

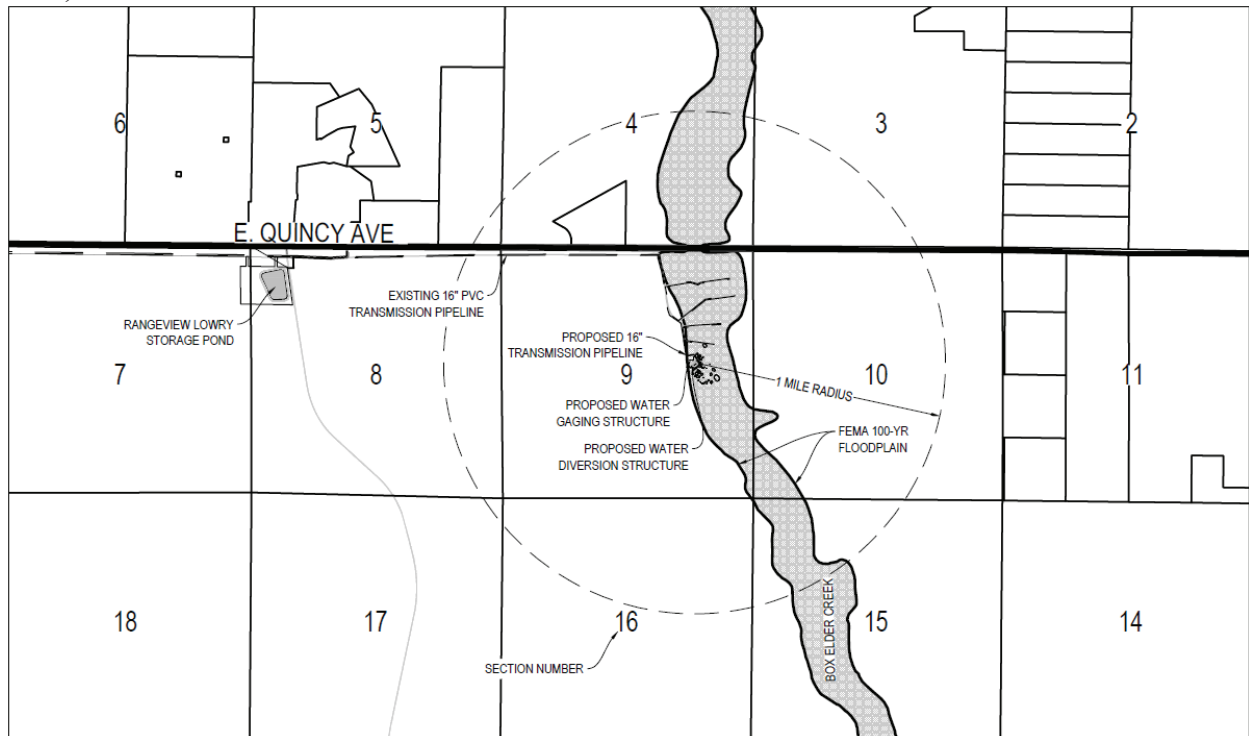
ARAPAHOE COUNTY PLANNING COMMISSION
PUBLIC HEARING
JUNE 2, 2026
6:30 P.M.

SUBJECT: CASE NO. LE25-005 BOX ELDER DIVERSION DAM - LOCATION AND EXTENT

KAT HAMMER, SENIOR PLANNER

LOCATION AND VICINITY MAP

The proposed project is located in the Northeast quarter of Section 9, Township 5 South, Range 64 West, of the 6th Principal Meridian, Parcel Id No. 2069-00-0-00-014. The location is approximately 2.3 miles southwest of the intersection of East Quincy Avenue and South Manila Road, in Commissioner District 3.

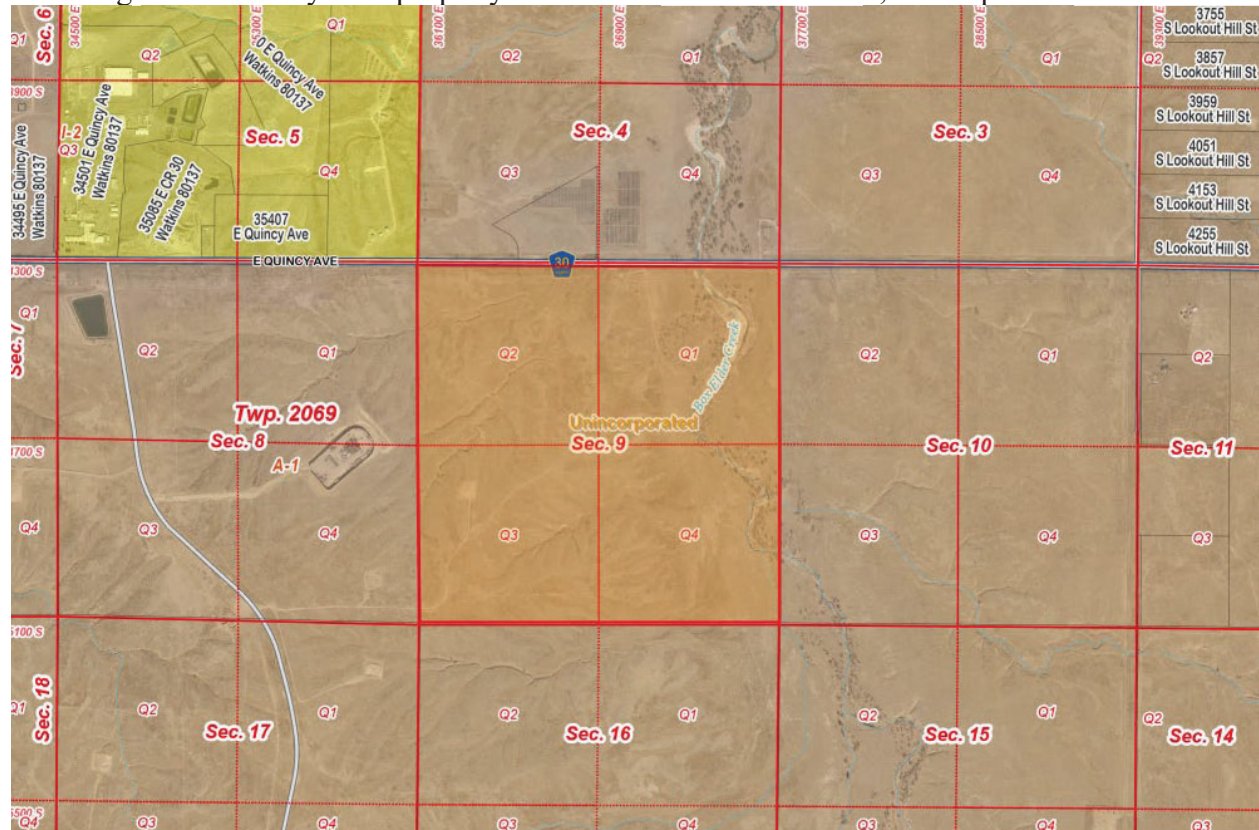


Vicinity Map

ADJACENT SUBDIVISIONS, ZONING, AND LAND USE

The properties to the east, south, and west of the subject property are zoned A-1, unplatted, and owned by the State of Colorado (Colorado State Land Board). The property to the north is zoned A-1, unplatted, not owned by the Colorado State Land Board, and is currently agricultural,

including a solar facility. The property to the northwest is zoned I-2, and unplatted.



*Zoning Map
(Subject property shown in orange)*

PURPOSE AND REQUEST

Rangeview Metropolitan District (Rangeview) is requesting approval of a Location and Extent application to construct a diversion dam and stream gauge on Box Elder Creek. The project is proposed on Colorado State Land Board property within a 1.5-acre easement granted to Rangeview. Construction is projected to begin in the summer of 2026 and is estimated to take three months to complete.

The proposal includes the construction of an inflatable bladder dam to divert Rangeview’s surface water rights on Box Elder Creek. The dam would function by inflating a 3-foot-tall bladder that spans the creek, allowing water to flow by gravity into a proposed buried pumping vault. Approximately 600 feet of new 16-inch transmission line, buried at a minimum depth of 4.5 feet below grade, is also proposed, which will be extended from the pump vault to Rangeview’s existing transmission lines. Together, these facilities will allow diverted water to be sent to the existing Lowry Ridge Storage Pond, the location of Rangeview’s proposed water treatment complex. From there, the water will be distributed to Rangeview’s customers. During dry stream conditions or when Rangeview is not accepting surface water diversions, the dam will be deflated, allowing surface water to continue flowing downstream. A stream gauging station is also proposed to be constructed downstream of the diversion dam to measure surface water flow rates in the creek.



Vicinity Map Showing the Existing and Proposed Infrastructure

BACKGROUND

The Sky Ranch 1041 for Water and Wastewater (Case No. ASI16-005) was approved by the Board of County Commissioners on October 3, 2017 (Resolution No. 170516). An associated Technical Review Amendment (Case No. AA24-014), approved administratively in May of 2025, and was required for the construction of additional infrastructure to access Rangeview’s water rights on Box Elder Creek and transfer that water to a proposed water treatment plant, which is illustrated in the original 1041 permit (Case No. ASI16-005). This application includes some of the additional infrastructure identified in the Technical Review Amendment (Case No. AA24-014).

Significant infrastructure has been constructed by Rangeview across the central portion of Arapahoe County, roughly between S. Gun Club Road and S. Manila Road to help support the water needs of the Sky Ranch Planned Unit Development (PUD). These facilities include the Sky Ranch Water Reclamation Facility, Sky Ranch Water Supply Facility, Box Elder Creek Well Field 1 and 2, Sky Ranch and Lowry Storage Ponds, and numerous groundwater wells and pipelines. These facilities have met the water needs for the initial phases of Sky Ranch;

however, as the community expands, additional infrastructure must be constructed to meet the associated water and wastewater demands.

While Rangeview purchases significant renewable water supplies from its regional partnership in Water Infrastructure and Supply Efficiency (WISE), this will be the first surface water diversion infrastructure it will independently own and operate. This will help further diversify Rangeview's water supplies, be a new source of renewable water in Arapahoe County, and is required for future phases of Sky Ranch. It will also alleviate some of Rangeview's demand on groundwater, allowing that source to be conserved for seasonal uses or periods of drought. This is a water right that has been part of Rangeview's water right portfolio since the mid-1980's. Specifically, this diversion was approved in Rangeview's water decree by the Colorado Division 1 Water Court judge. Once a diversion is approved in a decree, it is lawfully allowed to be constructed to divert water right for beneficial use according to the decree (pending other construction permits, i.e. nationwide permit, easement etc.). According to the applicant, "all construction permits have been granted for this project, and all major water right holders are aware of this proposed diversion."

ANALYSIS OF THE LOCATION AND EXTENT APPLICATION

Staff review of this application included a comparison of the proposal to: 1) applicable policies and goals outlined in the Comprehensive Plan; 2) review of pertinent Land Development Code regulations; and 3) analysis of referral comments.

1. The Comprehensive Plan/ Lowry Sub-Area Plan

The Lowry Sub-Area Plan designates this area as a Conservation Area, which allows a mix of resource-based and conservation-oriented activities and water resource improvements. The proposed Location and Extent is compatible with the Arapahoe County Comprehensive Plan and Lowry Sub-Area Plan.

This application complies with the following Goals, Policies, and Strategies of the Lowry Sub-Area Plan:

Policy LUI.1 Conservation Area South of Quincy Avenue.

Conservation uses, and limited recreation or resource-based improvements should occur in this area. Appropriate activities in areas designated for conservation include recreation, water resource development, resource-based commercial activities, and other resource-based activities. The proposed project is a water resource development.

Policy PFS 1.1 Explore Options to Obtain an Adequate Long-Term Water Supply for Communities in the County.

The proposed project will provide necessary water services to the Sky Ranch Development and the surrounding area. This proposal will add additional renewable water supplies to Rangeview's water portfolio and diversify Rangeview's water sources.

Policy PFS 1.2 Reduce Dependence on Aquifers for Long Term Water Supply

The proposed project adds additional renewable water supplies to Rangeview's water portfolio and should help to reduce dependence on aquifers.

Policy PFS 1.2 (c) Promoting renewable water supplies.

The proposed project adds additional renewable water supplies to Rangeview's water portfolio.

2. Land Development Code Review

Section 5-7.3 of the Land Development Code covers the policy and regulatory aspects of a Location and Extent. This includes specific review, general requirements, and procedure for Location and Extent applications. A Location and Extent does not have specific approval criteria but may be approved upon the finding that:

5-7.3.B.1.a. No road, park, public way, ground, or space, no public building or structure, and no major facility of a public utility shall be constructed or authorized in the unincorporated areas of Arapahoe County unless and until the proposed location and extent thereof has been submitted to and approved by the Arapahoe County Planning Commission.

The proposed public utility requires approval of a Location and Extent application.

5-7.3.B.1.b. Routine extensions of public utility lines and minor modifications to existing utility lines and/or facilities shall not be subject to this procedure.

The proposed project is more than a routine extension and is not a minor modification to an existing utility line, and is therefore not exempt from the Location and Extent procedure.

3. Referral Comments

Comments received during the referral process are summarized in Attachment A. All referral comments, with the exception of Colorado Parks and Wildlife (CPW), have been addressed. Staff is recommending three conditions of approval to address CPW's comments.

CPW provided a referral letter dated December 3, 2025 (Attachment B) that included several areas of concern, summarized below.

1. Aquatic Native Species Conservation Waters High Priority Habitat (HBH)
 - a. A diversion dam could negatively impact the native fish community by altering hydrology and reducing available habitat, and by acting as a barrier to movement and interrupting the colonization process. CPW recognizes that avoiding the creek will not be feasible due to the nature of the project. CPW recommends boring under Box Elder Creek for the water line and recommends disinfecting equipment that was previously used in a river, stream, lake pond, or wetland prior to moving the equipment to another water body.
2. Northern Leopard Frog Habitat

- a. The proposed project occurs within the mapped potential Northern Leopard Frog habitat. The stream area identified by the applicant is a suitable habitat. CPW recommends that Northern Leopard Frog surveys be conducted during the appropriate season prior to construction. If Northern Leopard Frogs are found in the proposed project area, CPW recommends avoiding construction (including discharge of fill) within 300 feet of breeding sites during the breeding season (March-May). The applicant's response letter dated January 27, 2026, indicates that previous environmental studies have not identified Northern Leopard Frogs in the vicinity of the project and that work is not anticipated during the breeding season (March-May).
3. Mule Deer Winter Concentration Area HPH, Severe Winter Range HPH and Migration Corridor HPH
 - a. The entire project area is mapped as Mule Deer Winter Concentration Area, Mule Deer Severe Winter Range and Mule Deer Migration Corridor HPHs. CPW recommends construction in these areas outside of the winter season, which falls between December 1st to April 30th. If this cannot be achieved, CPW recommends starting construction outside of the winter timing to reduce impacts to Mule Deer during this crucial time of year. The applicant's response letter indicates that construction is proposed for late summer and fall, when surface flows are typically absent from the creek. This construction timing will eliminate conflicts with the Mule Deer HBHs. Staff has included a condition of approval to address CPW's concerns of Mule Deer HBHs, restricting the start of construction from December 1st to April 30th.
4. Pronghorn Winter Concentration Area HPH
 - a. This HPH is present within the entirety of the project area. CPW recommends completing construction outside of the winter season, which is January 1st to April 30th. If this cannot be achieved, CPW recommends starting construction outside of the winter timing to reduce impacts to Pronghorn during this crucial time of year. Staff has included a condition of approval to address CPW's concerns of Pronghorn HBH, restricting the start of construction from December 1st to April 30th.
5. Wetlands
 - a. CPW recommends conducting an appropriate wetland delineation (dependent on the type of wetland) to define the boundary of any potential wetlands located within the project area. CPW recommends minimizing activities and operations within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river, and implementing best management practices to prevent sedimentation or contamination to those resources. The applicant provided a wetland delineation conducted in September of 2025, and a follow-up survey was conducted in April of 2026, Attachment D. The applicant's response letter to CPW comments indicates that all work will be limited to times when Box Elder Creek is not flowing to limit disturbances to wetlands. Additionally, A Nationwide Permit has already been granted by the Army Corps of Engineers for work within the floodplain for this project.
6. Raptors and Migratory Birds
 - a. The project area contains suitable habitat for nesting raptors and migratory birds. CPW recommends conducting raptor nest surveys prior to construction, but no more than one month prior to the start of construction during nesting season. The applicant

has agreed to complete a nest survey, and staff has included a condition of approval to address this concern.

7. Noxious Weed Management and Native Vegetation Re-seeding
 - a. The revegetation of disturbed areas and control of invasive weed species are important components of this project, and it is critically important that temporarily disturbed areas of the site be restored to the native plant community that currently exists on the site. The applicant's response letter indicates that any disturbed areas within the limits of construction will be reseeded using native seed mixes designated for use by the Colorado State Land Board. Additionally, typical re-establishment practices will be employed in accordance with the Arapahoe County Grading, Erosion, and Sediment Control standards and best practices to prevent the spread of noxious weeds.

STAFF FINDINGS

Staff has reviewed the plans, supporting documentation, and referral comments. Based upon review of applicable policies and goals in the Comprehensive Plan, review of the development regulations and analysis of referral comments, our findings include:

1. The proposed LE25-005, Box Elder Diversion Dam - Location and Extent, generally conforms to the Arapahoe County Comprehensive Plan and the Lowry Sub-Area Plan.
2. The proposed LE25-005, Box Elder Diversion Dam - Location and Extent, meets the Arapahoe County Land Development Code, zoning regulations, and procedures stated in Section 5-7.3 for consideration and approval of a Location and Extent application under the Land Development Code.

STAFF RECOMMENDATION

Considering the findings and other information provided herein, Staff recommends approval of Case No. LE25-005, Box Elder Diversion Dam - Location and Extent, subject to the following conditions of approval:

1. The start of construction should not occur between December 1st and April 30th, to protect Mule Deer and Pronghorn High Priority Habitats as described in the Colorado Parks and Wildlife letter dated December 3, 2025.
2. The applicant should complete raptor nest surveys prior to construction, but no more than one month prior to the start of construction during nesting season, as described in the Colorado Parks and Wildlife letter dated December 3, 2025. If nests are found, the applicant shall refer to Colorado Parks and Wildlife's Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors guidelines.

Alternatives

The Planning Commission has alternatives that include the following:

1. Approve the proposed Location and Extent.
2. Continue to a date certain for more information.

3. Deny the proposed Location and Extent.

CONCURRENCE

The Public Works and Development Planning and Engineering Services Divisions have reviewed the application, and the Arapahoe County Public Works Department is recommending conditional approval of this case.

PLANNING COMMISSION DRAFT MOTIONS

Conditional Approval

In the case LE25-005, Box Elder Diversion Dam - Location and Extent, I have reviewed the staff report, including all exhibits and attachments, and have listened to the applicant's presentation and any public comment as presented at the hearing, and hereby move to approve this application based on the findings in the staff report, subject to the following conditions:

1. The start of construction should not occur between December 1st and April 30th, to protect Mule Deer and Pronghorn High Priority Habitats as described in the Colorado Parks and Wildlife letter dated December 3, 2025.
2. The applicant should complete raptor nest surveys prior to construction, but no more than one month prior to the start of construction during nesting season, as described in the Colorado Parks and Wildlife letter dated December 3, 2025. If nests are found, the applicant shall refer to Colorado Parks and Wildlife's Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors guidelines.

Staff provides the following Draft Motions listed below as general guidance in preparing an alternative motion if the Planning Commission reaches a different determination:

Denial

In the case of LE25-005, Box Elder Diversion Dam - Location and Extent, I have reviewed the staff report, including all exhibits and attachments and have listened to the applicant's presentation and any public comment as presented at the hearing and hereby move to deny this application based on the following findings:

1. *State new findings in support of denial as part of the motion.*

Continue to Date Certain:

In the case LE25-005, Box Elder Diversion Dam - Location and Extent, I move to continue the hearing to [*date certain*], 6:30 p.m., to obtain additional information and to further consider the information presented.



Planning Commission's Summary Report

Date: May 15, 2026

To: Arapahoe County Planning Commissioners

Through: Kathleen Hammer, Planning Division

From: Joseph Boateng, PE
Engineering Services Division

Case name: **LE25-004 Location and Extent
Quincy Flow Diversion at Box Elder Box**

Purpose and Recommendation

The purpose of this report is to communicate the Engineering Services Staff findings, comments, and recommendations regarding the land use application(s) identified above.

Scope/Location:

The project is in parcel # 2069-00-0-00-014 in Unincorporated Arapahoe County. The proposed development includes the Installation of pressurized 16" water line, a 20" gravity line, a manhole, a pump station, an air inflated rubber bladder with a concrete foundation, and sheet piles.

Engineering Services Staff has reviewed the land use application(s) and has the following findings and comments:

1. This development lies within the boundaries of the jurisdiction:
 - Mile High Flood District
 - Bennett Fire District
2. The Engineering Certification of No impact letter, Gesc Plans and Report were reviewed and there are no outstanding comments.

CATEGORY	Company	Referral Agency Comments	Applicant's Response to Comments
ARAPAHOE COUNTY AGENCIES			
	ARAPAHOE COUNTY ENERGY PROGRAM MANAGER		No comments provided
	ARAPAHOE COUNTY OPEN SPACES		No comments provided
	ARAPAHOE COUNTY PUBLIC HEALTH DEPARTMENT - LAND USE REFERRALS	No documented landfills, past, present, or planned within 1,000 ft.	Noted
		No documented septic systems associated with property.	Noted
		Multiple wells are identified on the property. The applicant may conduct a due diligence examination of records at the Division of Water Resources https://dwr.state.co.us/Tools/WellPermits , to ensure any existing wells on the property are properly abandoned and/or protected during construction.	These alluvial wells are owned by the Applicant and are outside the limits of construction for the project.
		GESC Report: Section 4. Erosion and Sediment Control Measures C. Other Controls, pg. 7: Temporary "porta-potties" will be used. It is stated that they will be placed on a stabilized surface and secured to prevent tipping, but no other details were provided regarding a maintenance schedule. Please provide a maintenance plan/schedule.	Section updated. Plan is to service on a weekly basis and will increase on an as-needed basis based on frequency of use or weather.
		No detail was provided on how water will be provided to the employees working on the site. If a bulk potable water container will be used, please detail what steps will be taken to ensure continued potability and quality of the water.	Bottled water is provided to all construction staff.

CATEGORY	Company	Referral Agency Comments	Applicant's Response to Comments
BUILDING DIVISION	ARAPAHOE COUNTY PUBLIC WORKS -		No comments provided
	ARAPAHOE COUNTY R&B REFERRALS	No comments or concerns.	Noted
	ARAPAHOE COUNTY/PWD ENG/TRAFFIC OPS		No comments provided
FIRE			
	BENNETT - WATKINS FIRE RESCUE		No comments provided
	BENNETT - WATKINS FIRE RESCUE		No comments provided
FLOODPLAIN/WETLANDS			
	US ARMY CORPS OF ENGINEERS		No comments provided
	US ARMY CORPS OF ENGINEERS		No comments provided
HEALTH DEPARTMENT/AIR QUALITY			
ENVIRONMENT - STATE OF COLORADO	CDPHE/ DEPARTMENT OF HEALTH & ENVIRONMENT - STATE OF COLORADO	See letter from Brenden Cicione and provide response.	Noted. Land disturbance activity is expected to be less than 25 contiguous acres and less than 6 months in duration. As such, air quality permitting and reporting is not required. GESC plan (to be reviewed and approved by Arapahoe County) will be utilized for the project.
SHERIFF			
EMERGENCY MANAGEMENT (OEM)	ARAPAHOE COUNTY SHERIFF - OFFICE OF		No comments provided
COMMUNITY RESOURCE UNIT	ARAPAHOE COUNTY SHERIFF'S OFFICE -	No comments.	Noted
LAND USE REFERRALS	ARAPAHOE COUNTY SHERIFF'S OFFICE -	No comments.	Noted
LAND USE REFERRALS	ARAPAHOE COUNTY SHERIFF'S OFFICE -		No comments provided
PREVENTION UNIT	ARAPAHOE COUNTY/SHERIFF/CRIME		No comments provided
SOIL OR CONSERVATION			
COLORADO	COLORADO GEOLOGICAL SURVEY - STATE OF	No objection.	Noted
UTILITIES OR PHONE			
	BIJOU TELEPHONE CO-OP		No comments provided
DEPARTMENT	CENTURYLINK NETWORK REAL ESTATE		No comments provided
	COGCC- COLORADO NATURAL GAS		No comments provided

CATEGORY	Company	Referral Agency Comments	Applicant's Response to Comments
CORE		<p>CORE Electric Cooperative has existing transmission line electric facilities located on the subject property. These facilities and associated utility easements must be maintained. All proposed structures and landscaping must maintain a minimum clearance of 20 feet from transmission line structures and allow CORE Electric Cooperative access for maintenance purposes.</p>	<p>Noted. The proposed project is approximately 2,200 feet due south from the transmission lines that are adjacent to Quincy Avenue. No conflict exists with CORE facilities.</p>
		<p>Additionally, if any grading work is planned that could affect clearances or access to the transmission line, CORE Electric Cooperative will require a grading profile for review prior to construction.</p>	<p>Noted. The limits of construction are not in the vicinity of CORE facilities.</p>
CRESTONE PEAK-PIPELINE REFERRALS			No comments provided
CRESTONE PEAK-WELL SITE REFERRALS			No comments provided
PHILLIPS 66 CO		No comment.	Noted
XCEL ENERGY - PSCO ROW & REFERRALS		<p>Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the plans for Box Elder Diversion Dam and currently has no apparent conflict.</p> <p>As a safety precaution, PSCo would like to remind the developer to call the Utility Notification Center by dialing 811 for utility locates prior to construction.</p>	<p>Noted. Utility locates via 811 will be completed prior to construction.</p>

CATEGORY	Company	Referral Agency Comments	Applicant's Response to Comments
WELL AND SEPTIC ENGINEER/GROUNDWATER	DIVISION OF WATER RESOURCES-STATE	<p>DWR has reviewed the LE25-005: Box Elder Diversion Dam location and extent referral for a proposed diversion structure in Box Elder Creek on behalf of Rangeview Metropolitan District. This referral does not appear to qualify as a "subdivision" as defined in section 30-28-101(10)(a), C.R.S. Therefore, pursuant to the State Engineer's March 4, 2005 and March 11, 2011 memorandums to county planning directors, this office will only perform a cursory review of the referral information and provide informal comments. The comments do not address the adequacy of the water supply plan for this project or the ability of the water supply plan to satisfy any County regulations or requirements. In addition, the comments provided herein cannot be used to guarantee a viable water supply plan or infrastructure, the issuance of a well permit, or physical availability of water. No water supply was proposed as a part of this project. Therefore, this office has no comments on the proposed water supply for the project. However, we recommend that the applicant contact the DWR</p>	<p>Noted. This infrastructure will operate pursuant to Rangeview's water right decree which the Division 1 Water Commissioner is aware of.</p>

CATEGORY	Company	Referral Agency Comments	Applicant's Response to Comments
		Dam Safety team and the Division 1 water commissioners, as any Box Elder water needs to be appropriate in priority under a water right, and with water commissioner approval.	
WILDLIFE & ANIMAL			
REFERRALS	COLORADO PARKS & WILDLIFE - ENERGY		No comments provided
CONTACT	COLORADO PARKS & WILDLIFE/ 1ST POINT OF	See letter dated December 3, 2025 and provide complete response.	See separate response letter.
COMMERCIAL, RESIDENTIAL, & ENERGY	COLORADO PARKS AND WILDLIFE -		No comments provided
	COLORADO PARKS AND WILDLIFE - ENERGY		No comments provided



COLORADO

Parks and Wildlife

Department of Natural Resources

Area 5/Northeast Regional Office
6060 Broadway
Denver, CO 80216
P 303.291.7227

December 3, 2025

Kathleen Hammer
Arapahoe Public Works and Development
6924 S. Lima Street
Englewood, CO 80112
KHammer@arapahoegov.com

Re: Colorado Parks and Wildlife Comments on the Box Elder Diversion Dam,
LE25-005

Dear Ms. Hammer,

Thank you for the opportunity for Colorado Parks and Wildlife (CPW) to comment on the proposed Box Elder Diversion Dam (Project). The mission of CPW is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. CPW has a statutory responsibility to manage all wildlife species in Colorado and to promote a variety of recreational opportunities throughout Colorado. One way we achieve this goal is by responding to referral comment requests, as is the case for this Project.

Project Understanding

It is our understanding that the proposed Project consists of constructing a diversion dam across Box Elder Creek, located in Township 5 South, Range 64 West, Section 9. The Project includes the installation of a pressurized 16" water line, a 20" gravity line, a manhole, a pump station, an air-inflated rubber bladder with a concrete foundation, and sheet piles. The project will be constructed in undeveloped agricultural land within Box Elder Creek and is estimated to disturb less than 3.0 acres. The pipeline will be buried at a minimum depth of 4.5' below grade.



After review of this Project and the location, CPW has the following recommendations:

The Importance Of High Priority Habitats

Developers and permitting agencies can help avoid, minimize, and mitigate impacts to wildlife from their projects by working with CPW. High priority habitats (HPH) are defined as sensitive habitats where CPW has recent data regarding sensitive wildlife use, along with scientifically backed best management practice (BMP) recommendations. HPHs are a subset of CPW's species activity maps that we actively collect supporting data and update on a regular basis for a variety of species and their particular habitats; we provide these maps to the public and regulatory agencies to support environmental impact assessment and avoidance through land use comments and recommendations for proposed development on a given parcel, and general scientific research.

Aquatic Native Species Conservation Waters High Priority Habitat

Aquatic Native Species Conservation Waters are identified within the State of Colorado's 2015 State Wildlife Action Plan (SWAP). This HPH layer is designated for the recovery, conservation, protection, or enhancement of native fish species, and to aid in the conservation of other native aquatic species, such as amphibians, crustaceans, or mollusks (includes CPW Tier 1 and 2 SWAP Species). These surface water features provide critical habitat for native aquatic wildlife, such as amphibians and fish, while also providing crucial habitat for mammals, birds, and reptiles that utilize the habitat. Within the proposed Project area, there is a possibility of sensitive aquatic native species (fish, amphibians, invertebrates) presence within Box Elder Creek.

This stream has been sampled downstream of the proposed diversion dam location. Historical sampling documented 10 different native fish species, including Brassy Minnow (Tier I SGCN), Orangespotted Sunfish (Tier I SGCN), and Iowa Darter (Tier II SGCN). In the most recent samples, only Iowa Darter and Fathead Minnow were documented. However, in ephemeral streams, such as this, fish can persist in localized habitat nodes and go undetected, especially if the spatiotemporal extent of sampling is limited. An occupancy-based study of colonization and extinction rates in an ephemeral Great Plains stream fish assemblage demonstrated that extinction probabilities were highest during the transition from wet to dry conditions, especially when surface water was the

predominant driver of local hydrology. Colonization probabilities were highest during the transition from dry to wet, regardless of the availability of groundwater input. This is important as it shows these dynamic processes of localized colonization and extinction are ongoing, and the fish in these systems are adapted to those conditions to persist, driven by the capability to move into available habitat as hydrologic conditions change.

A diversion dam could negatively impact the native fish community by altering hydrology and reducing available habitat, and by acting as a barrier to movement and interrupting the colonization process. A recent laboratory study of fish passage showed that a barrier greater than 6 cm will impede upstream movements of Iowa Darter. Most small-bodied plains stream fishes have a short generation time of only a few years, and can thus experience drastic population declines over a very short time.

CPW recommends no surface occupancy and no ground disturbance (year-round) within a minimum of 500 feet of the ordinary high water mark of all of these surface waters and the implementation of appropriate stormwater and sediment control BMPs. CPW also recommends that diversion structure design should not create any vertical drop or hydraulic jumps, as either of these would represent an impediment to passage of important native fish species found within Box Elder Creek.

CPW recognizes that avoiding the creek will not be feasible due to the nature of the project. CPW recommends boring under Box Elder Creek for the water line. CPW also recommends the following if the project is to move forward:

When entering Box Elder Creek to complete work, CPW recommends the following additional BMPs be implemented:

- Disinfect heavy equipment, hand tools, boots and any other equipment that was previously used in a river, stream, lake, pond, or wetland prior to moving the equipment to another water body.
- The disinfection practice should follow this outline:
 - Remove all mud and debris from equipment and spray/soak equipment with a 1:15 solution of disinfection solution containing the following ingredients: [Further sub-bullet]
 - *Dialkyl dimethyl ammonium chloride, 5-10% by weight;
 - *Alkyl dimethyl benzyl ammonium chloride, 5-10% by weight;
 - *Nonyl

phenol ethoxylate, 5-10% by weight; *Sodium sesquicarbonate, 1-5%; *Ethyl alcohol, 1-5%; and *Tetrasodium ethylene diaminetetraacetate, 1-5%; *and water, keeping the equipment moist for at least ten minutes and managing rinsate as a solid waste in accordance with local, county, state, or federal regulations;

- Or spray/soak equipment with water greater than 140 degrees Fahrenheit for at least ten minutes. Sanitize water suction hoses and water transportation tanks (using methods described above) and discard rinse water at an appropriately permitted disposal facility.

Northern Leopard Frog Habitat

The northern leopard frog is a Tier 1 Species of Greatest Conservation Need. The proposed project occurs within mapped potential northern leopard frog habitat. Previously, northern leopard frogs were identified in the area, and the stream area identified by the applicant is a suitable habitat. CPW recommends that northern leopard frog surveys be conducted during the appropriate season prior to construction. If northern leopard frogs are found in the proposed project area, CPW recommends avoiding construction (including discharge of fill) within 300 ft of breeding sites during the breeding season (March-May).

Mule Deer Winter Concentration Area High Priority Habitat

Mule Deer Winter Concentration Areas are defined as the part of the winter range where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average of five winters out of ten.

The entire proposed Project area is mapped as Mule Deer Winter Concentration Area HPH. For the identified portions of the proposed Project area that traverse Mule Deer Winter Concentration Area HPH, CPW typically recommends that the following timing limitation be implemented for the construction phase:

- Complete construction in these areas outside of the winter season, which falls between December 1st to April 30th. If this cannot be achieved, CPW recommends starting construction outside of the winter timing to reduce impacts to Mule deer during this crucial time of year.

Mule Deer Severe Winter Range High Priority Habitat

Mule Deer Severe Winter Ranges are defined as that part of the overall winter range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. These areas provide crucial wintering habitat during both severe and mild winters by providing ideal forage, vegetation, and topographic features for deer. Regardless of weather patterns, winter is the most stressful period for ungulates due to the challenges winter poses for forage availability.

The entire proposed Project area is mapped as Mule Deer Severe Winter Range HPH. For the identified portions of the proposed Project area that traverse Mule Deer Severe Winter Range HPH, CPW typically recommends that the following timing limitation be implemented for the construction phase:

- Complete construction in these areas outside of the winter season, which falls between December 1st to April 30th. If this cannot be achieved, CPW recommends starting construction outside of the winter timing to reduce impacts to Mule deer during this crucial time of year.

Mule Deer Migration Corridor High Priority Habitat

Mule Deer Migration Corridors are a specific mappable site through which large numbers of animals migrate and the loss of which would change migration routes. Within the proposed Project area, Mule Deer Migration Corridors are present along the entirety of the proposed area. For the identified portions of the proposed Project area that traverse Mule Deer migration corridor, CPW recommends the following recommendations be implemented during construction:

- CPW recommends minimizing ground disturbance and work activities within the mapped migration corridor to the maximum extent possible, thereby keeping the migration corridor along the river as open as possible.

Pronghorn Winter Concentration Area High Priority Habitat

Colorado Parks and Wildlife defines Pronghorn Winter Concentration Areas as the part of the winter range where pronghorn densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average five winters out of ten. Pronghorn Winter Concentration Area HPH is present within the entirety of the project area. For the

identified portions of the proposed Project area that traverse Pronghorn Winter Concentration HPH, CPW recommends that the following timing limitation be implemented for the construction:

- Complete construction in these areas outside of the winter season, which falls from January 1st to April 30th. If this cannot be achieved, CPW recommends starting construction outside of the winter timing to reduce impacts to pronghorn during this crucial time of year.

Wetlands

Wetlands are considered critical habitat for many Tier 1 and Tier 2 species in Colorado (CPW SWAP 2015). Wetland habitats include Grass/Forb Dominated Wetlands, Playas, Riparian Woodlands and Shrublands, Seeps and Springs, and Shrub-dominated Wetlands. Degradation of wetland habitats has contributed to the decline of many species. Anthropogenic disturbance in wetlands has reduced the overall landscape condition and connectivity of the habitat, which is likely to reduce its resilience in the face of increasing frequency of extreme events and generally warmer, drier conditions. CPW recommends conducting an appropriate wetland delineation (dependent on the type of wetland) to define the boundary of any potential wetlands located within the Project area. CPW recommends minimizing activities and operations within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river and implementing best management practices to prevent sedimentation or contamination to those resources.

Raptors and Migratory Birds

The proposed Project area contains suitable habitat for nesting raptors and migratory birds. To ensure compliance with the MBTA and the Bald and Golden Eagle Protection Act, CPW recommends consulting with the USFWS prior to the construction of the proposed Project. All migratory birds are protected from potential take under the MBTA, and any removal or disturbance of an active migratory bird nest requires prior consultation with CPW and USFWS. Both active and potential nest sites, as well as winter night roosts, should be considered when evaluating potential disturbance during construction. CPW recommends conducting raptor nest surveys prior to construction, but no more than a month prior to the start of construction during the nesting season. Additionally, please refer to our [CPW Raptor Buffer Guidelines Document](#) for recommendations on timing limitations and buffers.

Noxious Weed Management and Native Vegetation Re-seeding

Also of importance to CPW is the revegetation of disturbed soils and the control of noxious and invasive weed species through the development and implementation of a noxious weed management plan prior to initiating construction activities. The revegetation of disturbed areas and control of invasive weed species are important components of the Project, and it is critically important that temporarily disturbed areas of the site be restored back to the native plant community that currently exists on site. CPW prefers that native vegetation be retained on-site during the lifespan of the Project, both as potential habitat for wildlife and to ensure successful reclamation of the Project area, as noxious weeds could spread to adjacent habitats outside the Project area. CPW recommends that the applicant consult with the Arapahoe County Weed Division or the Natural Resource Conservation Service (NRCS) in Arapahoe County for the best noxious weed management practices.

Thank you again for the opportunity to comment on the Box Elder Diversion Dam project. We appreciate your consideration of our recommendations to avoid and minimize impacts to wildlife. If you have any additional questions regarding wildlife concerns for this Project, please contact your local District Wildlife Manager, Travis Harris at 303-915-8444 or travis.harris@state.co.us.

Sincerely,



Matt Martinez
Area 5 Area Wildlife Manager

*Cc: Travis Harris, Arapahoe County District Wildlife Manager
Aubrey Pelletier, Area 5 Area Aquatic Biologist
Matt Haworth, Platte River Basin Native Aquatic Species Biologist
Lexi Hamous, Northeast Region Land Use Coordinator
Kyle Battige, Northeast Region Senior Aquatic Biologist
Andrew Newman, Northeast Region Senior Energy and Land Use Manager*

January 27, 2026

Arapahoe County Public Works & Development
Planning Division
6924 S Lima St.
Centennial, CO 80112

Re: Box Elder Diversion Dam, LE25-005, CPW Referral Comments

Dear Ms. Hammer,

Rangeview Metropolitan District is planning to construct the Box Elder Creek Diversion Dam and as part of the Location and Extent permit, the application was sent to various Referral Agencies for review. This letter addresses comments received from Colorado Parks and Wildlife (CPW). Comments from other referral agencies are listed in an Excel File provided separately. Only CPW comment titles are displayed below in bold for brevity, with the associated responses shown in plain text.

Aquatic Native Species Conservation Waters High Priority Habitat:

While Applicant supports aquatic habitat and native fish passage, this comment is more applicable to downstream sections of Box Elder Creek where perennial surface water flows exist closer to the confluence with the South Platte River due to irrigation canal return flows. The location of this project is located more than 40 miles upstream where Box Elder Creek is characteristically dry the majority of the year, typically only having surface flows four months of the year (March-June). While the fish species noted may have habitat near the confluence with the South Platte River, multiple man made and natural obstructions already exist upstream that limit hydrologic connectivity to major historical flood events. Applicants have not encountered fish species in this section of stream over a decade of hydrologic studies, likely because of these existing downstream obstructions and the long periods when the stream bed is completely dry, sometimes for more than a year at a time.

Northern Leopard Frog Habitat:

Previous environmental studies have not identified Northern Leopard Frogs in the vicinity of the project. Work is also not anticipated during the breeding season (March-May).

Mule Deer Winter Concentration Area High Priority Habitat:

The majority of this project will be constructed in the late summer and fall when surface flows are typically absent from the creek. This will eliminate conflicts with the Mule Deer Winter Concentration Area.

Mule Deer Severe Winter Range High Priority Habitat:

This habitat type is defined as “when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten”. Construction activities also do not occur during these times as it is impractical and/or unsafe to do so because of severe weather.

Mule Deer Migration Corridor High Priority Habitat:

Construction activities and ground disturbance will be minimized to the smallest extent possible which will minimize disturbance to this corridor.

Pronghorn Winter Concentration Area High Priority Habitat:

It is anticipated that this construction project will fall outside the Pronghorn Winter Concentration period as surface flows are typically present at this location in the winter and spring.

Wetlands:

A wetland delineation has been performed within the project area and disturbance associated with the project will be minimized to the greatest extent possible. All work will be limited to times when Box Elder Creek is not flowing to further limit disturbances to wetlands. A Nationwide Permit has already been granted by the Army Corps of Engineers for work within the floodplain for this project.

Raptors and Migratory Birds:

A nest survey will be completed and work is anticipated to occur in the fall outside of the typical raptor nesting/breeding season.

Noxious Weed Management and Native Vegetation Re-seeding:

Any disturbed areas within the limits of construction for the project will be reseeded using native seed mixes designated for use by the Colorado State Land Board. Typical re-establishment practices will be employed following Arapahoe County GESC standards and best practices to prevent the spread of noxious weeds.

If there are further comments from Referral Agencies or County Staff regarding this project, please do not hesitate to contact me.

For Rangeview Metropolitan District,

Taylor Rohde, PE
Pure Cycle Corporation
TRohde@purecyclewater.com



AQUATIC RESOURCE DELINEATION REPORT

Rangeview Metropolitan District
Box Elder Creek Diversion Dam

Prepared By:

Noah Washko, Environmental Specialist
Pure Cycle Corporation
34501 E. Quincy Ave, Bldg 1, Ste D
Watkins CO 80137

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Aquatic Resources	5
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Appendices

- Appendix A – Aquatic Resource Delineation Maps
- Appendix B – Supporting Maps
- Appendix C – Photo Log
- Appendix D – Plant List
- Appendix E – Wetland Delineation Data Sheets

Executive Summary

A delineation of aquatic resources was conducted on September 17, 2025, within a ~one-acre survey area associated with a proposed diversion dam structure along Box Elder Creek in Arapahoe County, Colorado. The investigation identified one aquatic resource, Box Elder Creek, which is classified as a Riverine system under the Cowardin classification. Near the project area, this resource extends approximately 550 feet and encompasses 0.67-acres. A follow-up visit occurred on April 6, 2026 to verify the latest wetland boundary within Box Elder Creek.

Wetlands were delineated within this reach of Box Elder Creek, with clear indicators of hydrophytic vegetation, hydric soils, and wetland hydrology observed. A distinct wetland boundary was established using multiple sampling plots located within the streambed and adjacent uplands. Soil within the floodplain was predominantly sandy alluvium, transitioning to loamier textures at upland sampling points. Overall, the diversion dam project footprint will disturb minimal wetland area (.02 acres) at its proposed location.

Introduction

Rangeview Metropolitan District retained Pure Cycle Corporation to provide an aquatic resources delineation for a proposed diversion structure (project area; Appendix A). On September 17, 2025 and April 6, 2026, Noah Washko conducted the delineation within the project area adjacent to Box Elder Creek. This report has been prepared in accordance with the *1987 U.S. Army Corps of Engineers Wetland Delineation Manual*. The report provides information on existing site conditions and resources as well as current regulatory guidelines related to those resources. Pure Cycle assumes Rangeview is responsible for obtaining all federal, state, and local permits for construction of the project.

The purpose of this report is to identify and describe aquatic resources and, identify known possible sensitive plants and wetlands in the survey area. This report facilitates efforts to:

- 1. Avoid or minimize impacts to aquatic resources during the design process.*
- 2. Document aquatic resource boundary determinations for review by regulatory authorities.*
- 3. Provide background information.*

Location

The project is located in Arapahoe County, Colorado, in the southeast northeast quarter of Section 9, Township 5 South, Range 64 West. The nearest town is Watkins, Colorado, with the closest intersection at Quincy Avenue and South Manila Road.

From the intersection of E-470 and Gun Club Road, proceed east on Gun Club Road. Turn east on Airline Road, then onto Quincy Avenue and proceed 8.5 miles to a locked gate on the south side of the road (39°38'15.4"N 104°33'22.3"W). Proceed through

the gate onto a gravel/two-track road and follow it approximately 0.57 miles to the site of the proposed diversion structure.

Methods

On September 17, 2025 and April 6, 2026, Pure Cycle conducted two site visits to survey the project area for wetlands, streambeds, and open waters. The assessment focused on identifying isolated wetlands, jurisdictional wetlands, and other waters of the United States (WOTUS). A jurisdictional wetland delineation was also performed. Prior to the fieldwork, Pure Cycle reviewed U.S. Geological Survey (USGS) topographic maps for the Watkins quadrangle and aerial imagery to locate mapped streams and open water features that could indicate potential wetlands or WOTUS.

Pure Cycle followed the procedures for routine on-site wetland determinations outlined in the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region* (Version 2.0) (U.S. Army Corps of Engineers 2010). Field data on vegetation, soils, and hydrology were recorded using standard routine determination forms (see Appendix E). Wetlands were identified based on the presence of all three required indicators: hydrophytic vegetation, hydric soils, and wetland hydrology. Boundaries were determined through visible changes in vegetation, topography, and other distinguishing features between wetland and upland areas.

Hydric soils were assessed in the field using the Natural Resources Conservation Service (NRCS) Field Indicators of Hydric Soils in the United States, Version 9.0 (NRCS 2024), and soil color was determined with a Munsell Soil Color Chart. Wetland Cowardin classification for Box Elder Creek were determined using data from the U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI) (U.S. Fish and Wildlife Service n.d.). Plant species' wetland indicator statuses were sourced from the National Wetland Plant List (U.S. Army Corps of Engineers n.d.). Species taxonomy and nomenclature followed the Natural Resources Conservation Service PLANTS Database (NRCS n.d.). Supporting information included USGS topographic maps, aerial photography, and NRCS Web Soil Survey data (NRCS Service n.d.).

In addition to wetland delineation, Pure Cycle identified features associated with defined streambeds, streambanks, and the ordinary high-water mark (OHWM). Per Corps regulations, a streambed is defined as "the substrate of the stream channel between the OHWMs," and the OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, presence of litter and debris, or other appropriate means" (33 CFR 328.3[e]). OHWM indicators were identified using the National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams (U.S. Army Corps of Engineers 2025).

GPS data was collected during the field visit using a Trimble R2 GNSS Receiver with a CenterPoint RTX correction service, providing horizontal accuracy of up to 2 cm and vertical

accuracy of up to 5 cm. The field data were then integrated into base maps using ArcGIS software.

To support the U.S. Army Corps of Engineers in making a preliminary jurisdictional determination, Pure Cycle evaluated the proximity and surface water connectivity of identified wetlands to known jurisdictional WOTUS using aerial photo interpretation and site-specific field data. Data was collected across the project area to characterize both upland and wetland features. Routine wetland determination forms from the Regional Supplement were completed for representative sampling points (SPs) across different plant community types.

Project Area Existing Conditions

Pure Cycle assessed the project area for potential isolated wetlands, jurisdictional wetlands, and other WOTUS. Within the project area, Box Elder Creek is classified as an intermittent stream according to the USGS Watkins topographic quadrangle map (Appendix B). Additionally, Box Elder Creek is identified as a "blue line" waterway, containing both perennial and intermittent sections. The creek is shown as a tributary to the South Platte River, which is both a traditional navigable waterway and interstate water, with the confluence located near Kersey, Colorado.

The National Wetlands Inventory (NWI) Map identifies riverine habitat within the Box Elder Creek streambed (Appendix B). The surrounding riparian corridor is shown to contain forested/shrub wetlands; however, field observations indicated upland characteristics within the floodplain outside of the eroded streambank.

During the 2025 site visit, the floodplain surrounding the creek was dominated by smooth brome (*Bromus inermis*) and western wheatgrass (*Pascopyrum smithii*). Additionally, the creek contained a defined channel bed, bank, and OHWM (Photo 1). The USDA Web Soil Survey application identifies the project area as containing a combination of loamy and sandy soils, with the most prevalent types identified as Nunn loam (NIB) and Sandy alluvial land (Su) (Appendix B). The most prevalent soil types are classified as Group A and C, indicating that some areas have a high-water infiltration rate and good drainage capabilities, while others drain much slower.

The prospective dam location lies within properties zoned as agricultural. Neighboring land uses within a mile of the proposed infrastructure include agriculture, commercial, mixed-use, and oil/gas development. The temporary construction disturbance within the majority of the project area is similar to the disruptions that currently occur multiple times per year during livestock grazing. Furthermore, an easement will be obtained from the Colorado State Land Board for the construction of the diversion structure within the Box Elder Creek floodplain.

Aquatic Resources

Based on the application of the three-parameter approach outlined in the 1987 *USACE Wetland Delineation Manual* and the *Great Plains Regional Supplement*, 0.67 acres of wetlands were identified within the study area during field visits (Appendix A). At multiple data points, hydric soils, hydrophytic vegetation, and wetland hydrology characteristics were identified, meeting the criteria for jurisdictional wetlands. To delineate wetland boundaries, paired data points were established along perpendicular transects, allowing a clear distinction between wetland and upland areas.

Vegetation

Upland data points were dominated by grass species including smooth brome (*Bromus inermis*) and western wheatgrass (*pascopyrum smithii*). Within wetland plots, Nebraska sedge (*carex nebrascensis*) and Reed canary grass (*Phalaris arundinacea*) were the most prevalent species, with other species such as Softstem bulrush (*schoenoplectus tabernaemontani*), Shining willow (*Salix lucida*), and Annual rabbitsfoot grass (*Polypogon monspeliensis*) occurring as well. These species have a wetland indicator status of Obligate (OBL) or Facultative Wetland (FACW), indicating conditions favorable for hydrophytic vegetation throughout the streambed of Box Elder Creek. The presence of these species reflects the stream's ability to support a diverse hydrophytic plant community and suggests relatively stable hydrologic conditions within wetland areas.

Upland sampling points were dominated by upland (UPL) or facultative upland (FACU) species, reflecting a clear transition from wetland to upland plant communities. The riparian corridor along Box Elder Creek is characterized by dense stands of Fremont cottonwoods (*Populus fremontii*), a facultative (FAC) species capable of occurring in both upland and wetland settings. These trees were frequently observed near the wetland boundary, often marking transitional zones between the two communities.

Soils

Using the NRCS Web Soil Survey, the project area was evaluated to identify the dominant soil types. Results indicate that Nunn loam (NIB) and Sandy alluvial land (Su) comprise most of the site. Nunn loam is classified as a Hydrologic Soil Group C soil, characterized by slow water infiltration and relatively poor drainage, conditions that increase its potential to support wetlands. This soil type occurs extensively within the Box Elder Creek floodplain and streambed. In contrast, Sandy alluvial land is classified as a Group A soil, with high infiltration rates and excellent drainage, and is also widespread throughout the project area.

Soil samples were collected to determine the wetland boundary, with pits excavated to a depth of 12–16 inches within hydrophytic plant communities to assess hydric indicators. Four sampling points (SP1, SP3, SP5, SP7) exhibited clear evidence of prolonged water saturation, including redoximorphic features and a hydrogen sulfide odor. Each of these locations met hydric soil indicator S5 (Sandy Redox), confirming that they undergo frequent periods of saturation followed by intervals of drying.

Upland soil samples reflected stable, dry conditions outside the wetland boundary, with no hydric soil indicators present. Sampling points SP2, SP4, SP6, and SP8 displayed soil colors such as 10YR 3/2 and 10YR 2/2, which are characteristic of upland soils. These findings confirm that the upland portions of the site lack prolonged saturation and are not supportive of hydric soil development.

Hydrology

Hydrology indicators were present in multiple sampling points. These points met the criteria for wetland hydrology under the USACE *1987 Wetland Delineation Manual* and the *Great Plains Regional Supplement*. At these points, hydrology was documented through the presence of multiple indicators, including high water table (A2), sediment deposits (B2), hydrogen sulfide odor (C1), and geomorphic position (D2).

In contrast, two out of three upland sampling points (SP2, SP4) did not exhibit hydrology indicators within the plots. SP6 showed signs of sediment deposition, however, that was the only indicator present within the plot. Though these points were located near the streambed and adjacent wetlands, hydrological conditions did not extend into the delineation plots, helping to establish a clear boundary.

Table 1. Aquatic resources within the survey area.

Aquatic Resource Name	Cowardin	Location (lat/long)	Aquatic Resource Size (acres/linear feet)
Box Elder Creek	Riverine	39.63057, -104.55170	.67/550

Conclusion

Based on the wetland delineation performed, this section of Box Elder Creek meets the wetland definition outlined in the USACE *1987 Wetland Delineation Manual*. At wetland sampling points, all three required parameters including hydrophytic vegetation, hydric soils, and wetland hydrology were observed. Vegetative communities across both wetland and upland plots reflected the conditions expected within their respective zones, and hydric soil indicators were present. Standing water and surface saturation were documented within the stream, though these appear to result from intermittent flow rather than prolonged saturation. Nevertheless, the intermittent flow has been enough to establish and maintain distinct wetland characteristics. An OHWM was also identified during the field visit, marked by a clear transition between the sediment-filled streambed and the adjacent upland vegetation within the riparian corridor. Although wetlands are present in the area, the project footprint overlaps a minimal amount of wetland area (0.02 acres) and disturbances will be minimal, particularly as construction will occur during times of the year when the Creek is dry.

References

- Environmental Laboratory. 1987. "Corps of Engineers Wetland Delineation Manual. Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station.
- U.S. Army Corps of Engineers. 2010. "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)." Vicksburg, Mississippi.
- U.S. Army Corps of Engineers. 2025. "National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams."
- U.S. Army Corps of Engineers. n.d. "National Wetland Plant List." Accessed April 2025. <https://nwpl.sec.usace.army.mil/species/>
- Natural Resources Conservation Service. 2024. "Field Indicators of Hydric Soils in the United States, Version 9.0." United States Department of Agriculture.
- U.S. Fish and Wildlife Service. n.d. "National Wetlands Inventory." Accessed April 2025. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- Natural Resources Conservation Service. n.d. "PLANTS Database." Accessed April 2025. <https://plants.usda.gov/plant-proile/CIIN/wetland>
- Natural Resources Conservation Service. n.d. "Web Soil Survey." Accessed April 2025. <https://websoilsurvey.nrcs.usda.gov/app/>

Appendix A

Aquatic Resource Delineation Maps



Legend

- Right of Way (ROW)
- Sample Points
- Wetlands (Mapped)

SP2 SP1

SP7 SP8

STREAM GAUGING (SHEET PILES)

EXTENTS OF PROJECT ROW

DIVERSION DAM (WITH SHEET PILES)

SP4 SP3

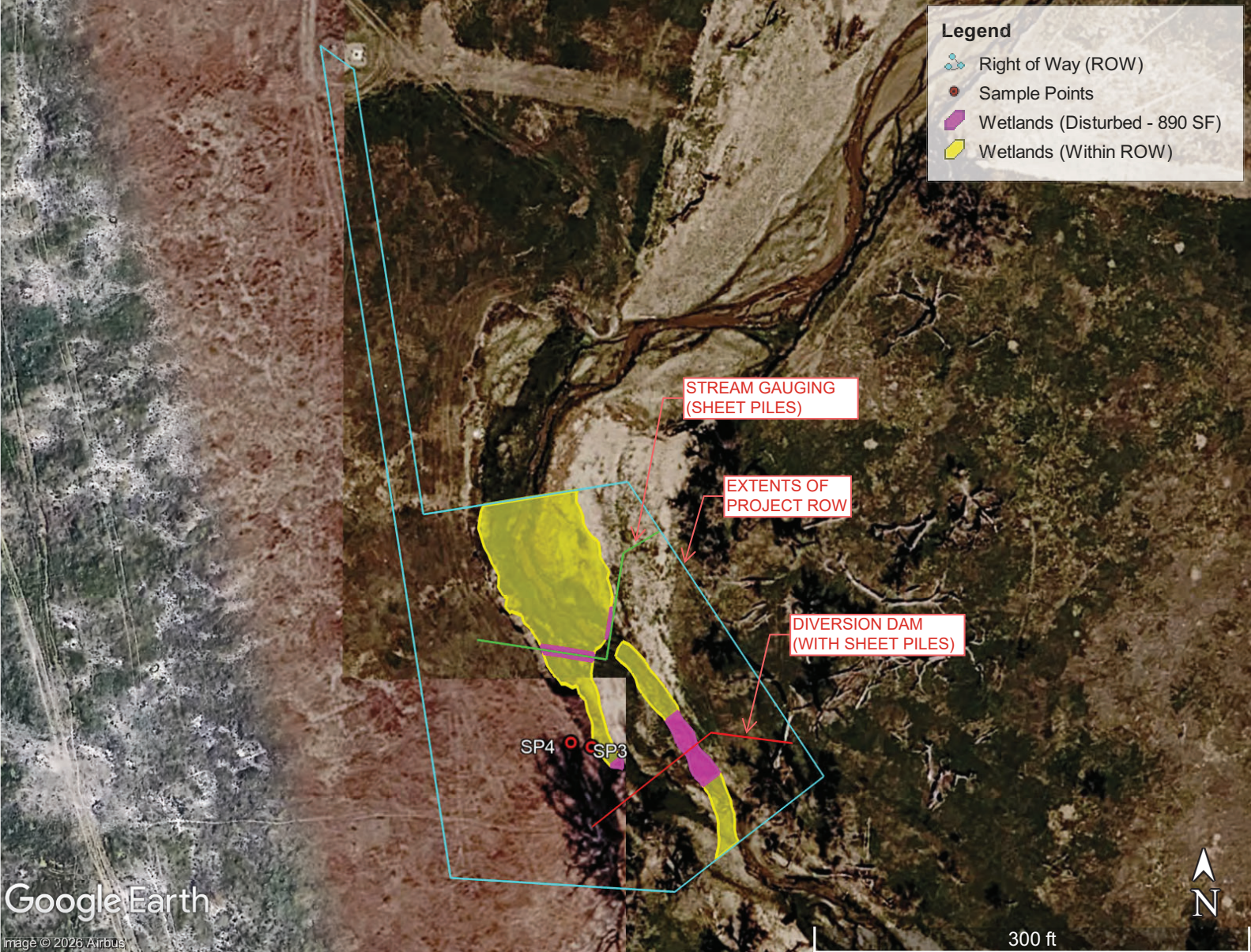
SP6 SP5

Google Earth

Image © 2026 Airbus



300 ft



Legend

- Right of Way (ROW)
- Sample Points
- Wetlands (Disturbed - 890 SF)
- Wetlands (Within ROW)

STREAM GAUGING
(SHEET PILES)

EXTENTS OF
PROJECT ROW

DIVERSION DAM
(WITH SHEET PILES)

SP4 SP3

Google Earth
Image © 2026 Airbus

300 ft
N

Appendix B
Supporting Maps



U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



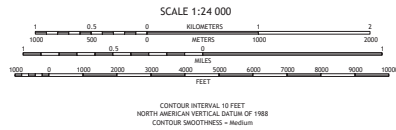
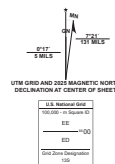
WATKINS QUADRANGLE
COLORADO
7.5-MINUTE TOPO



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1:250,000 scale; UNIVERSAL TRANSVERSE MERCATOR (UTM). Zone 13S
Data is provided by The National Map (TNM), is the best available at the time of map
generation, and includes data collected from supporting themes of Elevation,
Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover,
and Orthophotography. Refer to associated Federal Geographic Data Committee (FGDC)
Metadata for additional source data information.

This map is not a legal document. Boundaries may be generalized for this map scale.
Private lands within government reservations may not be shown. Obtain permission
before entering private lands. Temporal changes may have occurred since these data
were collected and some data may no longer represent actual surface conditions.

Learn About The National Map: <https://nationalmap.gov>



QUADRANGLE LOCATION

East	North	West
Coal	North	Section 10
East	Section 10	Section 10

ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

WATKINS, CO
2025

ADJOINING QUADRANGLES

National Flood Hazard Layer FIRMette



104°33'21"W 39°38'3"N



Basemap Imagery Source: USGS National Map 2023

Legend

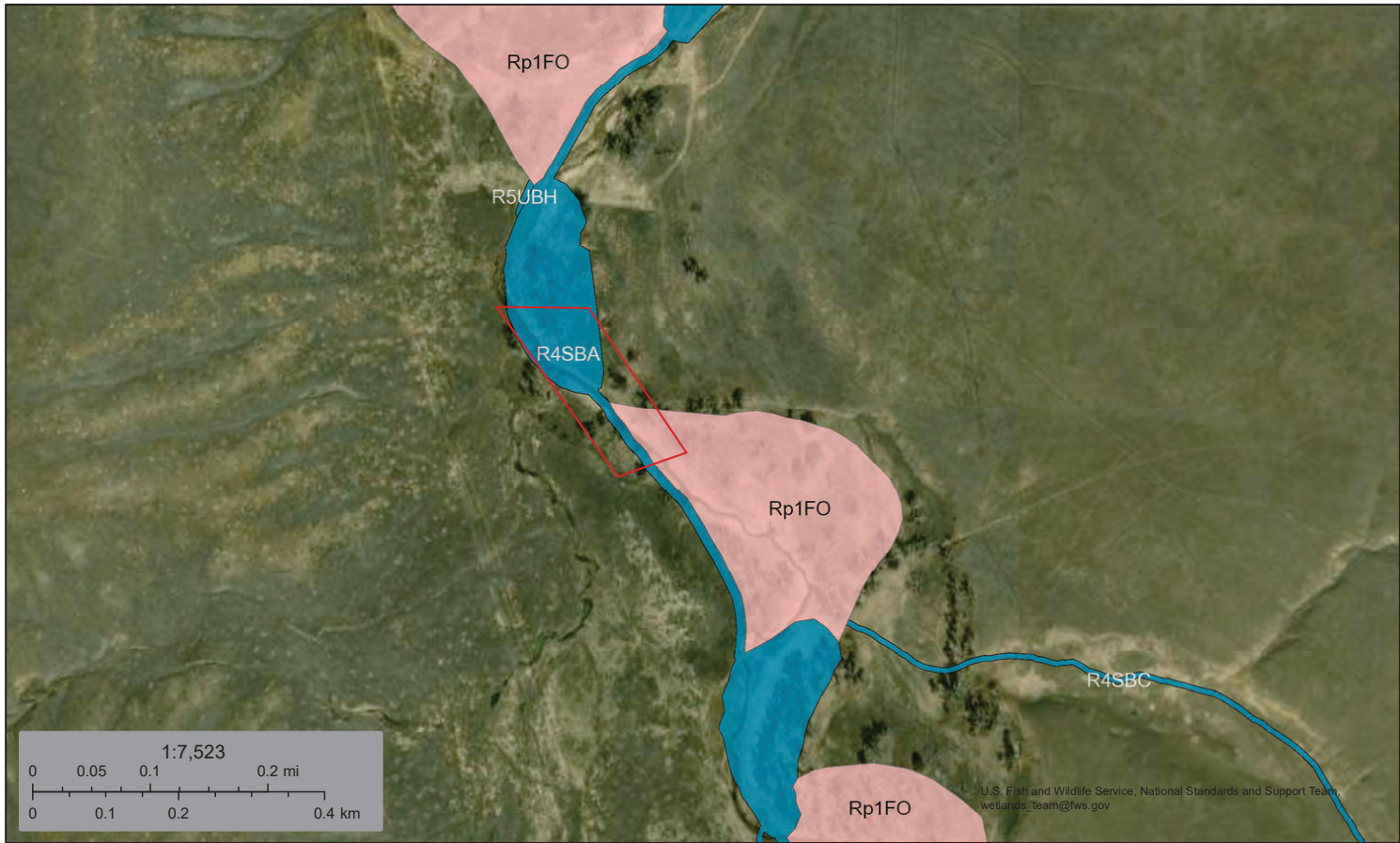
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, AB99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		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 Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
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
OTHER FEATURES		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 9/22/2025 at 4:06 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.



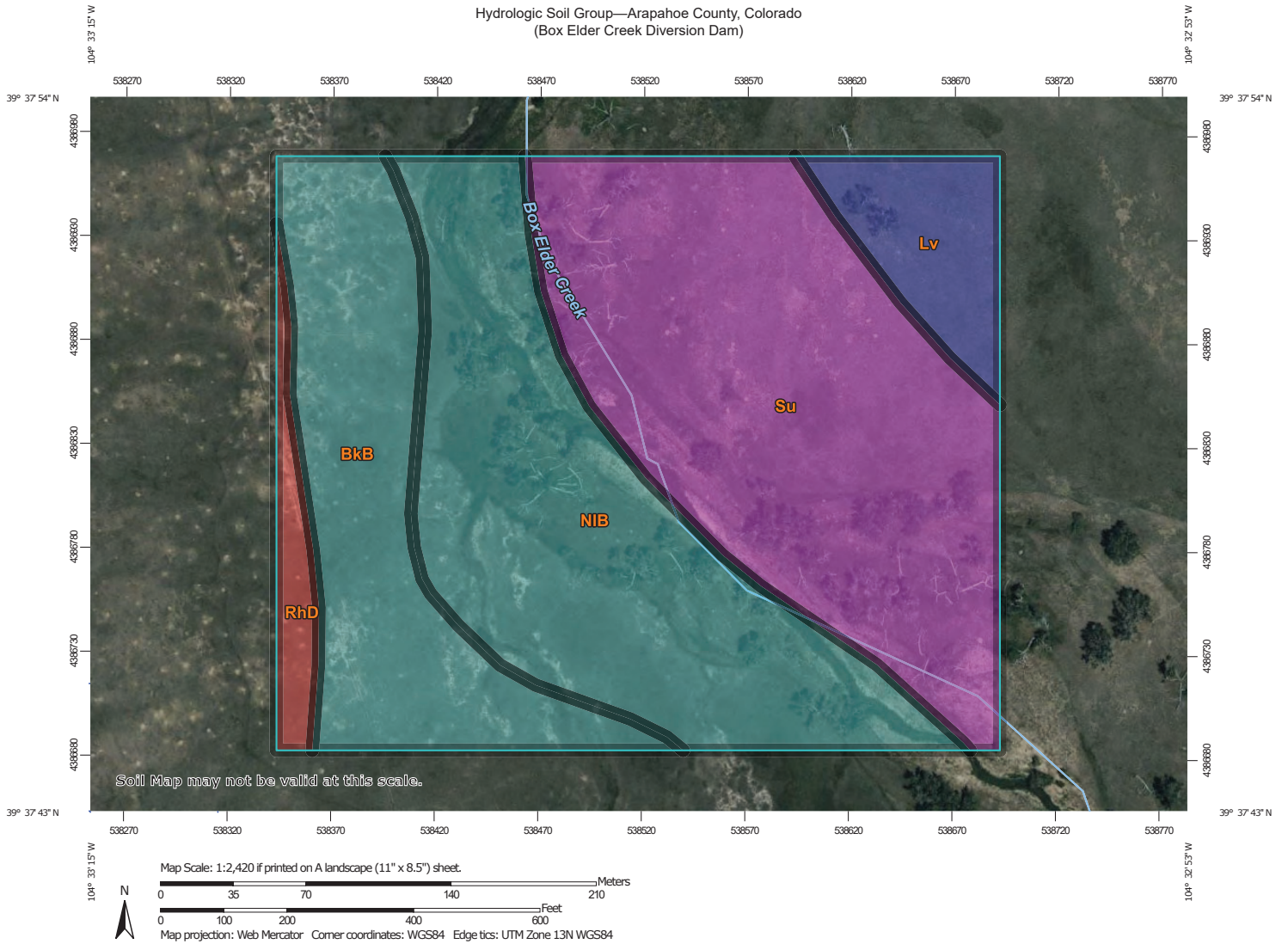
September 5, 2025

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.

Hydrologic Soil Group—Arapahoe County, Colorado
(Box Elder Creek Diversion Dam)



Hydrologic Soil Group—Arapahoe County, Colorado
(Box Elder Creek Diversion Dam)

MAP LEGEND

Area of Interest (AOI)	 C
 Area of Interest (AOI)	 C/D
Soils	 D
Soil Rating Polygons	 Not rated or not available
 A	Water Features
 A/D	 Streams and Canals
 B	Transportation
 B/D	 Rails
 C	 Interstate Highways
 C/D	 US Routes
 D	 Major Roads
 Not rated or not available	 Local Roads
Soil Rating Lines	Background
 A	 Aerial Photography
 A/D	
 B	
 B/D	
 C	
 C/D	
 D	
 Not rated or not available	
Soil Rating Points	
 A	
 A/D	
 B	
 B/D	

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: Arapahoe County, Colorado
Survey Area Data: Version 20, Aug 29, 2024

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

Date(s) aerial images were photographed: Jun 9, 2021—Jun 12, 2021

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BkB	Beckton loam, 0 to 3 percent slopes	C	5.1	20.5%
Lv	Loamy alluvial land	B	1.6	6.5%
NIB	Nunn loam, 1 to 3 percent slopes	C	7.7	31.2%
RhD	Renohill-Buick loams, 3 to 9 percent slopes	D	0.8	3.2%
Su	Sandy alluvial land	A	9.6	38.7%
Totals for Area of Interest			24.8	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

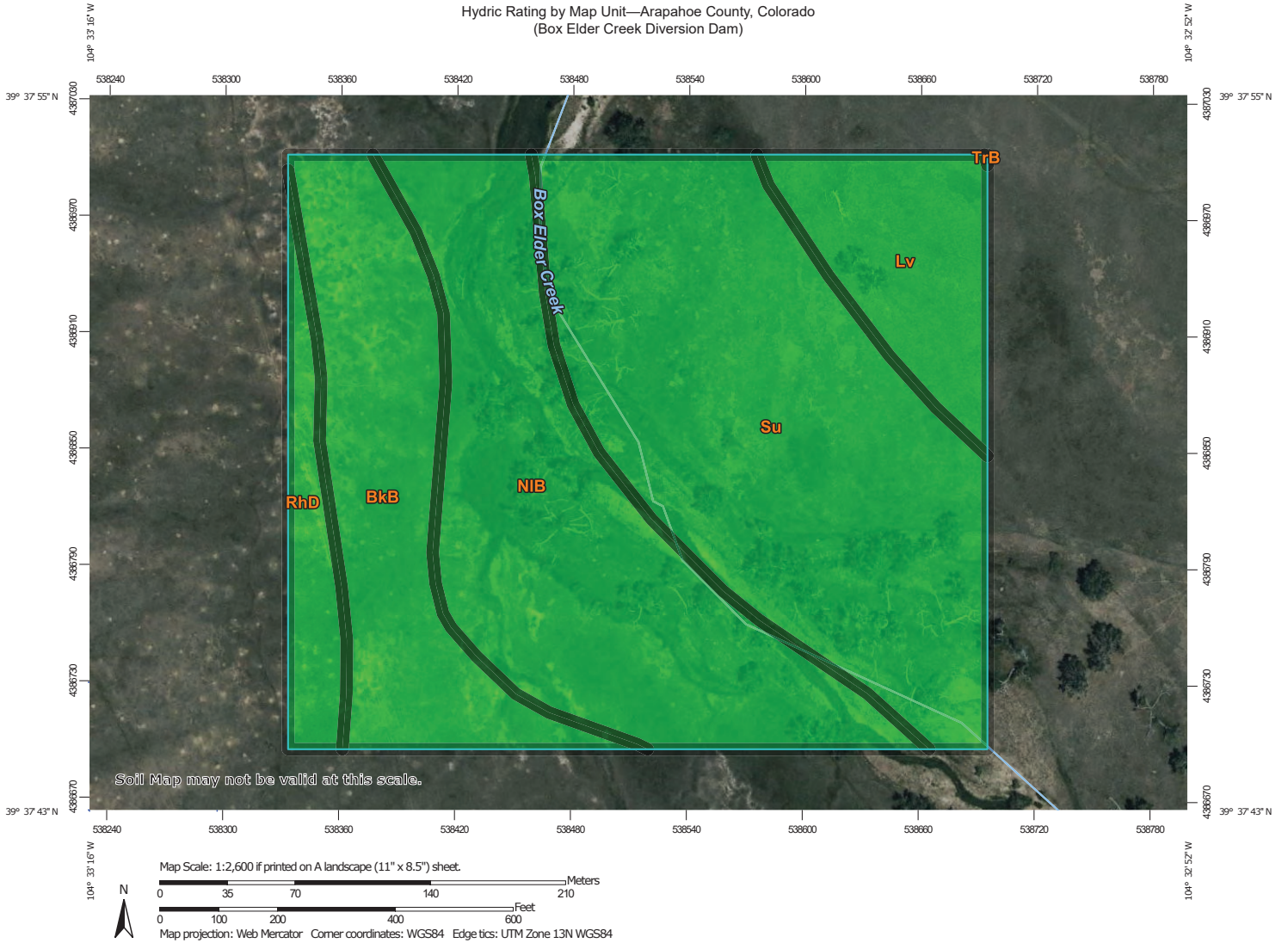
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified



























Tie-break Rule: Higher

Hydric Rating by Map Unit—Arapahoe County, Colorado
(Box Elder Creek Diversion Dam)



Hydric Rating by Map Unit—Arapahoe County, Colorado
(Box Elder Creek Diversion Dam)

MAP LEGEND

- Area of Interest (AOI)**
 Area of Interest (AOI)
- Soils**
Soil Rating Polygons
 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available
- Soil Rating Lines**
 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available
- Soil Rating Points**
 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available
- 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: Arapahoe County, Colorado
 Survey Area Data: Version 20, Aug 29, 2024

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

Date(s) aerial images were photographed: Jun 9, 2021—Jun 12, 2021

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.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BkB	Beckton loam, 0 to 3 percent slopes	0	5.0	18.1%
Lv	Loamy alluvial land	0	2.6	9.5%
NIB	Nunn loam, 1 to 3 percent slopes	0	7.9	28.7%
RhD	Renohill-Buick loams, 3 to 9 percent slopes	0	1.4	5.1%
Su	Sandy alluvial land	0	10.6	38.6%
TrB	Truckton loamy sand, 0 to 3 percent slopes	0	0.0	0.0%
Totals for Area of Interest			27.5	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Appendix C

Photo Log

9/24/2025



Photo 1. View of the wetlands and OHWM within Box Elder Creek, facing southeast.



Photo 2. View of the proposed diversion dam site within the creek, facing southeast. The majority of the project footprint will be constructed on alluvial sand deposits devoid of vegetation.



Photo 3. View of the wetlands and uplands from the southern portion of the project area, facing northwest.



Photo 4. View of the wetlands in the southernmost portion of the project area, facing northwest.

Appendix D

Plant List

Genus	Species	Common Name	WIS
<i>Bromus</i>	<i>inermis</i>	Smooth brome	UPL
<i>Verbascum</i>	<i>thapsus</i>	Common mullein	UPL
<i>Pascopyrum</i>	<i>smithii</i>	Western wheatgrass	FACU
<i>Populus</i>	<i>deltoides</i>	Eastern cottonwood	FAC
<i>Schoenoplectus</i>	<i>tabernaemontani</i>	Softstem bulrush	OBL
<i>Carex</i>	<i>nebrascensis</i>	Nebraska sedge	OBL
<i>Bidens</i>	<i>cernua</i>	Nodding beggartick	OBL
<i>Polypogon</i>	<i>monspeliensis</i>	Annual rabbitsfoot grass	FACW
<i>Phalaris</i>	<i>arundinacea</i>	Reed canary grass	FACW
<i>Salix</i>	<i>lucida</i>	Shining willow	FACW

Appendix E

Wetland Delineation Data Sheets

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 1
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Streambed Local relief (concave, convex, none): None Slope (%):
 Subregion (LRR/MLRA): LRR G Lat: 39.63160°N Long: -104.55240°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>x</u> No <u> </u> Hydric Soil Present? Yes <u>x</u> No <u> </u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
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Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2.					
3.					
4.					
				=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u>80</u> x 1 = <u>80</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>85</u> (A) <u>90</u> (B) Prevalence Index = B/A = <u>1.06</u>
1.					
2.					
3.					
4.					
5.					
				=Total Cover	
Herb Stratum	(Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Carex nebrascensis</u>	<u>75</u>	<u>Yes</u>	<u>OBL</u>	
2.	<u>Polypogon monspeliensis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
3.	<u>Schoenoplectus tabernaemontani</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		<u>85</u>		=Total Cover	
Woody Vine Stratum	(Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1.					
2.					
				=Total Cover	
% Bare Ground in Herb Stratum <u>15</u>					

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 4/2	100					Sandy	
2-11	10YR 6/2	90	7.5R 4/6	10	CS	M	Sandy	
11-16	10YR 5/1	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> High Plains Depressions (F16)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	(MLRA 72 & 73 of LRR H)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 2
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Upland Local relief (concave, convex, none): None Slope (%):
 Subregion (LRR/MLRA): LRR G Lat: 39.63159°N Long: -104.55255°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>x</u> Hydric Soil Present? Yes <u> </u> No <u>x</u> Wetland Hydrology Present? Yes <u> </u> No <u>x</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
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Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. <u>Bromus inermis</u>	90	Yes	UPL	
2. <u>Pascopyrum smithii</u>	75	Yes	FACU	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
165 =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 0 x 3 = 0
 FACU species 75 x 4 = 300
 UPL species 90 x 5 = 450
 Column Totals: 165 (A) 750 (B)
 Prevalence Index = B/A = 4.55

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 3/2	100					Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> High Plains Depressions (F16)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	(MLRA 72 & 73 of LRR H)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 3
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Streambed Local relief (concave, convex, none): None Slope (%):
 Subregion (LRR/MLRA): LRR G Lat: 39.63099°N Long: -104.55216°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>x</u> No <u> </u> Hydric Soil Present? Yes <u>x</u> No <u> </u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
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Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. <u>Phalaris arundinacea</u>	50	Yes	FACW	
2. <u>Salix lucida</u>	20	Yes	FACW	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
70 =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>30</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species 0 x 1 = 0
 FACW species 70 x 2 = 140
 FAC species 0 x 3 = 0
 FACU species 0 x 4 = 0
 UPL species 0 x 5 = 0
 Column Totals: 70 (A) 140 (B)
 Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 4/2	100					Sandy	
4-7	10YR 5/2	95	7.5YR 5/6	5	CS	M	Sandy	
7-10	N 2.5/	20					Mucky Sand	
7-10	N 4/	80					Sandy	
10-14	10YR 5/1	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Black Histic (A3)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 4
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Upland Local relief (concave, convex, none): None Slope (%):
 Subregion (LRR/MLRA): LRR G Lat: 39.63100°N Long: -104.55221°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>x</u> Hydric Soil Present? Yes <u> </u> No <u>x</u> Wetland Hydrology Present? Yes <u> </u> No <u>x</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
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Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. <u>Bromus inermis</u>	70	Yes	UPL	
2. <u>Pascopyrum smithii</u>	20	Yes	FACU	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
90 =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>10</u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 0 x 3 = 0
 FACU species 20 x 4 = 80
 UPL species 70 x 5 = 350
 Column Totals: 90 (A) 430 (B)
 Prevalence Index = B/A = 4.78

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/2	100					Loamy/Clayey	
10-12	10YR 2/2	100					Loamy/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> High Plains Depressions (F16)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	(MLRA 72 & 73 of LRR H)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Great Plains Region
 See ERDC/EL TR-10-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 5
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Streambed Local relief (concave, convex, none): None Slope (%):
 Subregion (LRR/MLRA): LRR G Lat: 39.63059°N Long: -104.55176°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>x</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	

Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Populus deltoides</u>	20	Yes	FAC	
2. <u> </u>				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
4. <u> </u>	20 =Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				Prevalence Index worksheet:
1. <u> </u>				
2. <u> </u>				OBL species <u>20</u> x 1 = <u>20</u>
3. <u> </u>				FACW species <u>80</u> x 2 = <u>160</u>
4. <u> </u>				FAC species <u>20</u> x 3 = <u>60</u>
5. <u> </u>	=Total Cover			FACU species <u>0</u> x 4 = <u>0</u>
				UPL species <u>0</u> x 5 = <u>0</u>
				Column Totals: <u>120</u> (A) <u>240</u> (B)
				Prevalence Index = B/A = <u>2.00</u>
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators:
1. <u>Phalaris arundinacea</u>	80	Yes	FACW	
2. <u>Bidens cernua</u>	15	Yes	OBL	<u>X</u> 2 - Dominance Test is >50%
3. <u> </u>				<u>X</u> 3 - Prevalence Index is ≤3.0 ¹
4. <u> </u>				<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u> </u>				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
6. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>	95 =Total Cover			
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>				
2. <u> </u>				
	=Total Cover			
% Bare Ground in Herb Stratum <u>5</u>				

Remarks:

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 4/2	100					Sandy	
3-13	10YR 6/2	95	7.5YR 4/6	5	CS	M	Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> High Plains Depressions (F16)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	(MLRA 72 & 73 of LRR H)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>14</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 6
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Floodplain swale Local relief (concave, convex, none): convex Slope (%): 1
 Subregion (LRR/MLRA): LRR G Lat: 39.63055°N Long: -104.55180°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Populus deltoides</u>	50	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
2. _____				
3. _____				
4. _____				
50 =Total Cover				
Sapling/Shrub Stratum	(Plot size: <u>15'</u>)			
1. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>50</u> x 3 = <u>150</u> FACU species <u>50</u> x 4 = <u>200</u> UPL species <u>90</u> x 5 = <u>450</u> Column Totals: <u>190</u> (A) <u>800</u> (B) Prevalence Index = B/A = <u>4.21</u>
2. _____				
3. _____				
4. _____				
5. _____				
_____ =Total Cover				
Herb Stratum	(Plot size: <u>5'</u>)			
1. <u>Bromus inermis</u>	90	Yes	UPL	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Pascopyrum smithii</u>	50	Yes	FACU	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
140 =Total Cover				
Woody Vine Stratum	(Plot size: _____)			
1. _____				
2. _____				
_____ =Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 3/2	100					Sandy	
12-14	10YR 2/2	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> High Plains Depressions (F16)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	(MLRA 72 & 73 of LRR H)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 7
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Streambed Local relief (concave, convex, none): None Slope (%):
 Subregion (LRR/MLRA): LRR G Lat: 39.63151°N Long: -104.55224°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>x</u> No <u> </u> Hydric Soil Present? Yes <u>x</u> No <u> </u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
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Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>75</u> x 1 = <u>75</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>75</u> (A) <u>75</u> (B) Prevalence Index = B/A = <u>1.00</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex nebrascensis</u>	<u>75</u>	<u>Yes</u>	<u>OBL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>75</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>25</u>				

Remarks:

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 4/2	98	7.5R 4/1	2	CS		Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> High Plains Depressions (F16)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	(MLRA 72 & 73 of LRR H)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Quincy Avenue Diversion Dam City/County: Arapahoe County Sampling Date: 9/17/25
 Applicant/Owner: Rangeview Metropolitan District State: CO Sampling Point: 8
 Investigator(s): Noah Washko Section, Township, Range: SENE 1/4 Section 9, T5S, R64W
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%):
 Subregion (LRR/MLRA): LRR G Lat: 39.63148°N Long: -104.55212°W Datum: NAD83
 Soil Map Unit Name: Nunn loam (NIB) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>x</u> Hydric Soil Present? Yes <u> </u> No <u>x</u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>x</u>
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Remarks:
 Riparian corridor with active cattle grazing.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>80</u> x 5 = <u>400</u> Column Totals: <u>80</u> (A) <u>400</u> (B) Prevalence Index = B/A = <u>5.00</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Bromus inermis</u>	75	Yes	UPL	
2. <u>Verbascum thapsus</u>	5	No	UPL	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
80 =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum <u>20</u>				

Remarks:

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2.5	10YR 6/2	100					Sandy	
2.5-12	10YR 4/2	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> High Plains Depressions (F16)	
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	(MLRA 72 & 73 of LRR H)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



ARAPAHOE COUNTY

**Arapahoe County
Public Works and Development
Planning Division**
6924 S. Lima Street
Centennial, Colorado 80112
Phone: 720-874-6650
www.arapahoegov.com

Land Development Application

This form must be **complete**.

Land Development Application materials received after 2pm shall be date stamped received the following business day.

APPLICANT NAME: Rangeview Metropolitan District	ADDRESS: 34501 E. Quincy Ave., Bldg 1 Watkins, CO 80137 PHONE: 303.292.3456 EMAIL: mharding@purecyclewater.com	CONTACT: Mark Harding TITLE: President
OWNER(S) OF RECORD NAME(S): Rangeview Metropolitan District	ADDRESS: 34501 E. Quincy Ave., Bldg 1 Watkins, CO 80137 PHONE: 303.292.3456 EMAIL: mharding@purecyclewater.com	SIGNATURE(S): 
ENGINEERING FIRM NAME: Pure Cycle	ADDRESS: 34501 E. Quincy Ave., Bldg 1 Watkins, CO 80137 PHONE: 303.292.3456 EMAIL: trohde@purecyclewater.com	CONTACT: Taylor Rohde TITLE: Engineer

Pre-Submittal Case Number: Q 25 - 049 **Pre-Submittal Planner:** Kat Hammer **Pre-Submittal Engineer:** Joseph Boateng

State Parcel ID No. (AIN no.):	2069-00-0-00-014
Parcel Address or Cross Streets:	E. Quincy Ave and Box Elder Creek
Subdivision Name & Filing No:	N/A

	EXISTING	PROPOSED
Zoning:	A-1	A-1
Project Name:	N/A	Quincy Flow Diversion at Box Elder Creek
Site Area (Acres):	N/A	N/A
Density (Dwelling Units/Acre):	N/A	N/A
Building Square Footage:	N/A	N/A
Disturbed Area (Acres):	N/A	2.3

CASE TYPE (S)

L&E _____ _____

THIS SECTION IS FOR OFFICE USE ONLY

Case No:		Assigned Planner:		Assigned Engineer:	
TCHD Fee:	\$	Planning Fee(s):	\$	Engineering Fee(s):	\$

This land use application shall be submitted with all required application fees. Incomplete applications will not be accepted. Submittal of this application *does not* establish a vested property right in accordance with C.R.S. 24-68-105(1). Processing and review of this application may require the submittal of additional information, subsequent reviews, and/or meetings, as outlined in the Arapahoe County Land Development Code.

October 22nd, 2025

Arapahoe County Public Works & Development
Planning Division
6924 S. Lima St.
Centennial, CO 80112

Attn: Kat Hammer, Planner

RE: Letter of Intent – Quincy Flow Diversion at Box Elder Creek – Arapahoe County Q25-049

Dear Ms. Hammer,

Pure Cycle Corporation on behalf of Rangeview Metropolitan District submits this Location and Extent application for a proposed diversion structure in Box Elder Creek. This infrastructure will allow Rangeview to source surface water according to its water right decrees in order to provide additional water to its growing customer base in Arapahoe County. This proposed project adds additional renewable water supplies to Rangeview's water portfolio, helps diversify its water sources, and aligns with several Arapahoe County Comprehensive Plan Goals.

The project is located in Parcel # 2069-00-0-00-014 in the NE ¼ of Section 9, Township 5S, Range 64 West of the 6th P.M. in unincorporated Arapahoe County, CO. The property is zoned A-1 and is owned by the Colorado State Land Board. No new access roads are proposed for the project and construction traffic will utilize an existing entrance to the parcel off East Quincy Avenue. The proposed project will be constructed on a Rangeview utility easement granted by the Colorado State Land Board with an approximate size of ~1.2 acres.

The diversion dam will consist of an air inflated rubber bladder that will be anchored by a concrete foundation. When the rubber bladder is fully inflated, water within Box Elder Creek will be diverted by pumps through an existing water transmission main to the Lowry Ridge Storage Pond. When the rubber bladder is deflated surface flows will continue downstream in Box Elder Creek. Riprap will be installed both upstream and downstream of the diversion dam to improve bank stabilization and limit scouring.

Sheet piles will be installed downstream of the diversion dam in a 'V' configuration to allow a stabilized cross section within the stream for calibrated flow monitoring. Surface flow rates will be continually monitored at this location in accordance with Rangeview's water decrees requirements and those of Colorado Division of Water Resources.

The project is anticipated to start construction in Q3 of 2026 and has an estimated duration of 3 months. We appreciate your assistance and review of the materials submitted for this L&E application. If you have any questions about the accompanying materials, please do not hesitate to contact me.

Taylor Rohde, P.E.
Pure Cycle Corporation
trohde@purecyclewater.com

October 3rd, 2025

Arapahoe County Public Works & Development
Planning Division
6924 S. Lima St.
Centennial, CO 80112

Attn: Kat Hammer

RE: Narrative – Quincy Flow Diversion at Box Elder Creek – Arapahoe County Q25-049

Dear Ms. Hammer –

Pure Cycle Corporation on behalf of Rangeview Metropolitan District is proposing to construct a diversion dam in Box Elder Creek, which will be located in Section 9, Township 5S, Range 64 West within Arapahoe County, Colorado.

Per Section 5-7.3.B, pages 5-397 to 5-398 of the Land Development Code of Arapahoe County Public Work and Development, certain guidelines and regulations are set forth to direct the application material towards approval. It is understood that the application material will enter review based on these certain codes and criteria which will then be sent to a Planning Commission hearing and Board of County Commissioner hearing which then, only after approval and proper full-size paper submittal be considered fully approved. Listed below are the certain Codes and Criteria used for the design of the facility.

Arapahoe County Codes and Criteria

1. *Land Development Code and Land Development Application Manual*
2. *Infrastructure Design and Construction Standards – adopted March 11th, 2025, effective June 9, 2025*
3. *Stormwater Management Manual – adopted January 30, 2007, revised June 25, 2021*
4. *Grading, Erosion, and Sediment Control (GESCC) Manual – adopted February 22, 2005, revised July 1, 2019*
5. *Guidelines for Traffic Impact Studies – revised December 7, 2010*
6. *Public Works & Development – Engineering Fee Schedule*

Other Jurisdictional Criteria

1. *Mile High Flood District Drainage Criteria Manuals (formerly Urban Drainage and Flood Control District)*
2. *Southeast Metro Stormwater Authority (SEMSWA).*

All county code and criteria as well as other jurisdictional criteria mentioned above has been adhered to and is reflected in the submitted application documents. Pure Cycle and Rangeview Metropolitan District look forward to working with all local jurisdictions on this proposed project.

Taylor Rohde, P.E.
Pure Cycle Corporation
trohde@purecyclewater.com

LOCATION AND EXTENT PLAN BOX ELDER DIVERSION DAM

SECTION 9 OF TOWNSHIP 5 SOUTH RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
COUNTY OF ARAPAHOE, STATE OF COLORADO

EMERGENCY ACCESS NOTE:

EMERGENCY ACCESS IS GRANTED HERETHWITH OVER AND ACROSS ALL PAVED AREAS FOR POLICE, FIRE AND EMERGENCY VEHICLES.

DRIVES, PARKING AREAS, AND UTILITY EASEMENTS MAINTENANCE:

THE OWNERS OF THIS PLAN OR PLAT, THEIR SUCCESSORS AND/OR ASSIGNS IN INTEREST, THE ADJACENT PROPERTY OWNERS, HOMEOWNERS ASSOCIATION OR OTHER ENTITY OTHER THAN ARAPAHOE COUNTY, IS RESPONSIBLE FOR MAINTENANCE AND UPKEEP OF ANY AND ALL DRIVEWAYS, PARKING AREAS, AND EASEMENTS, I.E. CROSS ACCESS EASEMENTS, DRAINAGE EASEMENTS, ETC.

PRIVATE STREET MAINTENANCE:

IT IS HEREBY ADVISED AND NOTED THAT THE PRIVATE ROADWAYS SHOWN ON THIS PLAT PLAN ARE NOT IN CONFORMANCE WITH ARAPAHOE COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AND WILL NOT BE MAINTAINED BY THE COUNTY UNTIL AND UNLESS THE STREETS ARE CONSTRUCTED IN CONFORMANCE WITH THE SUBDIVISION STANDARDS IN EFFECT AT THE DATE OF THE REQUEST FOR DEDICATION. THE OWNERS, DEVELOPERS, AND/OR SUBDIVIDERS, THEIR SUCCESSORS AND/OR ASSIGNS IN INTEREST, SHALL BE RESPONSIBLE FOR STREET MAINTENANCE UNTIL SUCH TIME AS THE COUNTY ACCEPTS RESPONSIBILITY FOR MAINTENANCE AS STATED ABOVE.

DRAINAGE LIABILITY:

IT IS THE POLICY OF ARAPAHOE COUNTY THAT IT DOES NOT AND WILL NOT ASSUME LIABILITY FOR THE DRAINAGE FACILITIES DESIGNED AND/OR CERTIFIED BY TAYLOR RICHIE, P.E. ARAPAHOE COUNTY REVIEWS DRAINAGE PLANS PURSUANT TO COLORADO REVISED STATUTES TITLE 30, ARTICLE 26, BUT CANNOT OR BEHOLD OF RANGEVIEW METROPOLITAN DISTRICT GUARANTEE THAT FINAL DRAINAGE DESIGN REVIEW WILL ABSOLVE RANGEVIEW METROPOLITAN DISTRICT AND/OR THEIR SUCCESSORS AND/OR ASSIGNS OF FUTURE LIABILITY FOR IMPROPER DESIGN. IT IS THE POLICY OF ARAPAHOE COUNTY THAT APPROVAL OF THE FINAL PLAT AND/OR FINAL DEVELOPMENT PLAN DOES NOT IMPLY APPROVAL OF TAYLOR RICHIE, P.E. DRAINAGE DESIGN.

LANDSCAPE MAINTENANCE:

THE OWNERS OF THIS PLAN OR PLAT, THEIR SUCCESSORS AND/OR ASSIGNS IN INTEREST, THE ADJACENT PROPERTY OWNERS, HOMEOWNERS ASSOCIATION OR OTHER ENTITY OTHER THAN ARAPAHOE COUNTY IS RESPONSIBLE FOR MAINTENANCE AND UPKEEP OF PERIMETER FENCING, LANDSCAPED AREAS AND SIDEWALKS BETWEEN THE FENCE LINE/PROPERTY LINE AND ANY PAVED ROADWAYS.

THE OWNERS OF THIS SUBDIVISION, THEIR SUCCESSORS AND/OR ASSIGNS IN INTEREST, OR SOME OTHER ENTITY OTHER THAN ARAPAHOE COUNTY, AGREE TO THE RESPONSIBILITY OF MAINTAINING ALL OTHER OPEN SPACE AREAS ASSOCIATED WITH THIS DEVELOPMENT.

SIGHT TRIANGLE MAINTENANCE:

THE OWNERS OF PRIVATE PROPERTY CONTAINING A TRAFFIC SIGHT TRIANGLE ARE PROHIBITED FROM ERECTING OR GROWING ANY OBSTRUCTIONS OVER THREE FEET IN HEIGHT ABOVE THE ELEVATION OF THE LOWEST POINT ON THE CROWN OF THE ADJACENT ROADWAY WITHIN SAID TRIANGLE.

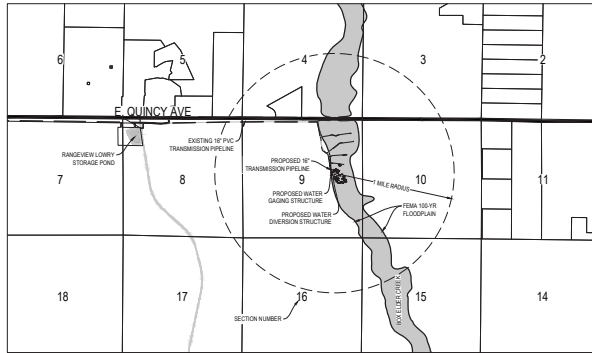
PUBLIC IMPROVEMENTS NOTE:

IF THE FINAL DEVELOPMENT PLAN AND/OR FINAL APPROVAL, ISSUANCE OF INDIVIDUAL BUILDING PERMITS WILL BE SUBJECT TO THE FOLLOWING STIPULATIONS AND/OR CONDITIONS PRECEDENT, WHICH OWNER AGREES TO IN CONJUNCTION WITH APPROVAL OF THE FINAL DEVELOPMENT PLAN AND/OR FINAL PLAT. SUCH BUILDING PERMITS WILL BE ISSUED ONLY AFTER THE OWNERS GUARANTEE PUBLIC IMPROVEMENTS IN A FORM ACCEPTABLE TO THE BOARD OF COUNTY COMMISSIONERS PURSUANT TO STATE STATUTE.

DRAINAGE MASTER PLAN NOTE:

THE POLICY OF THE COUNTY REQUIRES THAT ALL NEW DEVELOPMENT AND REDEVELOPMENT SHALL PARTICIPATE IN THE REQUIRED DRAINAGE IMPROVEMENTS AS SET FORTH BELOW.

- DESIGN AND CONSTRUCT THE LOCAL DRAINAGE SYSTEM AS DEFINED BY THE PHASE III DRAINAGE REPORT AND PLAN.
- DESIGN AND CONSTRUCT THE CONNECTION OF THE SUBDIVISION DRAINAGE SYSTEM TO A DRAINAGEWAY OF ESTABLISHED CONVEYANCE CAPACITY SUCH AS A MASTER PLANNED STORM SEWER OR MASTER PLANNED MAJOR DRAINAGEWAY. THE COUNTY WILL REQUIRE THAT THE CONNECTION OF THE MINOR AND MAJOR SYSTEM PROVIDE CAPACITY TO COUNTY ONLY. THESE FEES INCLUDE OFF-SITE FLOODING LEAVING THE SPECIFIC DEVELOPMENT SITE. TO MINIMIZE OVERALL CAPITAL COSTS, THE COUNTY ENCOURAGES ADJACENT DEVELOPMENTS TO JOIN IN DESIGNING AND CONSTRUCTING CONNECTION SYSTEMS. ALSO, THE COUNTY MAY CHOOSE TO PARTICIPATE WITH A DEVELOPER IN THE DESIGN AND CONSTRUCTION OF THE CONNECTION SYSTEM.
- EQUITABLE PARTICIPATION IN THE DESIGN AND CONSTRUCTION OF THE MAJOR DRAINAGEWAY SYSTEM THAT SERVES THE DEVELOPMENT AS DEFINED BY ADOPTED MASTER DRAINAGEWAY PLANS (SECTION 34 OF THE ARAPAHOE COUNTY STORMWATER MANAGEMENT MANUAL) OR AS REQUIRED BY THE COUNTY AND DESIGNATED IN THE PHASE III DRAINAGE REPORT.



VICINITY MAP
SCALE 1" = 200'

APPLICANT:

RANGEVIEW METRO DISTRICT
MARK HARGINS, PRESIDENT
3601 EAST QUINCY AVE., BLDG. 1
WATKINS, CO 80137
(303) 292-3456

OPERATOR/ENGINEER:

PURE CYCLE CORPORATION
ATTR: TAYLOR RICHIE, P.E.
3601 EAST QUINCY AVE., BLDG. 1
WATKINS, CO 80137
(303) 292-3456

SHEET LIST

- 1 - COVER SHEET
- 2 - SITE AND UTILITY PLAN

LEGAL DESCRIPTION

LOCATED IN SECTION 9 OF TOWNSHIP 5 SOUTH RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ARAPAHOE, STATE OF COLORADO.

PLANNING COMMISSION APPROVAL:

APPROVED BY THE ARAPAHOE COUNTY PLANNING COMMISSION ON THIS ____ DAY OF _____ A.D. 2008.

CHAIR _____

CERTIFICATE OF OWNERSHIP:

I, MARK W. HARGINS, HEREBY AFFIRM THAT I AM THE OWNER OR AUTHORIZED AGENT OF ALL INDIVIDUALS HAVING OWNERSHIP INTEREST IN THE PROPERTY DESCRIBED HEREIN, KNOWN AS _____

OWNER OF RECORD OR AUTHORIZED AGENT _____

STATE OF _____)
COUNTY OF _____) S.S.

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ____ DAY OF _____, 2008 BY MARK W. HARGINS,

AS PRESIDENT OF RANGEVIEW METROPOLITAN DISTRICT, AN AUTHORIZED SIGNATORY.

BY _____

NOTARY PUBLIC

WITNESS MY HAND AND SEAL

MY COMMISSION EXPIRES _____

NOTARY ID NUMBER: _____

PURE CYCLE CORPORATION
 3601 EAST QUINCY AVE., BLDG. 1
 WATKINS, COLORADO 80137
 WWW.PURECYCLEWATER.COM
 A WATER AND WASTEWATER SERVICES COMPANY
 PH: 303-292-3456

PROJECT: BOX ELDER DIVERSION DAM
 SHEET: LOCATION AND EXTENT COVER SHEET
 DATE: APRIL 2008

SEAL

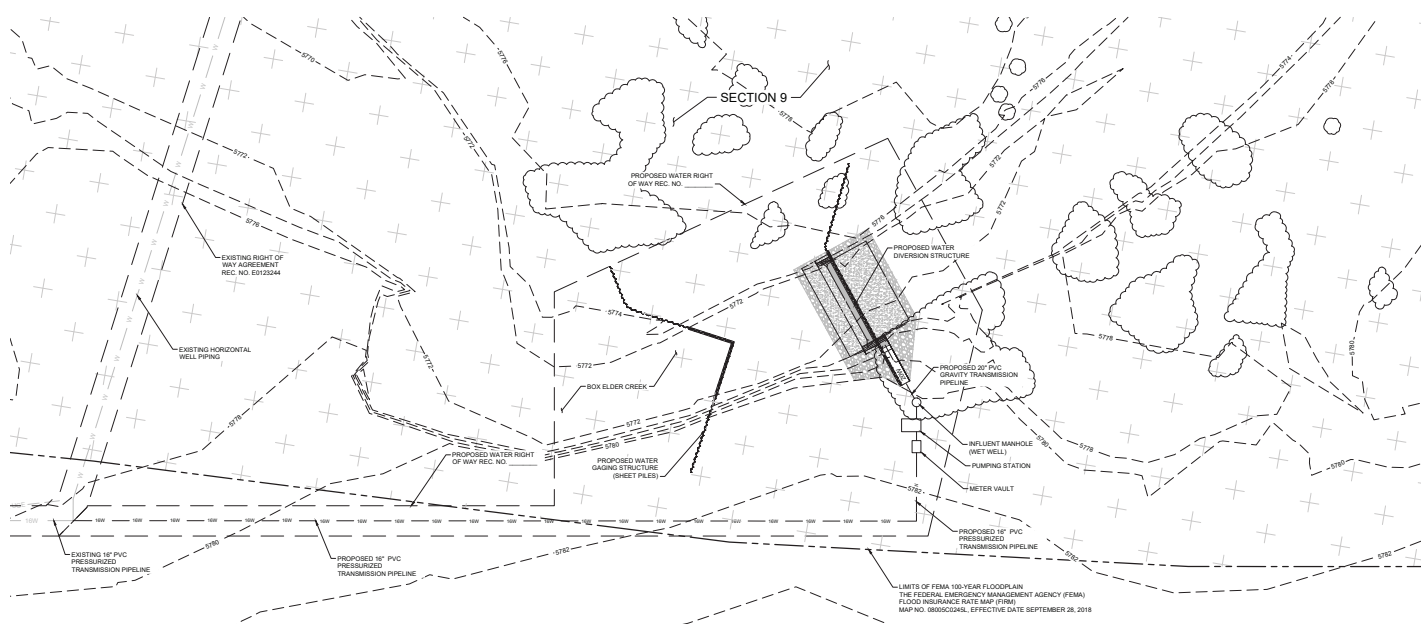
DATE REVISION

SHEET
1

LOCATION AND EXTENT PLAN

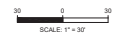
BOX ELDER DIVERSION DAM

SECTION 9 OF TOWNSHIP 5 SOUTH RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
COUNTY OF ARAPAHOE, STATE OF COLORADO



LEGEND	
PROPOSED RIGHT OF WAY BOUNDARY	--- -- -- --
PROPOSED 16 INCH WATERLINE	==== 16W ====
PROPOSED 24 INCH WATERLINE	==== 20W ====
PROPOSED MAJOR CONTOUR	----- 100 -----
PROPOSED MINOR CONTOUR	----- 500 -----
EXISTING FLOODPLAIN	10' 10' 10'
EXISTING RIGHT OF WAY BOUNDARY	----- -- -- --
EXISTING FLOODPLAIN BOUNDARY	----- -- -- --
EXISTING MAJOR CONTOUR	----- 1000 -----
EXISTING MINOR CONTOUR	----- 1001 -----
EXISTING 8 INCH WATERLINE	----- 8W -----
EXISTING 16 INCH WATERLINE	----- 16W -----
EXISTING TREE CANOPY	~~~~~

LAND USE SUMMARY:
 UTILITY WATER
 ZONING: A-1
 PROPOSED USE: WATER COLLECTION AND TRANSMISSION
 ROW AREA: 1.48 ACRES



PURE CYCLE CORPORATION
 34601 E. QUINCY AVE., BLDG. 1
 WATKINS, COLORADO 80137
 A WATER AND WASTEWATER SERVICES COMPANY
 PH: 303-292-3456
 WWW.PURECYCLEWATER.COM

PROJECT: BOX ELDER DIVERSION DAM
SHEET: LOCATION AND EXTENT SITE AND UTILITY PLAN
DATE: APRIL 2026

SEAL	
DATE	REVISION
SHEET 2	

ARAPAHOE COUNTY CASE NO. LES-862