A. BACKGROUND

1. **Name of proposed project, if applicable:**

Kittitas Reclamation District Tributary Supplementation Program – North Branch Canal Lining MP 23.3 to 27.5 and Pump Lateral Lining MP 0.6 to 5.6 Project

2. **Name of applicant:**

Kittitas Reclamation District (KRD)

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

Kittitas Reclamation District
Contact: Urban Eberhart
315 N Water St.
Ellensburg, WA 98926
(509) 925-6158

4. **Date checklist prepared:**

October 7, 2025

5. **Agency requesting checklist:**

KRD

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

Work will occur from September 2025 through March 3032 while irrigation water is off and the canals are dry. If work is needed over multiple years, the timing will be the same seasonal months (September to March) sequentially by year.

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

Improvements to the KRD canal system are in support of the on-going KRD Conservation Program and Tributary Supplementation Project. There is the potential for improvements to other segments of KRD canals. If funded, these projects will undergo separate SEPA review and approvals.

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

The Project is directly related to the conservation objectives of the Yakima Basin Integrated Water Resources Management Plan (YBIP) as outlined in the US Bureau of Reclamation (Reclamation) and Washington State Department of Ecology (Ecology) 2012 Final Programmatic Environmental Impact Statement. The Project meets the YBIP objective – Enhanced Water Conservation.

Documentation that has been prepared directly related to this proposal includes:

- Cultural Resources Assessment - KRD North Branch Canal MP 23.3 to 27.5 and Pump Lateral MP 0.6 to 5.6 Lining Project

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.**

None.

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

None.

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.)

KRD proposes two canal lining segments to be completed as one project:

- The North Branch Canal (NBC) canal lining segment includes lining approximately 4.2 miles of earthen canal between Caribou Creek and Vantage Highway between mile point (MP) 23.3 and 27.5. This segment is a continuation of the previous NBC lining projects in 2016, 2022, and 2023. Work includes lining the canal with concrete covered geomembrane, replacing 15 concrete turnouts, replacing one maintenance access bridge (MP 23.75), removing two timber farm bridges (at mile points 23.7 and 24.8), installing two wildlife ramps (MP 24.4 and 25.2), and installing fencing on either side of the canal. The fencing includes approximately 22,350 feet of barbed wire fence to the west of the canal (on the downslope side) and up to 22,350 feet of elk fence to the east of the canal (on the upslope side of the canal) within the existing right-of-way (ROW). The fencing will begin at Caribou Creek. Fence installation will avoid impacts to Waters of the United States. The existing maintenance road to the west of the canal will be re-graveled at the completion of the Project. Staging will occur at NBC Staging Area (Staging Area 3 in previous NBC lining projects).
- The Pump Lateral lining segment includes lining approximately 5 miles (MP 0.6 to MP 5.6) of earthen canal with a concrete covered geomembrane, replacing 26 turnouts (removing/combining 5 turnouts and associated concrete structures), removing 9 concrete check structures, and installing barbed wire fencing west of the canal and potentially installing elk fence east of the canal. The fencing includes approximately 34,000 feet of barbed wire fence to the west of the canal and the potential for 23,000 feet elk fence to the east of the canal within the existing ROW. The existing maintenance road to the west of the canal will be re-graveled at the completion of the Project. Staging will occur at five staging areas (Staging Area 1-5) adjacent to the canal.

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.

North Branch Canal Lining: This segment of the Project is located along the eastern side of the Kittitas Valley, approximately 4 miles northeast of the town of Kittitas, Washington. This segment of the Project

is located in Sections 17, 20, 21, 28, 29, 33, and 34, Township 18 North, Range 20 East, Willamette Meridian. Lining will follow the existing canal alignment for a distance of approximately 4.2 miles from Caribou Creek at MP 23.3 at 120.3425202°W, 47.0253243°N at the north end of the segment to MP 27.5 at Vantage Highway at 120.3152291°W, 47.0012418°N at the south end of the segment. Fencing will follow the canal starting at Caribou Creek extending south to the Vantage Highway crossing. The elk fencing will be installed along the upslope (east) side of the canal from Caribou Creek at the north end of the project, to Vantage Highway.

Pump Lateral Lining: This segment of the Project is located along the southeastern side of the Kittitas Valley, approximately 5 miles southeast of the town of Kittitas, Washington. This segment of the Project is located S3, 10, 14, 15, 23, 34 T16N, R20E. The Project lining will follow the existing canal alignment for approximately 5 miles from MP 0.6 at 120.3222676°W, 46.9189635°N at the north end of the Project to MP 5.6 at 120.2845369°W, 46.8611359°N at the south end of the Project.

See vicinity and project extent maps (Attachment 1).

B. ENVIRONMENTAL ELEMENTS

B.1 Earth

a. General description of the site:

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

The Project areas for both locations are relatively flat within the canals, but the Project corridors cross through hilly terrain and rolling slopes.

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

The steepest slope is 67 percent (1V:1.5H), inside the canal.

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.

Several of the soils in the Project area are characteristically associated with prime or unique farmland; however the Project will not alter or remove nearby soils since the primary work activity is modifying existing infrastructure. The Natural Resources Conservation (NRCS) Service Web Soil Survey maps the following soils within the NBC portion of the Project:

- Terlan-Durtash-Selah complex, 5 to 15% slopes
- Durtash gravelly loam, 3 to 10% slopes
- Terlan-Durtash-Selah complex, 2 to 5% slopes
- Mitta ashy silt loam, flooded, 0 to 2% slopes
- Durtash loam, 2 to 5% slopes
- Nanum ashy loam, 0 to 2% slopes
- Camaspatch-Boylston complex, 30 to 70% slopes
- Nitzel ashy silt loam, 0 to 2% slopes
- Weirman complex, drained, 0 to 5% slopes
- Nanum ashy loam, flooded, 0 to 2% slopes
- Vantage-Clerf complex, 3 to15% slopes

NRCS maps three soils within the staging area associated with NBC portion of the Project:

- Selah loam, 5 to 10% slopes
- Ternan-Durtash-Selah complex, 5 to 15% slopes
- Argixerolls, 15 to 30% slopes

NRCS maps following soils within the Pump Lateral portion of the Project:

- Terlan gravelly loam, 5 to 10% slopes
- Terlan-Durtash-Selah complex, 2 to 5% slopes
- Benwy silt loam, 10 to 15% slopes
- Terlan gravelly loam, 2 to 5% slopes

- Vantage very cobbly loam, 3 to 15% slopes
- Marlic-Zen-Laric complex, 3 to 15% slopes
- Selah loam, 5 to 10% slopes
- Terlan-Durtash-Selah complex, 5 to 15% slopes
- Selah loam, 15 to 30% slopes
- Rollinger ashy silt loam, 5 to 10% slopes
- Zen-Marlic-Laric complex, 3 to 15% slopes
- Esquatzel-Weirman complex, 0 to 2% slopes
- Rollinger silt loam, 5 to 10% slopes
- Selah silt loam, 15 to 30% slopes
- Esquatzel-Weirman complex, channeled, 0 to 2% slopes
- Selah silt loam, 5 to 10% slopes

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

NBC: Minor erosion associated with maintenance road run-off was observed from approximately 200 feet south of Caribou Creek along the existing maintenance road and approximately 1,400 feet south of the creek. No other indications of unstable soils are present in the areas within this segment of the Project.

Pump Lateral: No indications of unstable soils were observed within this segment of the Project.

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.

NBC: Prior to applying the liner, the interior of the canal will be reshaped to its original design as the interior has degraded in the past 90 years. This involves removing up to 4 inches of existing material on the sides and up to 10 inches of existing material on the bottom. Gravel would be placed under the concrete lining and serve as bedding. All introduced gravel will come from Washington State-certified quarries. Excavated material that cannot be incorporated into the Project will be hauled offsite to an approved location. Underdrains will be installed (where necessary) up to 2 feet below the existing canal, where a 2- by 2-foot trench will be excavated prior to installation. A 0.25-inch geomembrane lining will be placed and keyed into the canal, which will then be covered in 3 to 6 inches of concrete to prevent punctures to the geomembrane. The Project will require shaping of the existing canal cross-section and require approximately 75 cubic yards of imported gravel subgrade material per 100 linear feet of canal. Material quantities are approximate and subject to change based on conditions encountered during construction. The standard five strands of barbed wire fencing with metal posts would be installed within the ROW on the west side of the canal, and elk fencing would be installed within the ROW on the east side of the canal. The fence extends from Caribou Creek at MP 23.3 south to MP 27.5. The excavation and ground disturbance for the fence corner posts, which will be set in concrete, will average a depth of 36 inches and a diameter of 18 inches for wire fence and 24 inches for elk fence.

Pump Lateral: Prior to applying the liner, the interior of the canal would be to match the proposed section by excavation and fill. This involves removing up to 4 inches of existing material on the sides and

up to 10 inches of existing material on the bottom. Gravel would be placed under the concrete lining and serve as bedding. All introduced gravel will come from Washington State-certified quarries. A geomembrane lining would be placed and keyed into the canal, which would then be covered in 3 to 6 inches of concrete to prevent punctures to the geomembrane. The Project will require approximately 12,130 cubic yards of excavation and 6,970 cubic yards of fill in the dry canal and approximately 1,530 cubic yards of excavation and 12,120 cubic yards of fill for maintenance road improvements. Material quantities are approximate and subject to change based on conditions encountered during construction. The standard five strands of barbed wire fencing with metal posts would be installed within the ROW on the west side of the canal and elk fencing may be installed within the ROW on the east side. The excavation and ground disturbance for the fence corner posts, which will be set in concrete, will average a depth of 36 inches and a diameter of 24 inches.

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

Minimal erosion is possible associated with rain fall after clearing and grubbing work commences. Best management practices (BMPs) for erosion/sediment control will be in place to mitigate erosion during construction, including full containment within the canal prism. There will be no increase in erosion from the long-term use of the system.

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

The intent of the Project is to prevent water loss through seepage and ensure these canal segments are impervious.

NBC: The existing earthen canal will be lined with three to six inches of concrete which will overlay approximately 1,024,420 square feet of impervious membrane.

Pump Lateral: The existing earthen canal will be lined with three to six inches of concrete which will overlay approximately 658,320 square feet of impervious membrane.

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

Vegetation removal will be kept to the minimum area necessary to complete the Project. Disturbed areas will be replanted with native vegetation or approved species. Project-specific BMPs will be implemented to avoid and prevent erosion associated with construction.

B.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.

Typical construction activities are expected to cause minor and temporary increases in fugitive dust and exhaust. The completed Project will not result in increased traffic volumes or air emissions.

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

No.

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

Dust control measures during construction, such as watering exposed soil or road surfaces, placing clean rock on road surfaces, or other commercial dust abatement applications to road surfaces will be implemented as needed. Machinery, equipment, and support vehicles used for the Project will be maintained in proper working order and shut off when not in use.

B.3 Water

a. Surface:

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.

The non-jurisdictional NBC and Pump Lateral are the main surface waterbodies within the Project area and were constructed in uplands for the purpose of irrigation water conveyance.

NBC: Four non-jurisdictional irrigation laterals branch off the west side of the NBC within the Project area. The National Hydrography Dataset (NHD) shows Caribou Creek and Parke Creek as perennial streams flowing west under the canal from the slopes above the canal. During a site visit in July 2025, Caribou Creek was confirmed to be a perennial drainage while Parke Creek was dry above the canal and is an intermittent drainage at the canal. During the irrigation season, hydrology within Parke Creek is often limited to a small pool just downstream of the canal that forms from canal seepage. The July 2025 site visit indicates all remaining NHD mapped drainages that cross the canal are likely ephemeral or nonexistent.

NBC: The National Wetland Inventory (NWI) maps riverine wetlands associated with all of the drainages mapped by NHD. NWI also maps four freshwater emergent wetlands near the canal on the downslope side, and four freshwater emergent wetlands upslope of the canal. One freshwater/forested wetland is mapped upslope adjacent to the canal near Lateral NB 26.1. Additionally, NWI maps riverine wetlands associated with the canal and all laterals within this segment of the Project, except lateral NB 23.6. The July 2025 site visit identified a potential jurisdictional wetland complex east of Colockum Road and adjacent to Caribou Creek, on both north and south sides of NBC. Several potential linear wetlands were observed adjacent to the maintenance road to the south. These wetlands were artificially created due to seepage loss from the existing unlined NBC and therefore are not considered jurisdictional. Many of the NWI drainages mapped as riverine wetlands upslope of the canal were observed to be lacking hydrology and wetland tolerant vegetation and are not considered potential wetlands.

Pump Lateral: Five non-jurisdictional laterals branch off the west side of the Pump Lateral within the Project area. NHD shows one perennial stream (an unnamed tributary to Badger Creek) and seven multiple intermittent drainages within this segment of the Project. During the July 2025 site visit, no hydrology was observed in any mapped drainages upslope of the canal; however, some seepage from the canal was observed in a few of the drainages below the canal.

Pump Lateral: NWI maps all of the intermittent drainages and the canal as riverine wetlands. One of the intermittent NHD drainages transitions to a freshwater emergent wetland downslope of the canal. No additional wetlands are mapped in the immediate vicinity of this segment of the Project. The July 2025

site visit identified potential wetlands adjacent to the canal which were artificially created due to seepage loss from the existing unlined NBC and therefore are not considered jurisdictional.

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 Project will occur primarily within the non-jurisdictional, existing NBC and Pump Lateral when irrigation is turned off (October – March) and there is no water within the canals. There will be no impacts to drainages or jurisdictional wetlands. Appropriate BMPs will be implemented to avoid impacts to nearby aquatic resources.

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.**

No filling or dredging is anticipated within any wetlands or adjacent aquatic resources.

4. **Will the proposal require surface water withdrawals or diversions? Give a 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.

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:

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 a general description, purpose, and approximate quantities if known.**

No.

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (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.**

N/A.

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.**

Runoff during construction will be managed by using BMPs to contain all sedimentation and prevent discharge to adjacent drainages and wetlands. After construction, all disturbed areas and roadsides will be reseeded to prevent any long-term impacts.

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

No.

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

Lining sections of the NBC and Pump Lateral will reduce infiltration loss from the existing KRD canal system. Based on the location of the canals on elevated slopes above the Kittitas Valley floor, it is likely this infiltration loss has historically provided surface water to down-gradient wetlands where at least some of the hydrology was lost through evapotranspiration. The remaining water associated with infiltration loss would have infiltrated and may have provided recharge benefit to shallow groundwater. There is the potential that some of this groundwater recharge would eventually reach the Yakima River; however, this return of hydrology to the system would be less than what was lost through infiltration. Water retained in the canal that would have otherwise infiltrated would be "retimed" such that the return of flows to the river would be months after it was lost from the canal system.

The Project will improve the efficiency of the NBC and Pump Lateral and may result in loss of hydrology to adjacent wetlands. Artificially irrigated areas that would revert to dryland should application of water to that area cease are not considered Waters of the United States. These wetlands may experience reduced groundwater due to reduced infiltration loss from the canal system; however, no mitigation is required per the US Army Corps of Engineers and Ecology's guidance pertaining to loss of wetlands due to improved water conservation.

It is not anticipated lining the canals will impact the jurisdictional wetlands given the wetlands are present due to the hydrology associated with an adjacent perennial creek. If any potential impacts are identified to jurisdictional wetlands associated with fence installation, appropriate permits and approvals will be obtained from regulatory agencies.

The lining Project will allow more instream flows within the Yakima River during the irrigation season (spring through fall) when flows are most beneficial to ESA-listed species and other water users by decreasing water lost from canals due to seepage. These conservation measures are in line with the goals of the YBIP and KRD Tributary Supplementation Program which was spearheaded by the KRD in partnership with the Yakama Nation, Washington State, and federal agencies to improve KRD infrastructure to aid threatened anadromous fish during periods of drought. Increasing efficiency within the canals will allow for a greater amount of tributary supplementation if necessary, during future drought years, and immediate instream benefits in the Yakima River basin.

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

The Project will not impact drainage patterns. Approved BMPs will be in place in the event a precipitation event results in short duration runoff of surface water during construction. BMPs will

contain sediment and prevent discharge to adjacent drainages and wetlands. After construction, disturbed areas and roadsides will be reseeded to prevent any long-term impacts.

B.4 Plants

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

☒ **deciduous tree: alder, maple, aspen, other:** Cottonwood (*Populus trichocarpa*)

☐ **evergreen tree: fir, cedar, pine, other**

☒ **shrubs:** Willow (*Salix* sp.), antelope bitterbrush (*Purshiana tridenta*), rubber rabbitbrush (*Ericameria nauseosa*), big sagebrush (*Artemesia tridentata*), Nootka rose (*Rosa nutkana*)

☒ **grass:** Cheat grass (*Bromus tectorum*), bulbous bluegrass (*Poa secunda*), basin wildrye (*Leymus cinereus*), Sandberg bluegrass (*Poa secunda*), crested wheatgrass (*Agropyron cristatum*), squirrel bottlebrush (*Elymus elymoides*)

☒ **pasture:** Alfalfa (*Medicago sativa*), Timothy (*Phleum pratense*)

☐ **crop or grain**

☐ **orchards, vineyards, or other permanent crops.**

☒ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other:** Cattail (*Typha latifolia*), horsetail (*Equisetum* spp.)

☐ **water plants: water lily, eelgrass, milfoil, other**

☒ **other types of vegetation:** Showy milkweed (*Asclepias speciosa*), silverleaf Phacelia (*Phacelia* hastata), wild buckwheat (*Eriogonum* sp.), yarrow (*Achillea millefolium*), mullein (*Verbascum thapsus*), lupine (*Lupinus* sp.), clasping pepperweed (*Lepidium perfoliatum*).

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

Grasses, weedy species, and potentially upland shrubs surrounding the canal and roadside may be removed during the Project. Disturbed areas outside the KRD road and canal will be seeded with a native seed mix.

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

The Project will occur within the existing KRD ROW at both locations and most of the Project area has been significantly disturbed by construction and maintenance of the canal, maintenance road and associated infrastructure. The Project will not impact any threatened or endangered plant species as there is no suitable habitat for these species within the Project area.

NBC: A population of pauper milkvetch (*Astragalus misellus* var. *pauper*) has been documented in the shrub-steppe slope southeast of the Project. This species occurs in relatively undisturbed shrub steppe habitat. A population of Hoover's tauschia (*Lomatium lithosolamans*) also occurs east of the project.

Pump Lateral: There are no known threatened or endangered plant species in the vicinity of this segment of the Project. The closest state listed species is Hoover's tauschia (*Lomatium lithosolamans*) which is located on lithic habitat 400 feet east of the Project. Additional state listed species, Suksdorf's monkeyflower (*Erythranthe suksdorfii*), coyote tobacco (*Nicotiana attenuata*), and snowball cactus

(*Pediocactus nigrispinus*), have been documented even further east within riparian and shrub steppe habitat.

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

Disturbed areas will be replanted or reseeded with approved native species.

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

Prickly Russian thistle (*Salsola tragus*), Canada thistle (*Cirsium arvense*), diffuse knapweed (*Centaurea diffusa*), common teasel (*Dipsacus fullonum*), kochia (*Bassia scoparia*), cheatgrass (*Bromus tectorum*), prickly lettuce (*Lactuca serriola*), nodding thistle (*Carduus nutans*), tall tumblemustard (*Sisymbrium altissimum*), field bindweed (*Convolvulus arvensis*), common wormwood (*Artemisia absinthium*), bur buttercup (*Ceratocephala testiculata*), oxeye daisy (*Leucanthemum vulgare*), salsify (*Tragopogon dubius*), lamb's quarters (*Chenopodium album*).

B.5 Animals

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

Examples include:

- **Birds: hawk, heron, eagle, songbirds, other:** Spotted sandpiper, cliff swallow, barn swallow, red-winged blackbird, killdeer, California quail, cedar waxwing, magpie, brewer's blackbird, owl (species undetermined), red tailed hawk, raven, kestrel, grackle, Mallard duck, magpie
- **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.

There are no threatened or endangered species known to be at or near either Project location. Steelhead had historic presence within Caribou Creek; however, a total fish passage barrier occurs downstream of the NBC segment of the Project and they cannot access the site.

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

NBC: The Ellensburg Foothills Corridor is northeast of the Project and is a corridor for elk, mule deer, western rattlesnake, American beaver, American badger, and white-tailed jackrabbit. The Quilomene elk and mule deer winter range is located east of this segment of the Project and herds are known to move down into the Kittitas Valley.

Pump Lateral: A large mule deer concentration area is mapped approximately 1.7 miles southeast of the project. Elk that reside on the Yakima Training Center travel to the adjacent farm fields to graze.

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

This water conservation project meets objectives of the Yakima River Basin Integrated Plan by enhancing the instream flow of the Yakima River and improving the quality of the water that is discharged from the irrigation system into the Yakima River. This will lead to improved aquatic habitat.

KRD will provide wildlife protection by adding elk fencing along the eastern perimeter of the canal at the NBC Project location and potentially Pump Lateral Project location, and fencing along the western side of the canal at both locations to prevent wildlife from accessing the canal where they could fall in. Two wildlife ramps will also be constructed along the NBC at MPs 24.4 and 25.2 to allow wildlife (mostly elk) to climb out of the canal. Wildlife ramps will not be added to the Pump Lateral as the canal is shallow enough for wildlife to egress without ramps.

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

None.

B.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.

None.

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

No.

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.

B.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 because of this proposal? If so, describe.

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

NBC: One Ecology facility/site (ID 3339) occurs on the parcel west of the NBC south of Stevens Road at the NBC Staging Area. The site was a hazardous waste generator (EPA Site ID WAH000059085) associated with a wrecking yard. Ground disturbance is not anticipated at the NBC Staging Area. There are no additional known sources of potential contamination in the Project vicinity.

Pump Lateral: There are no known sources of potential contamination near this segment of the Project.

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.

None.

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.

Toxic or hazardous chemicals that may be on-site during construction include but are not limited to vehicle and equipment fuel, oil, and hydraulic fluid. Equipment staging and fueling will occur more than 50 feet from wetlands and adjacent drainages.

4. **Describe special emergency services that might be required.**

It is not anticipated that special emergency services will be required.

5. **Proposed measures to reduce or control environmental health hazards, if any.**

These actions are not anticipated to create an environmental health hazard. Appropriate BMPs for spill prevention will be in place, and clean up measures will be taken if necessary.

b. Noise

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

None.

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)?**

Equipment associated with construction such as backhoes, bulldozers, and excavators will raise noise levels during construction. Construction will take place from approximately 8 am to 5 pm on weekdays. Noise levels will return to previous levels upon completion of the Project.

3. **Proposed measures to reduce or control noise impacts, if any:**

Equipment will be operational during normal working days and during daylight hours and shut off when not in use.

B.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.

Currently the site is the KRD NBC, Pump Lateral and maintenance roads. Adjacent properties are used for agriculture and rural residences. The Yakima Training Center is adjacent to the Pump Lateral segment of the Project.

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 because 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?**

No, neither site has been used as farmland or forest lands and no agricultural or farmland will be converted to another use as a result of the Project.

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, the Project will not affect or be affected by normal farm or business operations in the area.

c. Describe any structures on the site.

NBC: Structures include the Caribou Creek wasteway, culverts, turnouts, siphons, KRD maintenance roads, security gates, 2 farm bridges, cattle guards on the KRD maintenance roads, and a bridge carrying Christensen Road over the canal.

Pump Lateral: Structures on the site include turnouts, check structures, an intake pipe, wasteway, and KRD maintenance roads.

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

NBC: Two timber farm bridges will be removed.

Pump Lateral: Six check structures within the lateral will be removed.

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

NBC: The NBC segment of the Project and staging area are within an area zoned as Agriculture 20.

Pump Lateral: The Pump Lateral segment of the Project is on the border between Agricultural 20 and Commercial Agriculture.

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

NBC: The NBC segment of the Project and staging area are within the Rural Working land use designation.

Pump Lateral: The Pump Lateral segment of the Project is on the border between Rural Working and Commercial Agricultural land use designation.

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

There are no designated shorelines within the Project area at either location.

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

Per the County critical areas ordinance (Title 17A of the Kittitas County Code), critical aquifer recharge areas and wetlands are critical areas.

Critical aquifer recharge areas: Both Project sites are within an area of unconsolidated deposits within Kittitas and Roslyn Basins which is considered a critical aquifer recharge area by Kittitas County.

Geologically Hazardous Areas: Both Project sites may have erosion hazard areas due to soils identified by NRCS as having severe erosion potential. Potentially unstable slopes were identified along a portion of the NBC during a site visit.

Wetlands: NWI maps several riverine wetlands which are KRD irrigation canals as well as wetlands adjacent to the canal and maintenance roads which were artificially created due to seepage loss from the unlined canals within and adjacent to the Project. These are not considered wetlands under 17A.07.020. A potentially jurisdictional wetland complex may occur adjacent to the NBC segment of the Project, east of Colockum Road and adjacent to Caribou Creek, on both north and south sides of NBC. There will be no impacts to wetland buffers as work will occur in areas where the only vegetation present is weedy roadside grasses and forbs adjacent to KRD maintenance roads that do not provide any buffer function.

Fish and Wildlife Habitat Conservation Areas: Both segments of the Project may include shrub steppe habitat, however work is within KRD ROW where much of the area is previously disturbed. The Ellensburg Foothills Corridor (a biodiversity area and corridor) overlaps the NBC portion of the Project.

No other critical areas are known to occur within the Project area.

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

None.

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

None.

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

N/A.

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

This area is primarily used for agriculture and the Project will enhance the continuation of this land use.

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

N/A.

B.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:

None.

B.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?

NBC: Standard 5-strand barbed wire fencing will be installed along the western side of the canal within the ROW from Caribou Creek to Vantage Highway. Elk fencing will be installed along the eastern side of the canal within the ROW from Caribou Creek to Vantage Highway. Elk fence is typically 8 feet high and would be constructed of steel posts and steel mesh fence fabric.

Pump Lateral: Standard 5-strand barbed wire fencing will be installed along the western side of the canal and elk fencing may be installed along the eastern side of the canal within the ROW along the entire length of the Project.

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

The addition of the fence along the canals at both Project locations is the only alteration to views associated with the Project. The fence along the canals may be visible from nearby residences and roads.

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

Work will occur primarily within the existing NBC, Pump Lateral and along existing KRD maintenance roads. Once construction is complete, disturbed areas outside KRD roads and canals will be seeded.

B.11 Light and Glare

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

No light or glare producing activity is proposed.

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

No.

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.

B.12 Recreation

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

NBC: There are no recreational opportunities in the immediate vicinity of this segment of the Project.

Pump Lateral: Recreational use occurs within the Yakima Training Center immediately east of this segment of the Project.

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

N/A

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

N/A

B.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.

In April 2025 Jacobs prepared a cultural resources report for both the NBC and Pump Lateral Project (*Cultural Resources Assessment - KRD North Branch Canal MP 23.3 to 27.5 and Pump Lateral MP 0.6 to 5.6 Lining Project*). Jacobs conducted the cultural resources investigations, consisting of background

research, pedestrian survey, and recordation of cultural resources over 50 years old for the Project Area of Potential Effects (APE).

NBC: Two cultural resources are located within the NBC portion of the APE:

- Kittitas Division North Branch Canal (resource/historic property inventory no. 4217)
- Vantage Highway-High Line Canal Bridge #80344 (resource/historic property inventory no. 727610)

Pump Lateral: There are no NRHP eligible archaeological resources located within the Pump Lateral portion of the APE.

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.

NBC: A records review of the APE using the Washington Information System for Architectural and Archaeological Records Data identified one previously recorded historic property: the 36-mile long North Branch Canal (4217), determined eligible for listing on the National Register of Historic Places (NRHP) in 2016. The Vantage-High Line Canal Bridge #80344 was determined Not Eligible. A pedestrian survey encountered no surface archaeological materials. One precontact isolate (45KL04809) was identified within a staging area of the Pump Lateral portion of the APE. Additional subsurface tests at intervals around the isolate confirmed this resource as an isolated find. The precontact lithic find was noted within subsurface deposits associated with agriculture and is recommended not eligible for the NRHP.

Five built environment resources over 50 years of age within the APE were newly recorded and evaluated for the NRHP. Three of these are recommended NRHP-eligible properties: a canal segment contributing to the North Branch (4217); a contributing structure to the North Branch, the Caribou Creek Wasteway (736087); and a contributing lateral, the Wippel Pump Lateral (736088). Two timber farm bridges (736103, 736104) are recommended not eligible.

Pump Lateral: No cultural resources are located within the Pump Lateral portion of the APE; however, there have been eight cultural resource surveys conducted within a 1-mile radius of this portion of the APE, and 13 cultural resources have been identified within a 1-mile radius of the Pump Lateral portion of the APE. These cultural resources include six historic sites or linear features, two multicomponent sites, and five precontact sites/isolates.

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.

A records review was done by Jacobs cultural resources staff for the current APE and the surrounding area using the Washington Information System for Architectural and Archaeological Records Data (WISAARD).

Archaeology Methods:

The intensive survey of the NBC and Pump Lateral portions of the APE were conducted on several dates in May, August, and September 2024, by Jacobs SOI-qualified cultural staff.

The primary field methods consisted of a pedestrian survey of the APE on transects spaced approximately 10 meters apart. Indications of historical and modern development were noted and documented. In areas of poor visibility, surveyors examined all exposed ground surfaces, including erosional features, rodent back dirt piles, and animal paths. Field conditions were noted, and photographs taken to document the encountered conditions.

Given the rural and undeveloped nature of the APE, all observed features and photographs were plotted on an electronic field map using an iPad and a Global Positioning System unit to ensure precise location accuracy of resources.

Archaeological survey included subsurface focused on the staging areas associated with the Pump Lateral. Each new staging area was tested by shovel test probe (STP). Typically, each STP was 35 to 40 centimeters wide and was excavated with the intent of reaching 100 centimeters below surface. Testing locations were selected based on the discretion of the field director. Any cultural material located was reburied in the subsurface test unit. Where cultural materials were located, an additional four STPs were conducted at a set distance from the positive probe to identify any other associated cultural materials.

Built Environment Methods:

The research phase for the built environment portion of the Project involved standard techniques of locating primary and secondary documents. In addition to the background record search conducted through the WISAARD system, several archival repositories and web-based databases were consulted to gather primary and secondary source materials related to the history and development of built resources within the APE. These included the following sources:

- Kittitas Division reports, design plans, and drawings, construction specification, and historic photographs from 1928 to 1933, Reclamation Columbia-Cascades Area Office Records and Archives in Yakima, Washington.
- Historic aerials 1964 to 2006, www.historicaerials.com.
- *Historic Context of the Kittitas Division of the Yakima Project* (Doncaster 2022), KRD and Jacobs archives.
- Bridge and Road Plans, Kittitas County Office of Road Engineer, https://www.co.kittitas.wa.us/public-works/engineering/default.aspx.
- Metsker Maps of Kittitas County, 1934 and 1956, Washington State Archives, Central
- Branch, Ellensburg, WA, and http://historicmapworks.com.
- U.S. Geological Survey Topographic Maps review; Badger Pocket (USGS 1938), East
- Kittitas (USGS 1953), Wenatchee (USGS 1957), and Colockum Pass SE (USGS 1966).

Fieldwork was undertaken to document existing conditions and record historic age resources. The survey staff recorded all built resources over 50 years. These included the North Branch and Pump

Lateral segments and their associated features in the APE. The built resources were digitally photographed and detailed notes and measurements were taken where appropriate. The newly recorded resources within the APE were evaluated for the NRHP and documented on HPI forms under WISAARD Project No. 2024-06-04195.

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.

NBC: The complex engineered works of the NBC such as siphons, tunnels and wasteways that are its key features have not been altered in previous lined segments in a way that impacts its integrity. Nor is the Caribou Creek Wasteway, the major engineered structure within the APE, proposed for change.

Several turnouts are proposed for replacement; however, the replacement headgates of the turnouts would be in-kind. The turnout pipes are underground and not visible, over half of the turnouts are not original, and the turnouts themselves are common features of all canals and are considered non-contributing features. The two timber farm bridges along the alignment proposed for removal were constructed in the mid-twentieth century and are non-contributing elements. The new bridge would replace the one at MP 23.7 proposed for removal and in an already modified section of the canal. The two new wildlife ramps would slightly alter the canal's design by extending two small sections by about 15 feet at its banks to accommodate the concrete ramps. However, these additions would not constitute a major change within the nearly 5-mile extent of the canal segment; they blend seamlessly with the canal and do not alter its integrity of feeling and association as a canal of the Kittitas Division. The combined changes would not noticeably reduce the aspects of the canals integrity, such as its location, setting, association, feeling, and design, in such a way that would make it ineligible for the NRHP. Features of the canals design, its trapezoidal shape and alignment under Criterion

Pump Lateral: To date, no sections of the Pump Lateral have been concrete lined. The proposed Project would line 5 miles of the 18-mile lateral, leaving over 70 percent of the ditch unmodified. Furthermore, the complex engineered structures of the Pump Lateral, the two siphons at Badger Creek outside of the APE that are its contributing features would not be altered by the Project. The addition of metal barbed wire and elk fences will not affect the canal's integrity, as these are outside the canal's prism. Several turnouts are proposed for replacement; however, the replacement headgates of the turnouts would be in kind. The underground pipes are not visible, and the turnouts themselves are common features of all canals and considered non-contributing features. Several concrete check structures are proposed for removal; these are similarly considered non-contributing and do not impact the integrity of the canal. These combined changes would not noticeably reduce the aspects of the canals integrity, such as its location, design, setting, association, and feeling, in such a way that would make it ineligible for the NRHP. Features of the canals design, its trapezoidal shape and alignment under Criterion A would remain intact. While the integrity of materials and workmanship of the canals would be altered with introduction of new lining, these aspects of integrity – materials and workmanship - are important to maintain under Criterion C. Therefore, the Project would not have an adverse effect to this historic property.

B.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.

NBC: Access to this segment of the Project site will be from the existing KRD maintenance road that parallels the canal and is accessed from Vantage Highway to the south or Colockum Road to the north. Access to NBC staging area will be from an existing gravel road on the western side of the canal.

Pump Lateral: Access to this segment of the Project site will be from the existing KRD maintenance road that parallels the canal and is accessed from Fourth Parallel Road or Pumping Plant Road near the north end of this segment of the project, Morrison Road near Staging Area 3, Bynum Road near Staging Area 4, and Upper Badget Pocket Road near Staging Area 5 and the south end of the Project.

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?

No. The nearest transit stop is in the city of Ellensburg, approximately 5 miles from either Project location.

c. 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).

The Project will require slight modifications to KRD maintenance roads to allow large equipment access. These are private roads that will not affect public use. No modifications to public roads are proposed. The KRD maintenance roads will be re-graveled at both Project locations.

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

No.

e. 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?

There will be no increase in vehicular trips per day associated with the completed Project.

f. 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.

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

The Project will have no transportation impacts.

B.15 Public Service

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.

The Project will not impact public services.

B.16 Utilities

c. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

d. 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.

Electrical power will be necessary for construction of the Project, as well as for contractor and construction manager trailers, and potentially pumps. No new utilities are proposed for this 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.

X Urban Eberhart

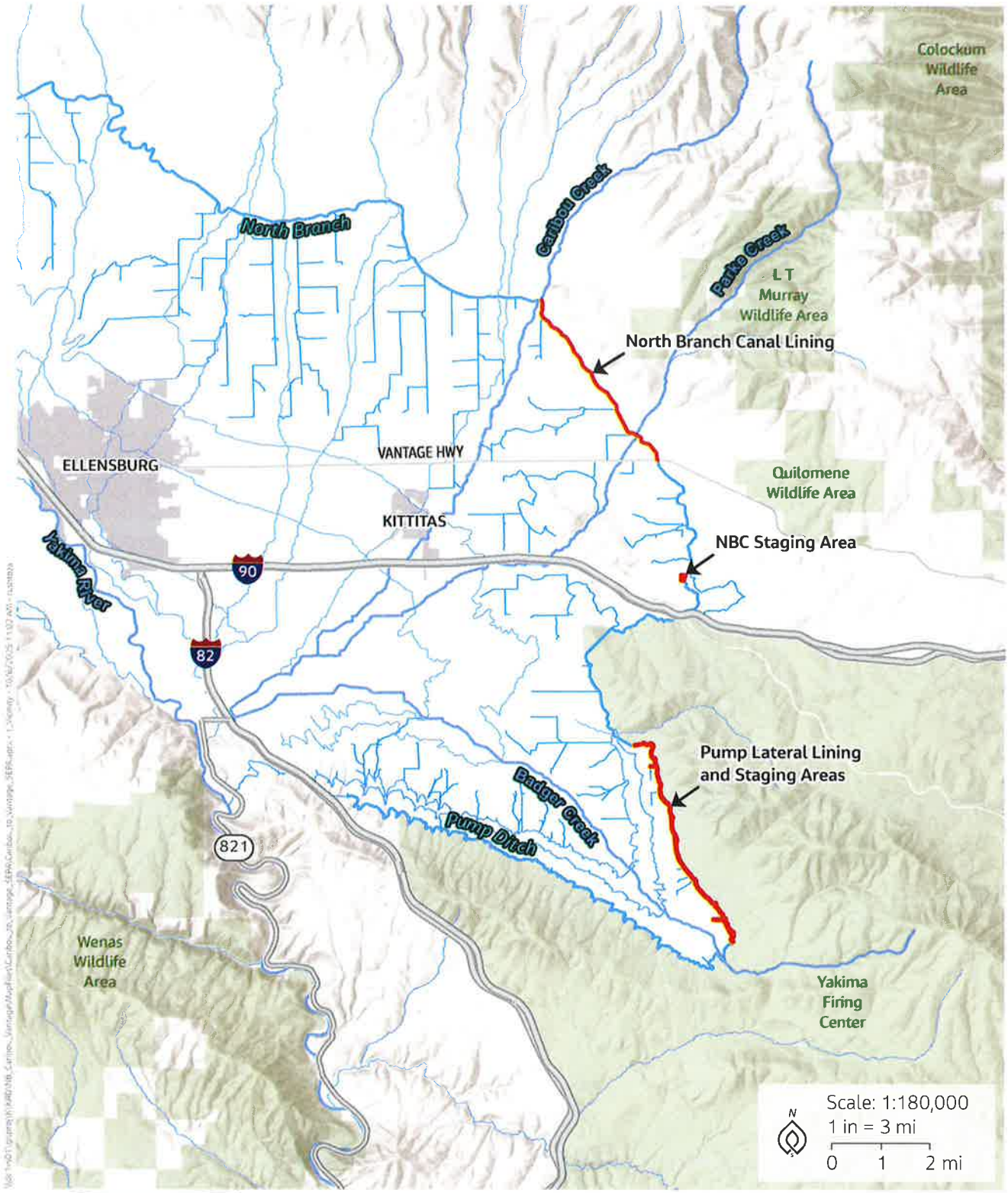
Type name of signee: Urban Eberhart

Position and agency/organization: Secretary Manager, Kittitas Reclamation District

Date submitted: 11/4/2025

APPENDIX A

MAPS



Project Area

FIG 1
Vicinity
North Branch Canal Lining MP 23.3 to 27.5 and
Pump Lateral Lining MP 0.6 to 5.6 Project

Kittitas County, Washington

Data Sources: DNR, Kittitas County, KRD, USGS, WSDOT. Basemap Sources: Esri, NASA, NGA, USGS

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Canal Lining Extent

FIG 2

North Branch Canal Project Location

North Branch Canal Lining MP 23.3 to 27.5 and
Pump Lateral Lining MP 0.6 to 5.6 Project

Kittitas County, Washington

Data Sources: DNR, Kittitas County, KRD, USGS, WSDOT. Basemap Sources: © 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS

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NBC Staging Area

FIG 3

NBC Staging Area

North Branch Canal Lining MP 23.3 to 27.5 and
Pump Lateral Lining MP 0.6 to 5.6 Project

Kittitas County, Washington

Data Sources: DNR, Kittitas County, KRD, USGS, WSDOT. Basemap Sources: © 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS

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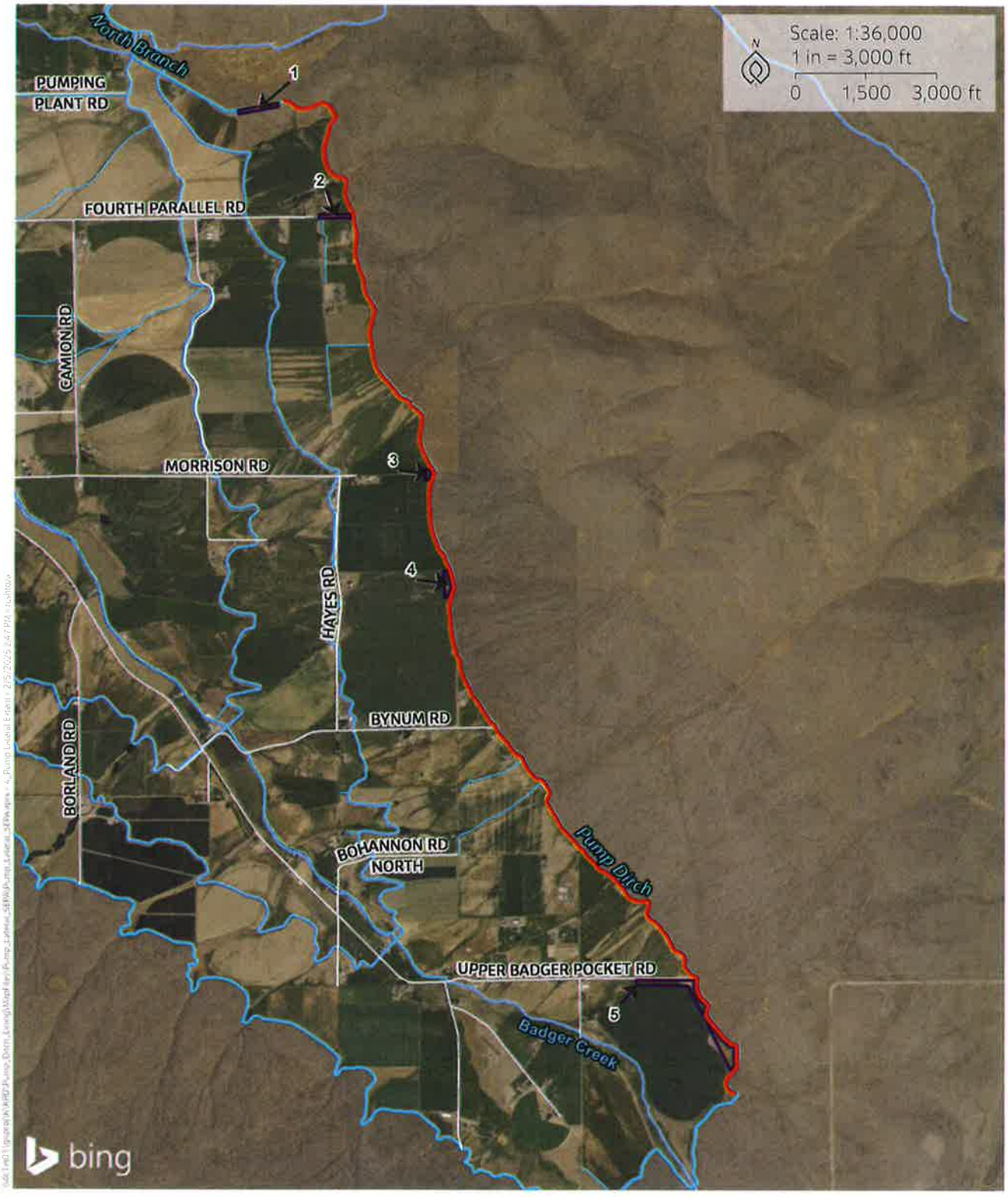

Pump Lateral Lining Extent

Staging Area

FIG 4

Pump Lateral Project Location

North Branch Canal Lining MP 23.3 to 27.5 and
Pump Lateral Lining MP 0.6 to 5.6 Project

Kittitas County, Washington

Data Sources: DNR, Kittitas County, KRD, USGS, WSDOT. Basemap Sources: © 2025 Microsoft Corporation © 2025 Maxar ©CNES (2025) Distribution Airbus DS

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