



May 13, 2022

Kyle Regan  
Civil Resources, LLC  
8308 Colorado Blvd. Suite 200  
Firestone, CO 80504

**Re: Monarch-DENM Gravel Mine, File No. M-2022-009,  
112c Permit Application Adequacy Review**

Mr. Regan:

The Division of Reclamation, Mining and Safety (Division/DRMS/Office) reviewed the contents of the 112c permit application for the Monarch-DENM Gravel Mine, File No. M-2022-009 and submits the following comments. The Division is required to issue an approval or denial decision no later than June 14, 2022, therefore a response to the following adequacy review concerns should be submitted to the Division as soon as possible.

The review consisted of comparing the application contents with the specific requirements of Rules 1, 3, 6.1, 6.2, 6.4 and 6.5 of the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials (effective date July 15, 2019). Any inadequacies are identified under the respective exhibit heading along with suggested actions to correct them.

### **Comments**

- 1) The Division received state agency comments from History Colorado, the Division of Water Resources and Colorado Parks and Wildlife. The letters from these agencies, as well as a letter from the U.S. Army Corp of Engineers, are included as an enclosure with this adequacy review letter. Please review the letters and provide comments accordingly.

### **1.6 Public Notice**

- 2) Pursuant to Rule 1.6.2(e), please submit proof of the notice to all owners of record of surface and mineral rights of the affected land and the owners of record of all land surface within 200 feet of the boundary of the affected land including all easement holders located on the affected land and within 200 feet of the boundary of the affected land. Proof of notice may be return receipts of a Certified Mailing or by proof of personal service.



### **Application Form**

- 3) On Page 1, Item #1.1 of the application form, the Applicant indicated the type of organization as a Limited Liability Corporation (LLC). Please provide the corporation seal on Page 8 of the application form, if the corporation does not have a seal please indicate "no seal".

### **6.2 General Requirements of Exhibits**

- 4) Rule 6.2.1(2)(b) requires maps be signed by a registered land surveyor, professional engineer, or other qualified person. Please submit signed copies of the Exhibit C and Exhibit F maps

### **6.4 Specific Exhibit Requirements - Regular 112 Operations**

The following items must be addressed by the Applicant in order to satisfy the Mineral Rules and Regulations of the Mined Land Reclamation Board:

#### **6.4.1 Exhibit A - Legal Description**

- 5) The Applicant indicated the total acreage in the permit area as 544.06 on Page 1, Item #3 of the application form. However, the total of the parcels in Exhibit A is 799.497 acres. Please revise the exhibit to include descriptions of parcels that only includes the area in the permit.

#### **6.4.3 Exhibit C - Pre-Mining and Mining Plan Maps of Affected Land**

- 6) For the sake of clarity, the Division recommends that the entire permit area be permitted to be affected, and this should be stated in Exhibit C.
- 7) The Pre-Mining Map, Map C-1, should illustrate (with hatching or other symbolism) the areas that are currently undisturbed (if any).
- 8) Please add the following to the Mining Plan Map, Map C-5.
  - Indicate if any area will remain undisturbed, preferably using shading that is included in the legend. Particular areas that require clarification are the area north of the Plant Area, the area northwest of Cell 4 along the permit boundary, and the area north of Cell 2. (The Division recognizes that although the entire area may be permitted to be affected, some areas may remain undisturbed, at least in the initial phases of the operation, and this will be reflected in the Reclamation Costs.)
  - Soil piles and other structures not currently shown on the map.
  - Indicate the constriction phase for the southern Fresh Water Pond. Is it Phase 1 like the other Fresh Water Pond?
  - Indicate County Roads and site roads on the map. In particular, indicate if a road will be constructed next to the conveyor.
  - Add all symbols to the legend that are shown on the map. This includes the conveyor symbol and several others.

#### **6.4.4 Exhibit D - Mining Plan**

- 9) In the text on page D-1, "Highway 66" should likely be "Highway 60."
- 10) In the first paragraph of page D-2, please clarify the phrase "3:1 setback to the planned top-of-slope."
- 11) In the paragraph about the size of area to be mined at any one time, please add a statement that the Financial Warranty will be increased, as appropriate, to reflect all of the phases being mined.
- 12) Regarding the discussion on topsoil and overburden stockpiles, more detail is needed regarding the storage volumes and locations of the piles, including distances from the piles to the areas to be reclaimed. It is recommended that they be shown on Map C-5.
- 13) The Mining Plan should state that topsoil should be stripped and salvaged from areas where soil will be stockpiled.
- 14) Exhibit D needs to include a discussion of stabilization of topsoil stockpiles. Reference Exhibit E, as appropriate.
- 15) Exhibit D should include a discussion of the structures that will be constructed for the mining operation, including dimensions and general construction methods. (For example, will foundations include rebar reinforcement?)
- 16) The mining plan should include a discussion on erosion prevention on the steep slope at the northwest portion of the permit area, especially where the conveyor will be built between the boundary and Cell 4.
- 17) Provide a discussion of existing buildings, other structures, and easements within the disturbance area. This should indicate if structures and easements will be relocated or removed. A particular area that should be addressed is the area within Cell 4.
- 18) The following text (or similar) should be added to the exhibit: "Prior to starting construction of any slurry wall, the applicant shall apply for a Technical Revision with a slurry wall design report."

#### **6.4.5 Exhibit E - Reclamation Plan**

- 19) The text needs to include details for revegetation, including details on seed bed preparation, the reclamation seed mix, seeding rate, application method, and the time of seeding. Also, include details for planting, if applicable.
- 20) On Page 3 of Exhibit E, the text states that stockpiles remaining in place for more than one growing season will be vegetated. Please commit to seeding stockpiles which have been in place for 180 days and provide a seed mixture, including pounds of pure live seed (PLS) per acre.
- 21) Please add additional text to Exhibit E explaining the process to backfill and compact the mined slopes to the reclaimed 3:1 slope. This explanation should include the type of equipment used. The text should state that their construction methods will insure stability of the slopes.

#### **6.4.6 Exhibit F - Reclamation Plan Map**

- 22) Please add additional information to the legend, indicating what all of the symbols on the map represent.

#### **6.4.7 Exhibit G - Water Information**

- 23) On Page 1 of Exhibit G, the Applicant states stormwater collected in the active mine area will be managed through the dewatering system. Please provide a design of the system and a description of the operation of this system.
- 24) The Applicant needs to provide a general description of the hydrology (surface water bodies and aquifers) in the vicinity of the site, as well as related structures and activities that impact the hydrology. This should include a discussion of local aquifers, nearby wells, the river, ditches, ponds, and irrigation practices.
- 25) The Applicant needs to provide a report analyzing groundwater conditions after slurry wall construction. This report must include the methodology used to forecast groundwater mounding and shadow impacts of the slurry walls. The analyses should entail groundwater modeling or a similarly rigorous method of analysis. The report must also include a detailed discussion of the results of the analyses.
- 26) Please provide a water monitoring plan to assess future impacts of the mining operations on local groundwater wells.
- 27) Please change "NPDES" to "CDPS" to reflect the requirements of the Water Quality Control Commission.

#### **6.4.12 Exhibit L - Reclamation Costs**

- 28) The Applicant should provide more detail on structures, including details on dimensions and types of construction.
- 29) The cost estimate should include a task (or tasks) to reclaim the areas where overburden and topsoil will be stored.

#### **6.4.13 Exhibit M - Other Permit and Licenses**

- 30) Please commit to providing copies of all required and approved permits and licenses to the Division when available. This should include well permits and documents related to water rights, such as a Substitute Water Supply Plan.

#### **6.4.18 Exhibit R - Proof of Filing with County Clerk and Recorder**

- 31) Please provide an affidavit or receipt indicating the date on which the revised application information required to address this adequacy letter was placed with the Weld County Clerk and Recorder for public review, pursuant to Subparagraph 1.6.2(1)(c).

#### **6.4.19 Exhibit S - Permanent Man-made Structures**

32) The Division requires the Applicant to demonstrate that they attempted to obtain notarized structure agreements with all owners of the structures within 200 feet of the affected area of the proposed mine site, pursuant to Rule 6.4.19. This attempt must be made prior to the Division's consideration of a stability analysis.

#### **6.5 Geotechnical Stability Exhibit**

DRMS is reviewing the geotechnical analysis and our comments will be forthcoming.

Please be advised that the Monarch-DENM Gravel Mine application may be deemed inadequate, and the application may be denied unless the above-mentioned adequacy review items are addressed to the satisfaction of the Division. If more time is needed to complete the reply, the Division can grant an extension to the decision date. This will be done upon receipt of a written waiver of the Applicant's right to a decision by June 14, 2022 and a request for additional time. This must be received no later than the decision date.

If you have any questions, please contact me at [rob.zuber@state.co.us](mailto:rob.zuber@state.co.us) or (720) 601-2276.

Sincerely,



Robert D. Zuber  
Environmental Protection Specialist

Enclosures

Copied via e-mail:     Michael Cunningham, DRMS  
                                 Eric Leigh, MMMA, LLC

## **Letters from Other Agencies**



# History Colorado

Robert D. Zuber  
Division of Reclamation, Mining and Safety  
1313 Sherman Street, Room 215  
Denver, Colorado 80203

Re: Monarch DENM Mine, File No. M-2022-009 (HC#81214)

Dear Mr. Zuber:

We received your letter on March 16, 2022 initiating consultation with our office on the subject action pursuant to the Colorado State Register Act – Colorado Revised Statute (CRS) 24-80.1 et. seq.

A search of our database indicates that no properties of historical significance included or nominated for inclusion in the state register have been recorded within the proposed permit area. Please, note, as most of Colorado has not been inventoried for cultural resources, our files contain incomplete information. Consequently, there is the possibility that as yet unidentified cultural resources exist within the proposed permit area. The requirements under CRS 24-80 part 13 apply and must be followed if human remains are discovered during ground disturbing activities.

We thank you for the opportunity to comment. If we may be of further assistance, please contact Holly McKee-Huth, Cultural Resource Information/Section 106 Compliance at (303) 866-4670/[holly.mckee@state.co.us](mailto:holly.mckee@state.co.us).

Sincerely,

Dawn DiPrince  
State Historic Preservation Officer



## COLORADO

Division of Water Resources

Department of Natural Resources

### Response to Reclamation Permit Application Consideration

DATE: April 5, 2022

TO: Robert D. Zuber, P.E., Environmental Protection Specialist; transmission via email at: [rob.zuber@state.co.us](mailto:rob.zuber@state.co.us)

EC:

FROM: Division 1 Office, District 2 Water Commissioner

RE: Ioana Comaniciu, P.E.

Monarch DENM Mine, File No. M-2022-009  
Operator: Monarch Mountain Minerals and Aggregates, LLC - Eric Leigh (720)-289-5584  
Contact: Civil Resources, LLC - Kyle Regan, (303) 833-1416  
Sections 18 and 19, Twp 4 North, Rng 66 West, P.M., Weld County

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#### CONDITIONS FOR APPROVAL

- ☒ The proposed operation will consume ground water by: ☒ evaporation, ☒ dust control, ☒ dewatering, ☒ water removed in the mined product, ☒ reclamation:  
  
Prior to initiation of these uses of groundwater, the applicant will need to obtain either a gravel pit or other type of well permit, as applicable. However, prior to obtaining a permit, an approved water supply plan or decreed plan for augmentation is required.
- ☒ Prior to approving a well permit, the applicant must conduct a field inspection of the site and document the locations of all wells within 600 feet of the permit area. The applicant must then obtain a waiver of objection from all well owners with wells within 600 feet of the permit area or request a hearing before the State Engineer.

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**COMMENTS:** The subject application is for a surface mining operation on approximately 544.6 acres located in the SE ¼ of the NE ¼ and the NE ¼ of the SE ¼ and the S ½ of the SE ¼ of Section 18; the N ½ of the NE ¼ and the E ½ of the NW ¼ and the N ½ of the SW ¼ of Section 19, the S ½ of the SW ¼ of Section 19, the SE ¼ of Section 19 and the NW ¼ of Section 30, all in Township 4 North, Range 66 West of the 6th P.M. The primary commodities to be mined at the site are sand and gravel intended for construction materials. The mining plan currently includes mining in five major phases ranging in size from 27 to 97 acres that are expected to last approximately 37 years.

The mining plan calls for excavation to remove approximately 1,000,000 tons of aggregate per year. Mining will be accomplished by dry-mining method. A continuous soil/bentonite slurry wall will be constructed around the proposed Cell 1 through Cell 4. In addition a unlined Siltation Pond and two Fresh Water Ponds will be located on the mined area. The mined area in the proposed Siltation Pond and Fresh Water Ponds may be backfilled back to native grade and used as farmland or may be converted to a water storage facility if economically feasible. The site is proposed to be reclaimed as water resources for storage of decreed water rights or other water as allowed by this office as well as backfilling.

Prior to the use/exposure of any groundwater the applicant must first obtain a well permit and a substitute water supply plan or decreed plan for augmentation. The site must continue to be operated under a substitute water supply plan until such time as the proposed storage reservoirs or backfilling





are completed and replacement of all lagged depletions shall continue until there is no longer an effect on the stream.

Any storm water runoff intercepted by this operation that is not diverted or captured in priority must infiltrate into the ground or be released to the stream system within 72 hours. Otherwise, the operator will be required to make replacements for evaporation.

The applicant may contact the State Engineer's Office with any questions.

Cc: Michael Grooms - DNR <michael.grooms@state.co.us>, Angelique Curtis - DNR <angelique.curtis@state.co.us>, Boyd Wright - DNR <boyd.wright@state.co.us>, Mike Sherman - DNR <mike.sherman@state.co.us>

Good afternoon Rob,

CPW appreciates this opportunity to provide DRMS with our following recommendations for the proposed Monarch DENM Mine development, which is located along the South Platte River between the Towns of Gilcrest & Milliken.

The mission of Colorado Parks and Wildlife (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; as such we encourage protection for Colorado's wildlife species and habitats through responsible development and land use planning. Our goal in responding to land use proposals is to provide complete, consistent, and timely information to all entities who request comments on matters within our statutory authority. One way we accomplish our mission is by responding to land use requests, as is the case for this proposed gravel mine.

The protection of High Priority Habitats (HPHs) is of extreme importance to CPW. CPW recommends that all proposed projects be assessed to prevent the loss of habitat or fragmentation of habitat as well as to avoid, minimize, or mitigate impacts to wildlife species sensitive to development, which can include species of concern, big game winter concentration areas, raptor nests, and breeding and nesting habitats for ground-nesting birds.

Therefore, CPW recommends the following wildlife protection measures - based on the proposed work boundary that intercepts or is near the following HPHs:

- **Bald Eagle Active Nest Site (1/2 & 1/4-mile nesting buffer)**
  - An active Bald Eagle nest site is a specific location in which a pair of Bald Eagles has attempted to nest within the last five years. Any nest location that can be directly tied to courtship, breeding, or brooding behavior is considered active. CPW has two buffer recommendations to protect these sites: a) a year-round restricted surface occupancy (RSO) 0.25-mile buffer of any active Bald Eagle nest site, and b) a seasonal (December 1 to July 31) no new human encroachment or permitted/authorized human activities 0.5-mile buffer of any active bald eagle nest site. Note: The Bald Eagle is designated as an avian Priority Tier 2 Species of Greatest Conservation Need within CPW's 2015 Colorado State Wildlife Action Plan. This designation denotes that these species are in need of conservation attention in Colorado and are provided a relative degree of conservation management priority.
    - CPW read in the Permit Application that the mapped Bald Eagle nest just northwest of the project boundary may have shifted its specific location, but is still present and the 1/4-mile and 1/2-mile buffers extend into the project boundary. Therefore, CPW recommends that initial site construction occur outside the nesting season and does not occur within the 1/4-mile buffer.
- **Bald Eagle Roost Site**
  - Bald Eagle roost sites are defined as groups of (or individual) trees that provide diurnal and/or nocturnal perches for wintering bald eagles. These trees are usually the tallest available in the wintering area and are primarily located in riparian habitats. CPW has one recommendation to protect these sites: no permitted or authorized human activities within 0.5-mile of any active Bald Eagle winter night roost if there is a direct line of sight (or 0.25-mile if there is no direct line of sight) during the winter roost season (November 15 to March 15)
    - As mentioned in the permit application, there are roosts located just upstream and downstream of this project boundary, and CPW recommends surveys for the riparian area closest to the initial ground disturbance areas if initial construction is slated to occur from November 15 to March 15. If winter roosting Bald Eagles are present, please observe the above recommendations.
- **Mule Deer Severe Winter Range**
  - 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.
    - Therefore, CPW recommends no initial ground disturbances in these polygons from December 1 to April 30.
  - Furthermore, CPW recommends using wildlife-friendly fencing throughout the development, in particular, along the western project boundary that borders the South Platte River. Wildlife-friendly fencing may include four-strand smooth wire as further discussed in [CPW's "Fencing with Wildlife in Mind" brochure](#).
- **Aquatic Native Species**
  - There are sensitive aquatic native species (fish and amphibians) located within the South Platte River.
    - Therefore, CPW recommends No Surface Occupancy and No Ground Disturbances (year-round) within 500 feet of the Ordinary High Water Mark of the South Platte River, as well as appropriate stormwater BMPs.

Should you or anyone else have any questions about our wildlife recommendations, please contact me. Otherwise, we appreciate the DRMS and the Applicant working with CPW's recommendations toward a responsibly-completed project while protecting sensitive wildlife species, and their habitats and time frames.

Regards,

**Brandon B. Marette, CWB®**  
**Northeast Region Energy Liaison and Land Use Coordinator**



Direct (303) 291-7327

6060 Broadway, Denver, CO 80216

[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)

[CPW's Energy Webpage](#)

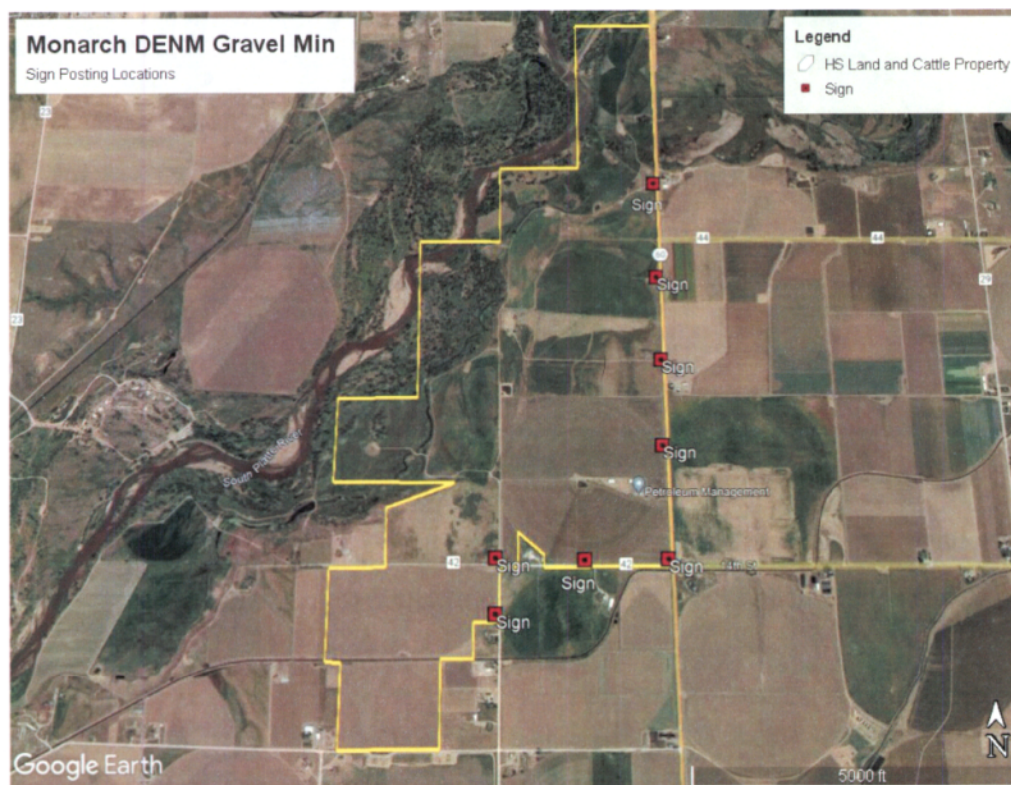
[CPW's Wildlife Movements Webpage](#)



**THINK SAFETY FIRST!**

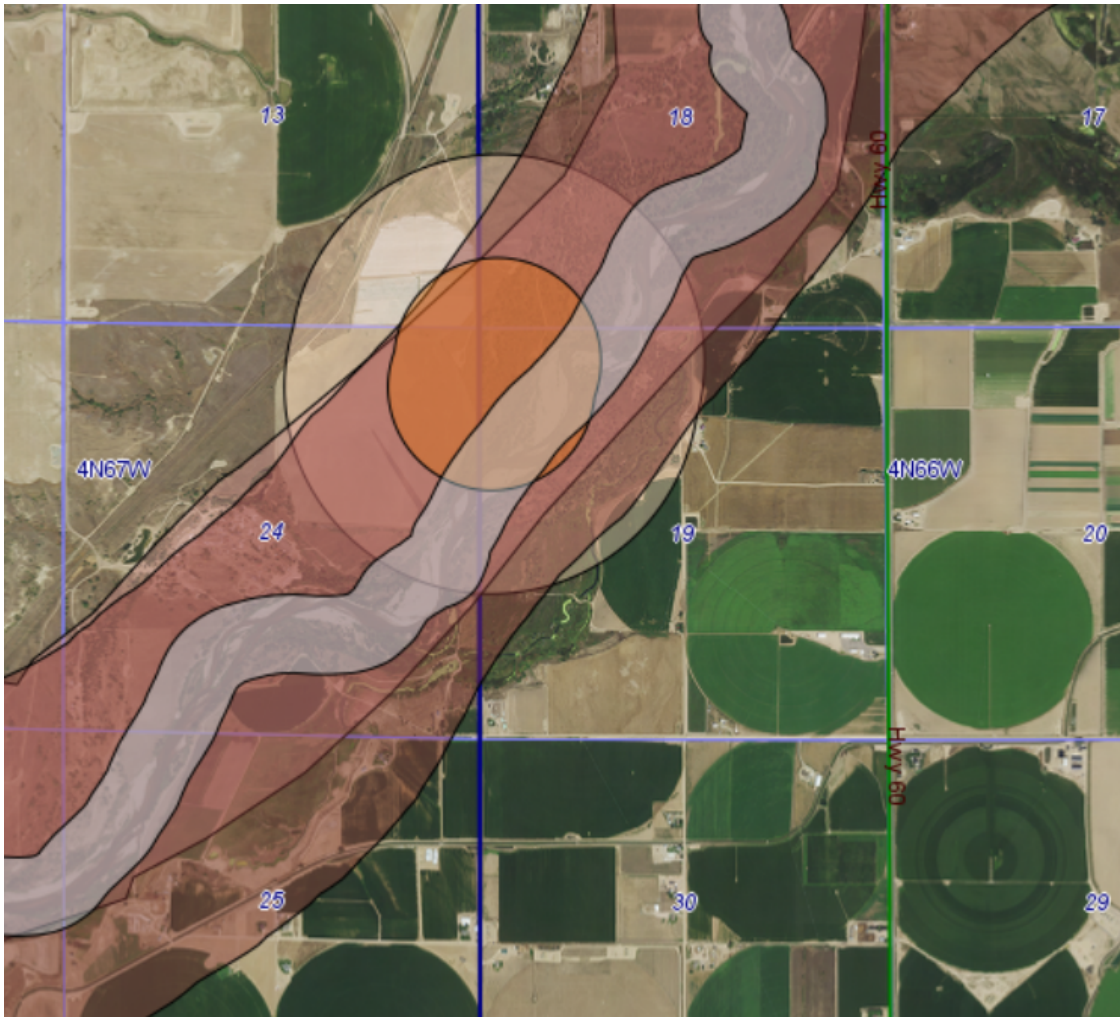


### Sign Posting Affidavit

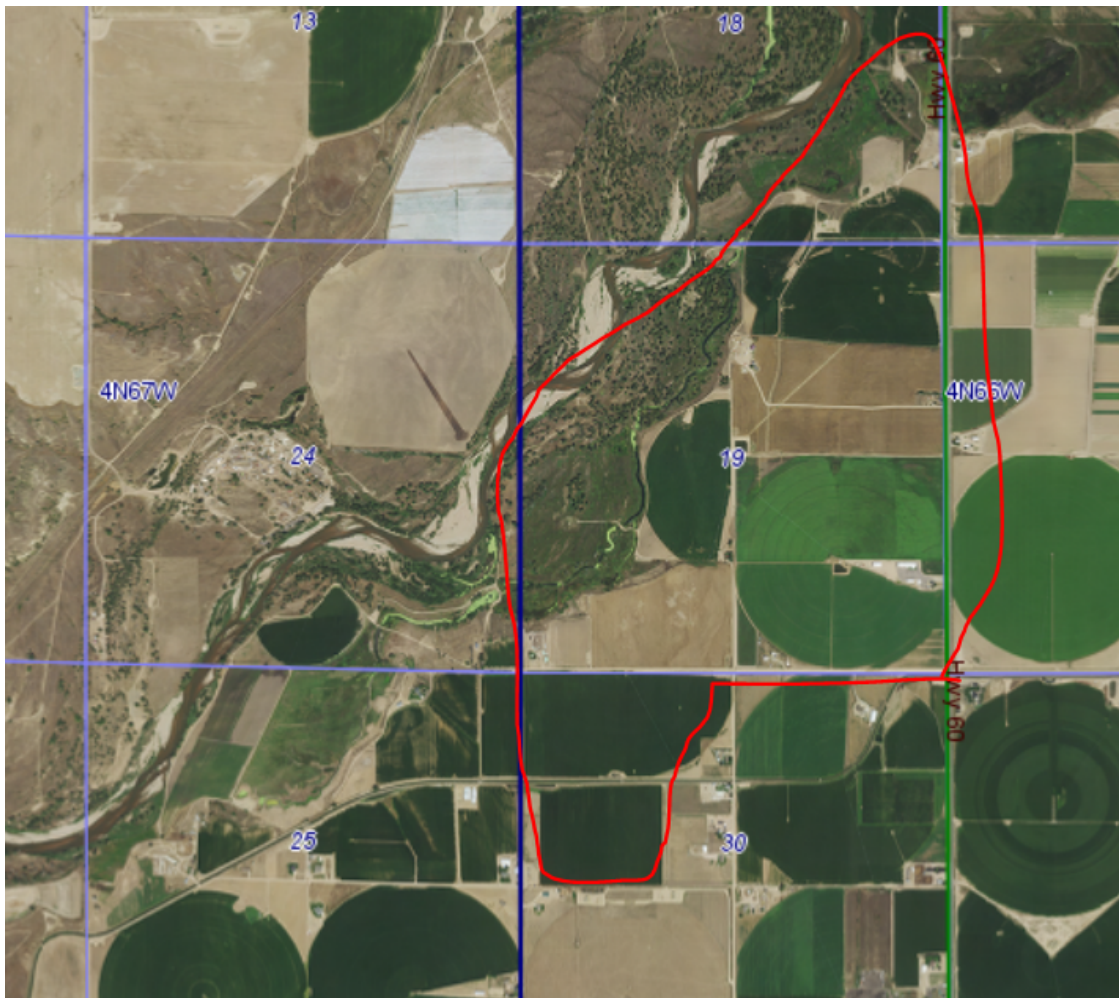


Screenshot from COGCC's webmapper showing these HPHs likely impacted...

- Bald Eagle (1/2 & 1/4-mile nesting buffer)
- Mule Deer Severe Winter Range
- Aquatic Native Species








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**2 attachments**

 **d69985b2-4802-416e-b3f3-f63e3b43682a.pdf**  
276K

 **2022-03-04\_PERMIT FILE - M2022009.pdf**  
7493K



**DEPARTMENT OF THE ARMY**  
CORPS OF ENGINEERS, OMAHA DISTRICT  
DENVER REGULATORY OFFICE, 9307 SOUTH WADSWORTH BOULEVARD  
LITTLETON, COLORADO 80128-6901

**SUBJECT: Section 404 of the Clean Water Act Initial Comments**

To whom it concerns:

In accordance with Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers reviews and authorizes any work associated with the discharge of dredged or fill material, and any excavation associated with a dredge or fill project, either temporary or permanent, in waters of the United States. Waters of the United States may include ephemeral, intermittent and perennial streams, wetlands, lakes, ponds, drainage ditches and irrigation ditches. Please note that the discharge of dredged or fill material into upland areas or aquatic resources which are not waters of the United States does not require authorization from this office.

Jurisdictional Determinations identify the locations and amounts of aquatic resources within a specified area to determine if they are or are not waters of the United States. Prior to submitting a request for a Jurisdictional Determination, we recommend a wetland delineation be conducted in the field by a qualified environmental consultant. A wetland delineation identifies the boundaries of aquatic resources located within your project area and must be conducted using the methods outlined in the Corps of Engineers Wetlands Delineation Manual and applicable regional supplements.

Nationwide Permits authorize common types of dredge and fill activities in waters of the United States that will result in a minimal adverse effect to the environment. Some fill activities require a pre-construction notification (PCN) to the Corps prior to any work and possibly coordination with other local or state agencies. Descriptions of the current nationwide permits and their general conditions can be found at:

<https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Colorado/>

Regional General Permits authorize specific types of dredge and fill activities in waters of the United States that will result in a minimal adverse effect to the environment. These fill activities require a pre-construction notification to the Corps prior to starting work, and possibly coordination with other local or state agencies. Please note several of the RGP's are applicant and location specific. Descriptions of the current regional general permit activities and their general conditions can be found at:

<https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Colorado/Regional-General-Permits/>

Standard Individual Permits authorize dredge and fill activities that do not qualify for Nationwide or Regional General Permits. We recommend contacting the Denver Regulatory Office to arrange for a pre-application consultation prior to applying for a

Standard Individual Permit. Standard Individual Permits include public interest review procedures, including public notice, notification of adjacent property owners and review of public and agency comments. Standard Individual Permits require an evaluation of effects for a range of alternatives. The Corps will evaluate practicable (cost, logistics, and technology) alternatives that meet the overall project purpose for environmental effects. Alternatives can include off-site alternatives and alternative designs. When evaluating Standard Individual Permit applications, the Corps can only issue a permit for the least environmentally damaging practicable alternative (LEDPA). In some cases, the LEDPA may not be the applicant's preferred alternative. The Standard Individual Permit application form and instructions can be found at:

<https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/>

A federal action occurs when a discharge of dredged or fill material into waters of the United States requires a Clean Water Act Section 404 permit. For the Corps to make a permit decision, the applicant must provide enough information to demonstrate compliance with Section 106 of the National Historic Preservation Act (NHPA) and Section 7 of the Endangered Species Act (ESA).

Dredge and fill activities in waters of the United States must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to the maximum extent practicable at the project site. Mitigation, including avoiding, minimizing, rectifying, reducing, or compensating for resource losses, will be required to the extent necessary to ensure that the adverse effects to the aquatic site are minimal. Any loss of function at an aquatic site may require mitigation. Mitigation requirements will be determined during the Clean Water Act Section 404 review process.

If the activity you described would impact waters of the United States, the Denver Regulatory Office should be notified. Please include a map identifying dimensions of work in each aquatic site, the county, Township, Range and Section and the latitude and longitude of the activity in decimal degrees, along with a description of your request, to the Denver Regulatory Office mailbox located at [DenverRegulatoryMailbox@usace.army.mil](mailto:DenverRegulatoryMailbox@usace.army.mil) or contact the Denver Regulatory Office at 303-979-4120.

Sincerely,



Kiel Downing  
Chief, Denver Regulatory Office