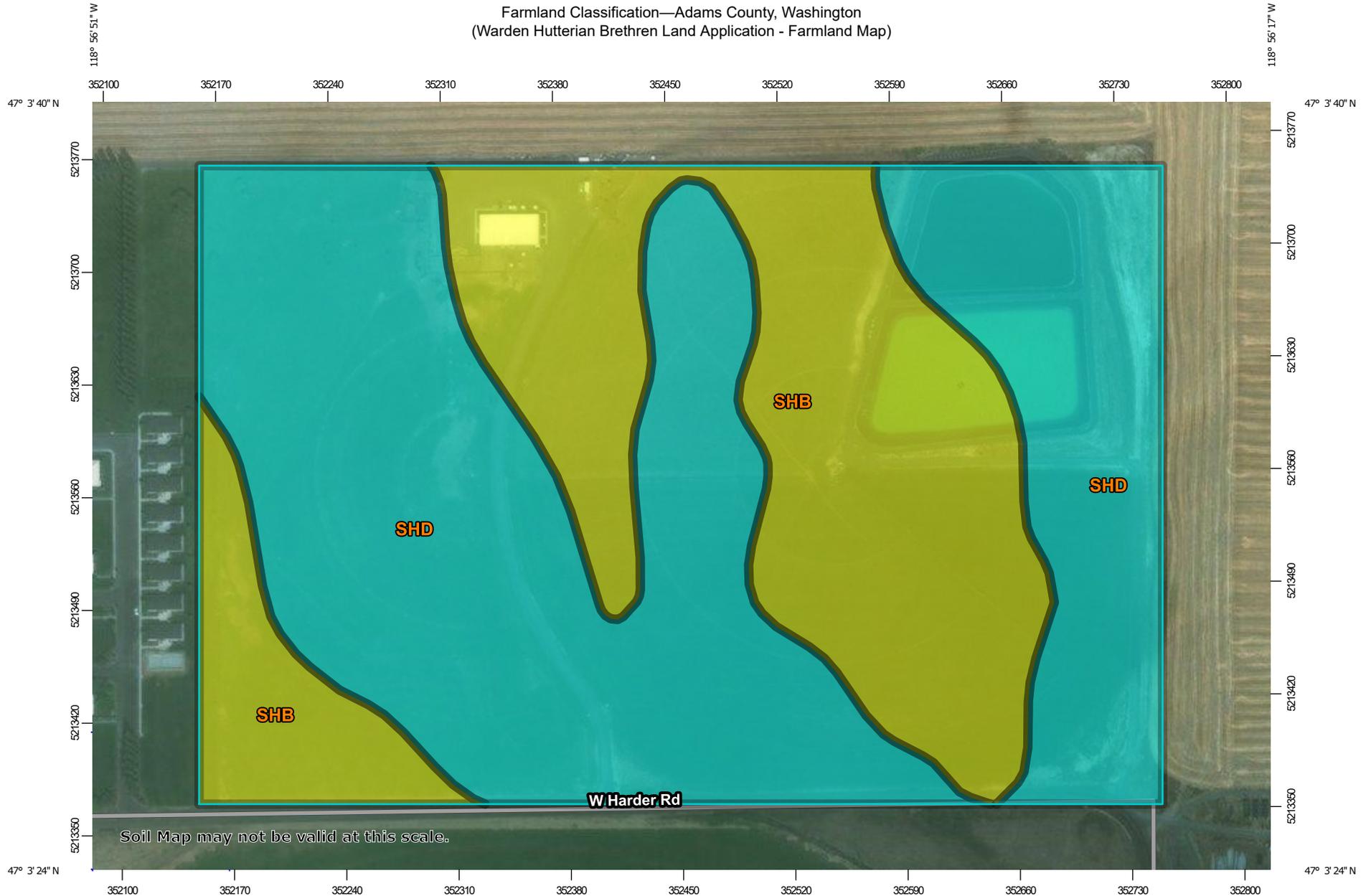
Date(s) aerial images were photographed: Jun 28, 2014—Sep 11, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

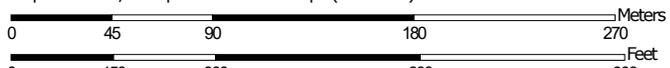
| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------------|----------------|
| SHB | Shano silt loam, 0 to 5 percent slopes | 22.7 | 38.4% |
| SHD | Shano silt loam, 5 to 30 percent slopes | 36.4 | 61.6% |
| Totals for Area of Interest | | 59.1 | 100.0% |

Farmland Classification—Adams County, Washington
(Warden Hutterian Brethren Land Application - Farmland Map)



Soil Map may not be valid at this scale.

Map Scale: 1:3,360 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

Farmland Classification—Adams County, Washington
(Warden Hutterian Brethren Land Application - Farmland Map)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Farmland Classification—Adams County, Washington
(Warden Hutterian Brethren Land Application - Farmland Map)

| | | | | | | | | | |
|---|--|---|---|---|--|---|--|---|--|
|  | Prime farmland if subsoiled, completely removing the root inhibiting soil layer |  | Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season |  | Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium |  | Farmland of unique importance |  | Prime farmland if subsoiled, completely removing the root inhibiting soil layer |
|  | Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 |  | Farmland of statewide importance, if irrigated and drained |  | Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season |  | Soil Rating Points Not prime farmland |  | Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 |
|  | Prime farmland if irrigated and reclaimed of excess salts and sodium |  | Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season |  | Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season |  | Prime farmland if drained |  | Prime farmland if irrigated and reclaimed of excess salts and sodium |
|  | Farmland of statewide importance |  | Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer |  | Farmland of statewide importance, if warm enough |  | Prime farmland if protected from flooding or not frequently flooded during the growing season |  | Farmland of statewide importance |
|  | Farmland of statewide importance, if drained |  | Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 |  | Farmland of statewide importance, if thawed |  | Prime farmland if irrigated |  | Farmland of statewide importance, if drained |
|  | Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season | | |  | Farmland of local importance |  | Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season |  | Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season |
|  | Farmland of statewide importance, if irrigated | | |  | Farmland of local importance, if irrigated |  | Prime farmland if irrigated and drained |  | Farmland of statewide importance, if irrigated |
| | | | |  | |  | Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season | | |

Farmland Classification—Adams County, Washington
(Warden Hutterian Brethren Land Application - Farmland Map)

| | | | |
|--|--|--|---|
| <ul style="list-style-type: none">  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if irrigated and drained  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 | <ul style="list-style-type: none">  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if warm enough  Farmland of statewide importance, if thawed  Farmland of local importance  Farmland of local importance, if irrigated | <ul style="list-style-type: none">  Farmland of unique importance  Not rated or not available <p>Water Features</p> <ul style="list-style-type: none">  Streams and Canals <p>Transportation</p> <ul style="list-style-type: none">  Rails  Interstate Highways  US Routes  Major Roads  Local Roads <p>Background</p> <ul style="list-style-type: none">  Aerial Photography | <p>The soil surveys that comprise your AOI were mapped at 1:20,000.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p> </div> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Adams County, Washington Survey Area Data: Version 19, Sep 10, 2018</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Jun 28, 2014—Sep 11, 2016</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p> |
|--|--|--|---|

Farmland Classification

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|------------------------------------|---|----------------------------------|--------------|----------------|
| SHB | Shano silt loam, 0 to 5 percent slopes | Prime farmland if irrigated | 22.7 | 38.4% |
| SHD | Shano silt loam, 5 to 30 percent slopes | Farmland of statewide importance | 36.4 | 61.6% |
| Totals for Area of Interest | | | 59.1 | 100.0% |

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Attachment 4 – NWI Map



U.S. Fish and Wildlife Service, National Standards and Support Team
wetlands_team@fws.gov

July 18, 2019

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment 5 – FEMA FIRMette

National Flood Hazard Layer FIRMette



47°3'42.36"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|------------------------------------|----------------------|--|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i> |
| | | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i> |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
| | | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i> |
| | | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i> |
| | | Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS | | Area of Minimal Flood Hazard <i>Zone X</i> |
| | | Effective LOMRs |
| | | Area of Undetermined Flood Hazard <i>Zone D</i> |
| GENERAL STRUCTURES | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| | | Profile Baseline |
| | Hydrographic Feature | |
| MAP PANELS | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |
| | | The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location. |



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/7/2019 at 3:51:07 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

USGS The National Map: Orthoimagery. Data refreshed April, 2019.



47°3'17.85"N

118°56'11.74"W

118°56'49.19"W

Attachment 6 – IPaC Report



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
Phone: (360) 753-9440 Fax: (360) 753-9405
<http://www.fws.gov/wafwo/>

In Reply Refer To:

June 07, 2019

Consultation Code: 01EWF00-2019-SLI-1137

Event Code: 01EWF00-2019-E-02296

Project Name: Warden Hutterian Brethren Land Application Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated and proposed critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. The species list is currently compiled at the county level. Additional information is available from the Washington Department of Fish and Wildlife, Priority Habitats and Species website: <http://wdfw.wa.gov/mapping/phs/> or at our office website: http://www.fws.gov/wafwo/species_new.html. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether or not the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). You may visit our website at <http://www.fws.gov/pacific/eagle/for> information on disturbance or take of the species and information on how to get a permit and what current guidelines and regulations are. Some projects affecting these species may require development of an eagle conservation plan: (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Also be aware that all marine mammals are protected under the Marine Mammal Protection Act (MMPA). The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas. The importation of marine mammals and marine mammal products into the U.S. is also prohibited. More information can be found on the MMPA website: <http://www.nmfs.noaa.gov/pr/laws/mmpa/>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Related website:

National Marine Fisheries Service: http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Washington Fish And Wildlife Office

510 Desmond Drive Se, Suite 102

Lacey, WA 98503-1263

(360) 753-9440

Project Summary

Consultation Code: 01EWF00-2019-SLI-1137

Event Code: 01EWF00-2019-E-02296

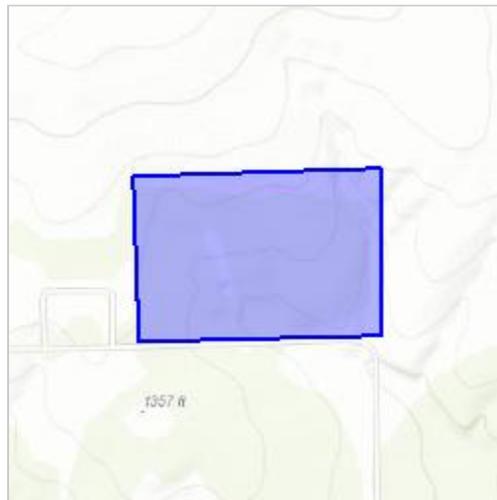
Project Name: Warden Hutterian Brethren Land Application Project

Project Type: ** OTHER **

Project Description: Wastewater Land Application

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/47.05915950278015N118.94286147677984W>



Counties: Adams, WA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

| NAME | STATUS |
|--|------------|
| Columbia Basin Pygmy Rabbit <i>Brachylagus idahoensis</i> Population: Columbia Basin DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1126 | Endangered |

Birds

| NAME | STATUS |
|---|------------|
| Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911 | Threatened |

Flowering Plants

| NAME | STATUS |
|--|------------|
| Spalding's Catchfly <i>Silene spaldingii</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3681 | Threatened |

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Attachment 7 – PHS Report



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPublic
REPORT DATE: 06/07/2019 12.56

Query ID: P19060712552

| Common Name | Site Name | Priority Area | Accuracy | Federal Status | Sensitive Data | Source Entity |
|-----------------|----------------|------------------------|----------|--------------------|----------------|---------------|
| Scientific Name | Source Dataset | Occurrence Type | | State Status | Resolution | Geometry Type |
| Notes | Source Record | More Information (URL) | | PHS Listing Status | | |
| | Source Date | Mgmt Recommendations | | | | |

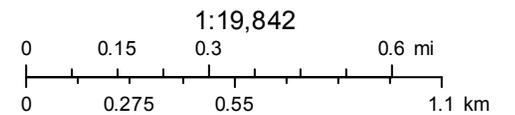
DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

WDFW Test Map



June 7, 2019

- | | | | | | |
|---|----------------------|---|---|---|----------|
|  | PHS Report Clip Area | POLY |  | QTR-TWP | |
|  | PT |  | AS MAPPED |  | TOWNSHIP |
|  | LN |  | SECTION | | |



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

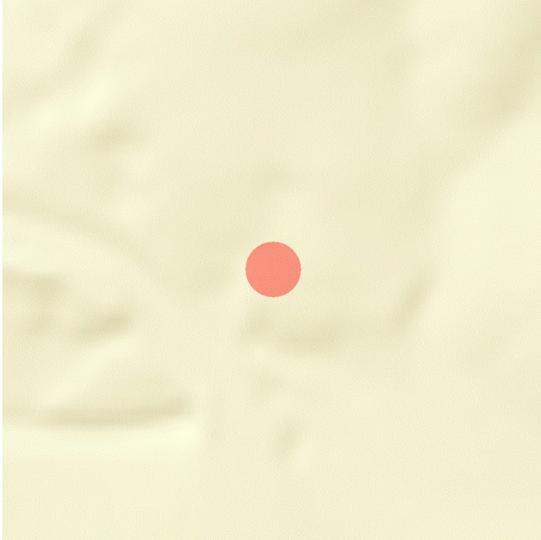
Attachment 8 – WISAARD



Historic Property Report

Resource Name: Columbia Basin Project East Low Canal Property ID: 669155

Location



Address: ECBID Irrigation Block 43, Warden, WA 98857
Geographic Areas: Adams County, HATTON NW Quadrangle, T17R31E08

Information

Number of stories: N/A

Construction Dates:

| Construction Type | Year | Circa |
|-------------------|------|--------------------------|
| Built Date | 1957 | <input type="checkbox"/> |
| Built Date | 1951 | <input type="checkbox"/> |

Historic Use:

| Category | Subcategory |
|-------------------------|---|
| Agriculture/Subsistence | Agriculture/Subsistence - Irrigation Facility |
| Agriculture/Subsistence | Agriculture/Subsistence - Irrigation Facility |

Historic Context:

| Category |
|-------------------------|
| Politics/Government/Law |

Architect/Engineer:

| Category | Name or Company |
|-----------|-------------------------------|
| Builder | J.A. Terteling and Sons, Inc. |
| Architect | U.S. Bureau of Reclamation |
| Engineer | U.S.D.I./U.S.B.R. |



Historic Property Report

Resource Name: Columbia Basin Project East Low Canal Property ID: 669155

Thematics:

Local Registers and Districts

| Name | Date Listed | Notes |
|------|-------------|-------|
|------|-------------|-------|

Project History

| Project Number, Organization, Project Name | Resource Inventory | SHPO Determination | SHPO Determined By, Determined Date |
|---|--------------------|---------------------|-------------------------------------|
| 022513-04-BOR, BOR, Columbia Basin Project East Low Canal Lind Coulee Wasteway Expansion | 1/23/2013 | Determined Eligible | , 2/25/2013 |
| 2013-02-00029, , East Columbia Basin Irrigation District East Low Canal Expansion Project | 10/17/2012 | Not Determined | |

Photos



Southern overview of a typical East Low Canal section.



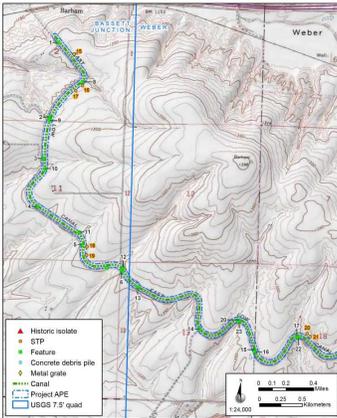
Southern overview of Feature 6.



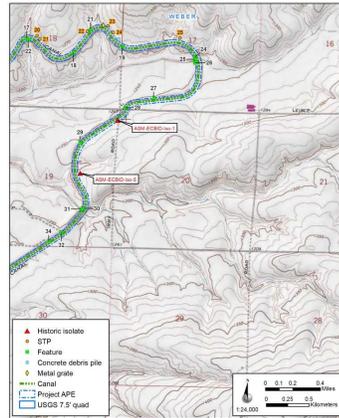
Eastern close-up view of Feature 10.



Northeastern overview of Feature 14.



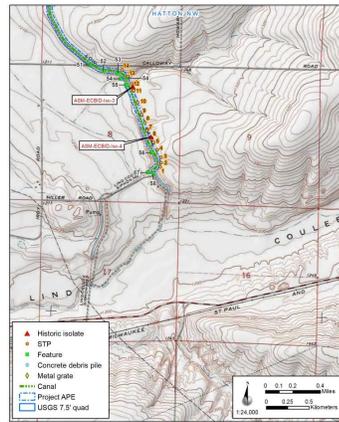
USGS map showing the inventoried portion of the East Low Canal and feature locations (T18N;R30E Sections 2, 11, 13, and 14/T18N;R31E Section 18).



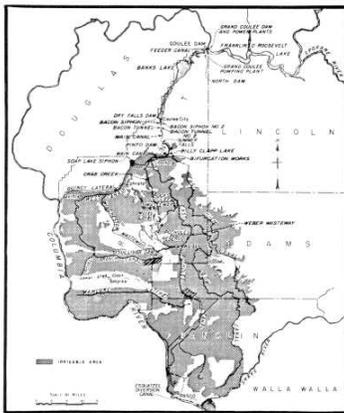
USGS map showing the inventoried portion of the East Low Canal and feature locations (T18N;R31E Sections 17, 18, 19, 20, and 30).



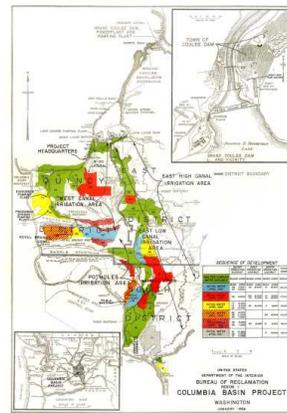
USGS map showing the inventoried portion of the East Low Canal and feature locations (T18N;R31E Sections 30 and 31/T17N;R31E Sections 5 and 6).



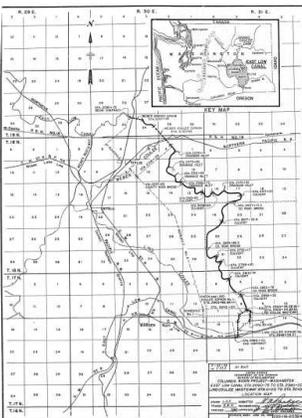
USGS map showing the inventoried portion of the East Low Canal and feature locations (T17N;R31E Sections 6 and 8).



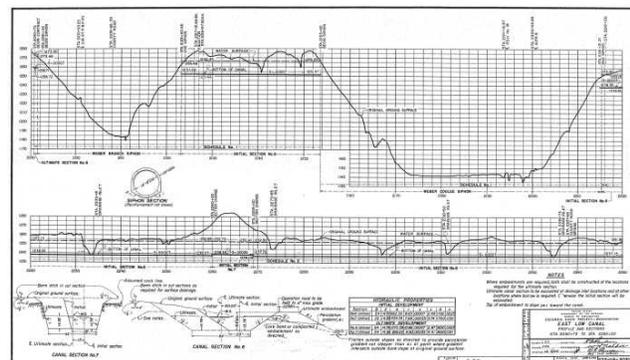
Map of the Columbia Basin Project. Adapted from Pitzer.



Map of the Columbia Basin Project showing major irrigation structures and irrigated land in January 1956. Adapted from Bureau of Reclamation.



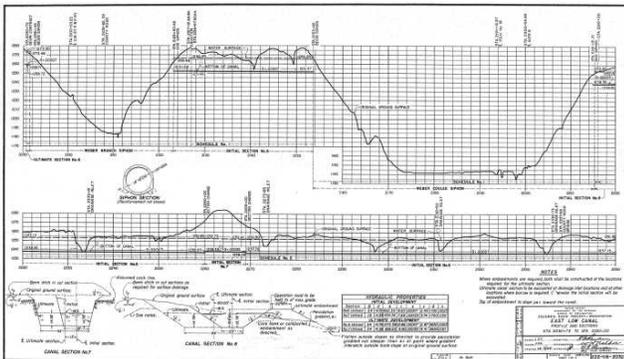
As-built location map of the East Low Canal from the Weber Coulee Siphon and the Lind Coulee Siphon that highlights the location of the four timber bridges, five drainage inlets, and eight culverts constructed within this stretch.



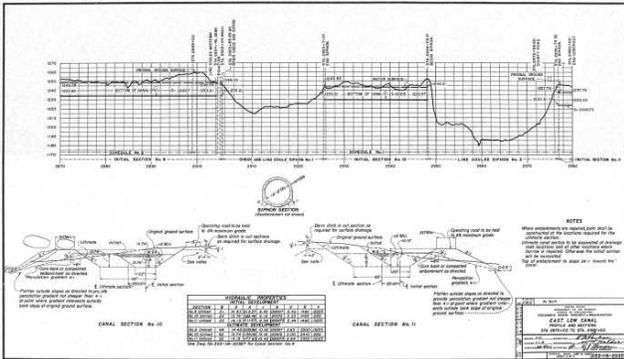
East Low Canal Profile and Sections Station 2090+75 to Station 23350+00

Historic Property Report

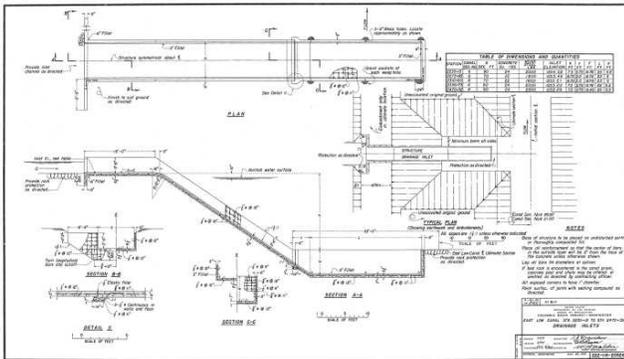
Resource Name: Columbia Basin Project East Low Canal Property ID: 669155



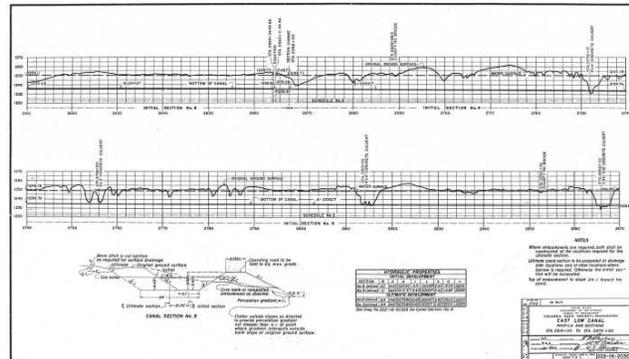
East Low Canal Profile and Sections Station 2350+00 to Station 2610+00.



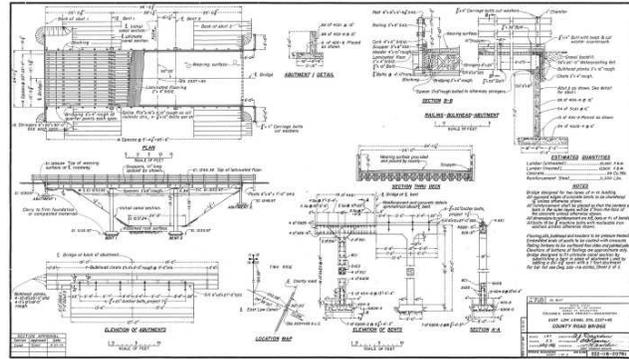
East Low Canal Profile and Sections Station 2870+00 to Station 2980+00.



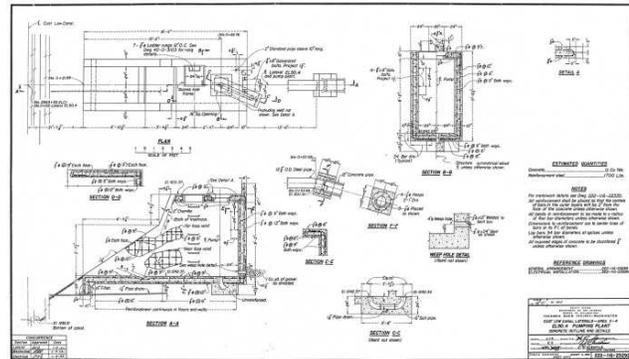
As-built drawing of the drainage inlets.



East Low Canal Profile and Sections Station 2610+00 to Station 2870+00.



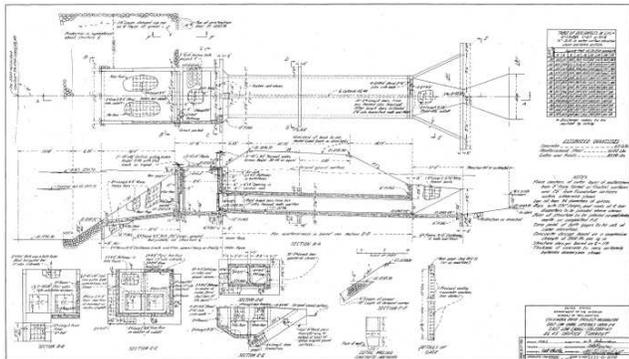
Representative as-built drawing of an existing timber bridge at Station 2337+85.



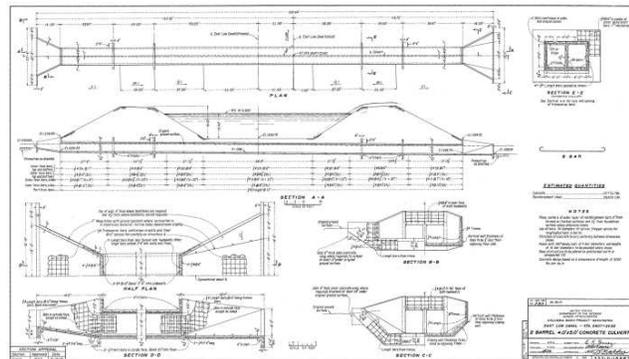
As-built drawing of Pumping Plant 50.4.

Historic Property Report

Resource Name: Columbia Basin Project East Low Canal Property ID: 669155



As-built drawing of a double-barrel turnout for Lateral EL45.



Representative as-built drawing of the culverts along this section. This as-built drawing depicts a larger, double-barrel 4-ft. by 5-ft. concrete culvert.



Historic Property Report

Resource Name: Columbia Basin Project East Low Canal Property ID: 669155

Inventory Details - 10/17/2012

Common name: BOR Columbia-Cascades Area Office
Date recorded: 10/17/2012
Field Recorder: Brandon Sybrowsky and Jared Valenta
Field Site number:
SHPO Determination

Detail Information

Characteristics:

| Category | Item |
|----------|-----------|
| Plan | Irregular |

Styles:

| Period | Style Details |
|----------|---------------|
| No Style | No Style |

Surveyor Opinion

Property appears to meet criteria for the National Register of Historic Places: Yes

Property is located in a potential historic district (National and/or local): No

Property potentially contributes to a historic district (National and/or local): No

Significance narrative: The East Low Canal has been determined eligible for listing on the National Register of Historic Places (NRHP) by the Bureau of Reclamation (BOR) and the Washington State Department of Archaeology and Historic Preservation (DAHP).

The East Low Canal is a component of the NRHP eligible Columbia Basin Project (CBP). The CBP has not been completely surveyed or evaluated for listing on the NRHP, and the CBP has not been determined eligible as a historic district (Kelsey Doncaster, personal communication 2012). Previous evaluations of eligibility have been made on components of the system (Doncaster 2010:6; Sharley and Mahelona 2007:4). As part of those evaluations, the major features of the CBP have been considered potentially eligible for listing on the NRHP under Criterion A as the best representations of the CBP historic context or under Criterion C as the best examples of period engineering works of the CBP. Secondary structures, such as laterals, have been largely considered ubiquitous structures of the CBP that “inadequately portray the magnitude and historical significance of the project or distinctive characteristics of period engineering works” (Sharley and Cantrell 2008:4).

On April 11, 2005, the DAHP determined that the East Low Canal was eligible for listing in the NRHP under Criterion A for the “unmistakable social and economic impact on both the landscape and the people, and the remarkable engineering achievement of its builders” (Crisson 2004). Main structures such as the dams, reservoirs, pumping plants, canals, siphons, tunnels, and wasteways best reflect the historical significance of the project for central Washington. One example is the Potholes East Canal Wastegate which was determined eligible under Criterion A as a contributing element of the NRHP-eligible



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Potholes East Canal, and under Criterion C because it “retains a majority of its original design, construction and conveys the massive scale undertaken to irrigate the CBP” (Kelsey Doncaster, personal communication 2012).

During the current survey, ASM documented 13 mi. of a largely unlined canal stretch, four bridges, five drainage inlets, and eight culverts, as well as other features such as historic and modern pumps at lateral turnouts (Smith et al. 2012). According to ECBID Staff Engineer Levi Johnson (personal communication 2012), for the current project expansion of 2.8-ft. “the only modifications made [over time] on the section of the East Low Canal in question are short concrete linings sections (at ultimate width design) at the undershot sections [culverts], as well as a section of canal that leaked in 2008.” The undershot linings may have been installed in the 1990s (Levi Johnson, personal communication 2012), which is supported by a concrete stamp that indicated a section of the canal lining was installed in 1999. For the current 2.8-ft. expansion project, construction will be completed on the high side of the canal (left side looking downstream). Private pumps on that side have been removed and will be replaced after the expansion (Levi Johnson, personal communication 2012). In anticipation of a potential future 15-ft. expansion project, ASM conducted a formal evaluation of the original structures associated with the East Low Canal and assessed their significance as contributing or non-contributing elements of the canal. During the current survey, ASM documented 13 mi. of a largely unlined canal stretch, four bridges, five drainage inlets, and eight culverts, as well as other features such as historic and modern pumps at lateral.

Modifications of an operating irrigation system are expected, given the effects that flowing water and the environment have on materials, particularly wooden structures. Replacing structures with better and longer-lasting materials is considered an improvement to the operational function of the system. Since the East Low Canal is assumed eligible to the NRHP and is unofficially recognized as a historic property, preservation of original materials whenever possible is optimal. Within the APE, the canal remains largely an unlined canal, as originally designed. A majority of the original structures (lateral turnouts, pumps, drainage inlets, bridges, culverts, etc.) also remain as potentially contributing elements to the assumed NRHP-eligible East Low Canal. As previously mentioned, none of these structures will be removed or altered during the current 2.8-ft. expansion project. However, should a future project include a 15-ft expansion of the canal it is likely that original structures will be impacted.

When designing the water system, the BOR originally designed the East Low Canal for later expansion, with an initial development capacity and an ultimate development capacity. Each section within this 13-mi. stretch was designed with slightly different measurements for the bottom width, slope, and water flow. Ultimate width design is the maximum width originally designed by BOR, and varies by canal section. Within the 13-mi. stretch of the East Low Canal under consideration here, canal section No. 6 is currently 24 ft., with an ultimate development capacity up to 64 ft. (potential 40 ft. of expansion); canal section No. 7 is currently 28 ft. with an ultimate development capacity up to 54 ft. (potential 26 ft. of expansion); canal section No. 8 is currently 22 ft. with an ultimate development capacity up to 64 ft. (potential 40 ft. of expansion); and canal section No. 9 is currently 21 ft. with an ultimate development capacity up to 64 ft. (potential 43 ft. of expansion) (see Appendix A for canal profile and section drawings). The current Lake Roosevelt Incremental Releases Program (LRIRP) authorizes the expansion of the flow capacity for an additional 133 ft.³ per second (cfs) of water flow. In order to achieve this, the ECBID has proposed widening the bottom widths of this 13-mi.



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stretch by 2.8 ft. to acquire that additional 133 cfs of water flow (Levi Johnson, personal communication 2012). This expansion is well within the original design specifications between the initial and ultimate development capacity. However, the proposed future 15-ft. expansion project will more than double the width of sections No. 7-9 and will nearly double the width of section No. 6. At this time, the ECBID has not been authorized to widen the canal by 15-ft. However, should the ECBID obtain authorization to expand the unlined canal by widening the bottom of the canal by 15-ft., it is expected that the project would significantly impact the width of the canal as it was constructed and will impact historic structures associated with the canal.

In conclusion, the current proposed project is an expansion of the bottom width of the canal by 2.8 ft., and that extension is well within the ultimate development capacity originally designed by the BOR. This expansion will not affect the integrity (location, design, setting, materials, workmanship, feeling, or association) of the canal. Therefore, ASM does not recommend any mitigation measurements for the current proposed expansion project. Should the 15-ft expansion project be authorized and its construction not only double the canal width but require significant alterations and/or removal of contributing structures, ASM recommends that mitigation measures, at minimum, include DAHP Level II documentation of this unlined section of the canal and its contributing structures. Any future projects such as concrete lining large stretches of the canal and/or replacement or significant alterations of the original structures (lateral turnouts, pumps, drainage inlets, bridges, culverts, etc.), or if significant changes are made to the setting of the canal such as extensive residential or commercial construction along extended portions of the canal, ASM recommends a reevaluation of the East Low Canal to determine the impact of those projects to the integrity of the canal.

Physical description:

The portion of the East Low Canal documented during the current survey (Smith et al. 2012) is located entirely within ECBID Irrigation Block 43. The northern end of the survey area is approximately 500 m south of Interstate 90 at the southern end of the Weber Coulee Siphon and runs generally south-southeast to the Lind Coulee Wasteway. However, the canal twists and turns across the entire project alignment, with some sections of the canal actually running east-west. For descriptive purposes the left bank (looking downstream) or “high” side of the canal is referred to in the following sections as the east side, while the right bank (looking downstream) or “low” side of the canal is denoted as the west side.

The canal is relatively uniform along the entire project APE, and consists of an active, open-air irrigation canal. The majority of the canal is earth-lined and contains water at various depths, with a number of canal sections cut into basalt bedrock. Only a relatively few sections of the canal are concrete-lined. A large earthen berm along most of the west side of the canal represents fill as well as spoils from the original canal construction. A main gravel access road runs along the west side of the canal. A two-track gravel road also runs along the east side of the canal to provide access to the agricultural fields.

ASM recorded a total of 59 features associated with the canal within the project APE. Additionally, a metal grate similar to those associated with coverings of identified features was identified on the ground surface of a small grass covered knoll adjacent to an agricultural field east of Feature 21. Some of the features consist of irrigation related elements associated with the original construction of the canal, while others represent later additions. Features identified include turnouts, pumps, pump houses, drainage inlets, concrete lining, culverts, irrigation ditches, and siphons associated with the water supply function of the East Low Canal, as well as bridges spanning the canal. The following sections describe each of the recorded features, in numerical order.

?Feature 1 represents a concrete single-barrel turnout for lateral EL41 on the west side of the canal. The turnout has two wheel valves set in poured concrete, two wooden planks over the top opening secured with galvanized bolts and nuts, a concrete breather pipe 8 in. in diameter, and a metal trash rack. The turnout measures 46 in. wide and 68 in. long, with 50 in. between the centers of the wheel valves. The concrete walls are 7 in. thick. The southern end of the Weber Coulee Siphon is approximately 100 m northwest of this feature.

?Feature 2 consists of a concrete single-barrel turnout for lateral EL42 on the west side of the canal. The turnout has two wheel valves set in poured concrete, two wooden planks and a metal grate over the top opening secured with galvanized bolts and nuts, a concrete breather pipe 8 in. in diameter, and a metal trash rack. The turnout measures 85 in. wide and 98 in. long.

?A modern pump house on the west side of the canal constitutes Feature 3.

?Feature 4 is a concrete single-barrel turnout for lateral EL43 on the west side of the canal. The turnout has two wheel valves set in poured concrete, two wooden planks and a metal grate over the top opening secured with galvanized bolts and nuts, a concrete breather pipe 8 in. in diameter, and a metal trash rack. The turnout measures 85 in. wide and 98 in. long.

?Feature 5 is a concrete single-barrel turnout on the west side of the canal with "FU24" painted on it. The turnout has two wheel valves set in poured concrete, two wooden planks over the top opening secured with galvanized bolts and nuts, a concrete breather pipe 8 in. in diameter, and a metal trash rack. The turnout measures 46 in. wide and 68 in. long, with 50 in. between the centers of the wheel valves. The concrete walls are 7 in. thick.

?Feature 6 consists of a bridge across the canal from road W.2 SE. The bridge is 80 ft. long and 25 ft. wide supported by two concrete pillars in the canal. Heavy milled horizontal timbers span the canal with vertically placed 2-x-4-in. milled lumber stacked side-to-side on top of the heavy timber. The timber has been treated with creosote. The deck and bents appear to be original, but it appears that the rails and framing have been replaced with modern wood and hardware.

?Feature 7 is the remains of an abandoned concrete lateral irrigation ditch on the west side of an excavated spoil pile on the west side of the canal. The ditch is broken into several segments. The ditch segments are 12 in. deep and 40 in. wide on top, tapering to 12 in. wide at the bottom.

?Feature 8 represents a concrete drainage inlet on the east side of the canal. The feature is on the southeast side of a natural low spot in the rolling topography. The concrete was poured in place, with form board imprints. The drainage inlet has 42-in.-high walls that are 15 ft. long and 5 in. thick. The opening is 90 in. wide between the walls and has wing walls at least 81 in. long that are partially covered with sediment. The drainage inlet is at least 14.5 ft. long, going down to the water.

?A water pump on the west side of the canal comprises Feature 9. The pump has a screen-covered box under the water, a track rack, a screen covering the turn valve, and a small electric motor. The pump appears to be original.

?Feature 10 is a concrete drainage inlet on the east side of the canal. The feature is on the south side of a natural low spot in the rolling topography. The concrete was poured in place, with form board imprints. The drainage inlet has 42-in.-high walls that are 15 ft. long and 5 in. thick. The opening is 90 in. wide between the walls and has wing walls at least 81 in. long that are partially covered with sediment. The drainage inlet is at least 14.5 ft. long, going down to the water.

?Feature 11 is characterized by a concrete drainage inlet on the east side of the canal. The drainage inlet is on the south side of a natural low spot in the rolling topography. The concrete was poured in place, with form board imprints. The drainage inlet has 42-in.-high walls that are 15 ft. long and 5 in. thick. The opening is 90 in. wide between the walls and has wing walls at least 81 in. long that are partially covered with sediment. The drainage inlet is at least 14.5 ft. long, going down to the water.

?Feature 12 consists of a concrete drainage inlet on the east side of the canal. The drainage inlet is on the south side of a natural low spot in the rolling topography. The concrete was poured in place, with form board imprints. The drainage inlet has 42-in.-high walls that are 15 ft. long and 5 in. thick. The opening is 90 in. wide between the walls and has wing walls at least 81 in. long that are partially covered with sediment. The drainage inlet is at least 14.5 ft. long, going down to the water.

?Feature 13 represents a concrete single-barrel turnout for lateral EL44 on the west side of the canal. The turnout has two wheel valves set in poured concrete, two wooden planks over the top opening secured with galvanized bolts and nuts, a concrete breather pipe 8 in. in diameter, and a metal trash rack. The turnout measures 46 in. wide and 68 in. long, with 50 in. between the centers of the wheel valves. The concrete walls are 7 in. thick. A handmade metal stairway descends down the cut bank to the turnout.

?Feature 14 is a concrete double-barrel turnout for lateral EL45 on the west side of the canal that leads to an aqueduct. Seven metal steps lead down to the turnout. There are two turnout wheels on the eastern, water side and two cranks on the western, bank side. Metal grates cover the opening on top of the turnout. There is a long metal trash rack approximately 1 m to the northeast within the canal protecting the entrance of the turnout.

?Feature 15 consists of a concrete single-barrel turnout for lateral EL45.7 on the west side of the canal. The turnout has two wheel valves set in poured concrete, two wooden planks over the top opening secured with galvanized bolts and nuts, a concrete breather pipe 8 in. in diameter, and a metal trash rack. The turnout measures 46 in. wide and 68 in. long, with 50 in. between the centers of the wheel valves. The concrete walls are 7 in. thick.

?Feature 16 consists of a water depth indicator with a metal grate walkway from canal bank to the indicator. The walkway is 107 in. long and 17 in. wide.

?Feature 17 consists of concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography. The concrete was poured in place.

?Feature 18 is characterized by a concrete single-barrel turnout for lateral EL68L3-247 on the west side of the canal. The turnout has two wheel valves set in poured concrete with two wooden planks over the top opening secured with galvanized bolts and nuts. No



Historic Property Report

Resource Name: Columbia Basin Project East Low Canal Property ID: 669155

trash rack is present on the feature. The turnout measures 41 in. wide and 63 in. long, with 49 in. between the centers of the wheel valves. The concrete walls are 5 in. thick.

?Feature 19 is a concrete single-barrel turnout on the west side of the canal with no designation. The turnout has two wheel valves set in poured concrete with a metal grate over the top opening secured with bolts and nuts. The turnout measures 41 in. wide and 63 in. long, with 49 in. between the centers of the wheel valves. The concrete walls are 5 in. thick. A handmade metal stairway and handrail descend to the turnout. The stairway has nine steps cut from iron grating similar to what is use for covering the top opening of the turnout.

?Feature 20 consists of concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography. The concrete was poured in place.

?Feature 21 is a concrete drainage inlet on the east side of the canal. The drainage inlet is on the southeast side of a natural low spot in the rolling topography. The concrete was poured in place, with form board imprints. The drainage inlet has 42-in.-high walls that are 15 ft. long and 5 in. thick. The opening is 90 in. wide between the walls and has wing walls that are partially covered with sediment. The drainage inlet is at least 14.5 ft. long, going down to the water.

?Feature 22 is characterized by a concrete culvert that passes under the canal and Feature 17. The tunnel is poured-in-place concrete. There is one opening on the east side and an exit on the west side that are 36 x 36 in. with 32-in.-high walls above the opening. Concrete walls 9.5 ft. long flare out from the opening with wing walls. Bolts are in the concrete above the opening and on the floor of the opening. There is a collapsed milled wood trash rack at the opening.

?Feature 23 represents a concrete culvert that passes under the canal and Feature 20. The tunnel is poured-in-place concrete. There is one opening on the east side of the canal and another on the west side that measure 36 x 36 in. with a 32-in.-high wall above the holes. Concrete walls 9.5 ft. long flare out from the opening with wing walls. Bolts are in the concrete above the opening and on the floor of the opening.

?Feature 24 consists of concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography. The concrete was poured in place.

?Feature 25 is a concrete culvert under the canal and Feature 24. The tunnel is poured-in-place concrete. There is one opening on the east side of the canal measuring 61 in. high and 71 in. wide, with a 36-in. concrete piece above the opening. The exit hole on the west is choked off with vegetation and standing water with no concrete visible. Concrete walls 12 ft. long flare out from the opening, with 81-in.-long wing walls partially covered with sediment. The walls are 6.5 in. thick. There are two 2-in.-diameter pipe holes at the base of the wing walls. Bolts stick out from the concrete above the opening and on the floor of the opening.

?A small concrete irrigation ditch on the west side of the canal adjacent to an agricultural field comprises Feature 26. The ditch is 12 in. deep, with a 35-in.-wide top and 12-in.-wide bottom. The ditch appears to have been poured in place, with various-sized segments dependent on the shape of the field. The ditch is still in use for an active wheat field.



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?Feature 27 consists of a concrete single-barrel turnout for lateral EL47.9 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with two wooden planks over the top opening secured with galvanized bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 41 in. wide and 63 in. long, with 49 in. between the centers of the wheel valves. The concrete walls are 5 in. thick.

?Feature 28 consists of is a concrete bridge on Leslie Road. The bridge has a concrete base for the deck and two concrete bents. The deck appears to have been replaced along with the "t" railings, and it has modern galvanized guard rails. The two concrete bents may be original.

?Feature 29 is a concrete single-barrel turnout for lateral EL48 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with an iron mesh grate over the top opening secured with galvanized bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long.

?Concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography constitute Feature 30. The concrete was poured in place.

?Feature 31 is a concrete culvert under the canal and Feature 30. The tunnel is poured-in-place concrete. There are two openings on the east side of the canal that measure 48 x 48 in., with a 36-in. concrete piece above the opening. The exit holes on the west side are the same dimensions. Concrete walls 15.4 ft. long flare out from the opening, with support walls partially covered with sediment. The walls are 6.5 in. thick. There are two 2-in.-diameter pipe holes at the base of the wing walls. Bolts stick out from the concrete above the opening and on the floor of the opening.

?Feature 32 consists of a concrete single-barrel turnout for lateral EL49 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with three wooden planks over the top opening secured with galvanized bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long. An earthen ramp descends from the canal road to the turnout.

?A bridge across the canal along Sackman Road is Feature 33. The bridge is 80 ft. long and 25 ft. wide, supported by two concrete pillars in the canal. Heavy milled horizontal timbers span the canal with vertically placed 2-x-4-in. milled lumber stacked side to side on top of the heavy timber. The timber has been treated with creosote. The deck and bents appear to be original, including the exposed laminated wood flooring. Originally, the County finished it with a layer of pea gravel and hot tar. The railings are modern.

?Feature 34 is a modern pump house on the west side of the canal.

?Feature 35 consists of a concrete single-barrel turnout for lateral EL50 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with an iron mesh grate and wooden planks over the top opening secured with galvanized bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long. A metal handmade 11-step stairway descends from the access road to the turnout without a handrail.

?Feature 36 is pump EL50.4. The pump consists of metal pipes with a form-poured concrete foundation. The front side has the numbers 9, 30, and 52 pressed into the



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concrete. A chain-link and barbed-wire fence surround the pump feature.

?A concrete single-barrel turnout for lateral EL50.8 on the west side of the canal is Feature 37. The turnout has two wheel valves set in poured concrete, with two wooden planks over the top opening secured with galvanized bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long.

?Feature 38 is represented by a concrete single-barrel turnout for lateral EL51 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with wooden planks over the top opening secured with galvanized bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long.

?A modern pump house on the west side of the canal constitutes Feature 39.

?Feature 40 consists of concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography. The concrete is poured in place.

?Feature 41 is a concrete culvert under the canal and Feature 40. The tunnel is poured-in-place concrete. There is one opening on the east side of the canal that measures 48.5 in. in height and in width, with a 36-in. concrete piece above the opening. The exit hole on the west is the same dimension. Concrete walls 12 ft. long flare out from the opening with 81-in.-long wing walls partially covered with sediment. The walls are 6.5 in. thick. There are two 2-in.-diameter pipe holes at the base of the wing walls.

?Feature 42 is a concrete single-barrel turnout for lateral EL51.9. There are two turnout wheel valves and an iron grate over the opening. The turnout appears to be abandoned, because it is silted in and the breather valve is broken. Additionally, where the water used to go there is now a dairy farm manure storage area.

?Feature 43 consists of concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography. The concrete was poured in place.

?Feature 44 is a concrete culvert under the canal and Feature 43. The tunnel is poured-in-place concrete. There is one opening on the east side of the canal that measures 48.5 in. in height and in width, with a 36-in. concrete piece above the opening. The exit hole on the west is choked off with cattails and canary grass. Concrete walls 12 ft. long flare out from the opening, with 81 in. long wing walls partially covered with sediment. The walls are 6.5 in. thick. There are two 2-in.-diameter pipe holes at the base of the wing walls.

?Feature 45 is a steel pipe siphon on the west side of the canal. The pipe extends from below the water within the canal at a 45-degree angle and enters the side wall of the canal at 90 degrees, with an unknown exit point.

?Feature 46 consists of concrete linings on both sides of the canal. The concrete was poured in place. This lining is relatively straight compared to the previous linings and does not have a waterway tunnel under the canal.

?Feature 47 is a concrete single-barrel turnout for lateral EL52 with two wheel valves, an iron grate over the opening, a metal trash rack, and two concrete culvert-type pipes



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standing upright on the south side of the turnout.

?Feature 48 consists of concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography. The concrete was poured in place.

?Feature 49 is a concrete culvert under the canal and Feature 48. The tunnel is poured-in-place concrete. There is one opening on the east side of the canal measuring 49 x 49 in., with a 35-in. concrete piece above the opening. The exit hole on the west is choked off with cattails and canary grass. Concrete walls 12 ft. long flare out from the opening with 81-in.-long wing walls partially covered with sediment. The walls are 6.5 in. thick. There are two 2-in.-diameter pipe holes at the base of the wing walls and bolts sticking out of the wall above the opening and at the base of the opening.

?Feature 50 is a concrete single-barrel turnout for lateral EL53 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with iron mesh over the top opening secured with bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long. A metal hand-built seven-step stairway and handrail lead from the access road to the turnout.

?Feature 51 is a modern concrete bridge on Calloway Road. There is a date inscription of "2005" on the northeast corner of the bridge.

?Feature 52 is a concrete single-barrel turnout with no EL designation on the west side of the canal. The turnout has two wheel valves set in poured concrete, with iron mesh over the top opening secured with bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long.

?Feature 53 consists of concrete linings on both sides of the canal along a curve in the canal at a low spot in the topography. The concrete is poured-in-place and tagged with "John BEAR RICE 99" on the east side. The east side is much longer than the west side.

?Feature 54 is a concrete culvert under the canal and Feature 53. The tunnel is poured-in-place concrete. There are two openings on the east side of the canal measuring 59 x 59 in., with a 37 in. concrete piece above the opening. The exit holes on the west side are the same dimensions. Concrete walls 23 ft. long flare out from the opening, with support walls partially covered with sediment. The walls are 6.5 in. thick. There are two 2-in.-diameter pipe holes at the base of the wing walls. Bolts stick out from the concrete above the opening and on the floor of the opening.

?Feature 55 consists of a concrete single-barrel turnout for lateral EL54 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with iron mesh over the top opening secured with bolts and nuts. A trash rack is present on the canal side of the feature. The turnout measures 49 in. wide and 72 in. long.

?Feature 56 is a concrete single-barrel turnout for lateral EL54.8 on the west side of the canal. The turnout has two wheel valves set in poured concrete, with iron mesh over the top opening secured with bolts and nuts. A trash rack is present on the canal side of the turnout. The turnout measures 49 in. wide and 72 in. long. A metal hand-built 11-step stairway and handrail lead from the access road to the turnout.

?Feature 57 is the northern terminus of the Lind Coulee Siphon, located at the southern end of the project APE. The feature is constructed of formed concrete with a steel gate



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and is located within a concrete-lined portion of the canal. Metal debris catchers or trash racks hang from steel chains along a metal cable spanning the canal approximately 20 m north of the feature.

?Feature 58 consists of a concrete single-barrel turnout for lateral EL54.9 with a single-wheel turnout valve on the west side of the canal. There is a handmade rebar-and-galvanized-steel trash rack and a yellow-painted guard rail on the access road above the turnout. The northern terminus of the Lind Coulee Wasteway is immediately southeast of this feature.

?A modern concrete ramp leading down into the canal comprises Feature 59. The ramp is located on the opposite side of the canal from Feature 47.

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Common name: BOR Columbia-Cascades Area Office
Date recorded: 1/23/2013
Field Recorder: Brandon Sybrowsky
Field Site number:
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