



COLORADO

Division of Reclamation,  
Mining and Safety


Department of Natural Resources

## MINERALS PROGRAM INSPECTION REPORT

PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

<b>MINE NAME:</b> Midwestern Farms	<b>MINE/PROSPECTING ID#:</b> M-1993-059	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Prowers
<b>INSPECTION TYPE:</b> Surety-Related Inspection	<b>INSPECTOR(S):</b> Amy Eschberger	<b>INSP. DATE:</b> October 5, 2017	<b>INSP. TIME:</b> 08:45
<b>OPERATOR:</b> Midwestern Farms	<b>OPERATOR REPRESENTATIVE:</b> David King	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Surety Related	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$1,583,000.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> NA	<b>JOINT INSP. AGENCY:</b> Colorado Parks and Wildlife
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> December 28, 2017

**The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.**

**INSPECTION TOPIC:** Hydrologic Balance

**PROBLEM:** The Division has no evidence that the operator has a valid well permit for the exposed groundwater at the site. This is a problem pursuant to C.R.S 34-32.5-116(4)(h) and Construction Materials Rule 3.1.6(1)(a) for failure to comply with applicable Colorado water laws and regulations governing injury to existing water rights.

**CORRECTIVE ACTIONS:** The operator shall demonstrate that the operation is in compliance with the Office of the State Engineer (SEO), show evidence that the operator is taking measures to bring the site into compliance with the SEO, or backfill the expanded portion of the pit to at least two feet above the groundwater surface by the corrective action date specified.

According to a letter received from the SEO on October 13, 2017, compliance with their office may be gained by submitting an application to expand the use of well permit no. 53050-F. This permit currently covers an exposed surface area of 28.5 acres, and needs to be amended to cover the 73.5 acre expansion (to the existing 102 acres).

**CORRECTIVE ACTION DUE DATE:** February 11, 2018

## **OBSERVATIONS**

This was a surety-related inspection of the Midwestern Farms site (File No. M-1993-059) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) in response to a Surety Reduction request (Revision No. SR-1) submitted by the operator, and filed on August 25, 2017. The permittee, Midwestern Farms, was represented by David King during the inspection. Jackie Corday and Travis Black with Colorado Parks and Wildlife (CPW) were also present during the inspection. The site is located approximately 2.5 miles west of Holly, CO in Prowers County. The site is situated between US Hwy 50 and the Arkansas River. The main access to the site is off of Co Rd 30.5. Enclosed with this report are **Photos 1-30** taken during the inspection.

This is a 112c operation permitted for 1,479.2 acres (see enclosed Google Earth image of site showing permit area) to mine sand and gravel via the floating dredge method to maximum depths of 60 feet. The maximum allowed disturbed area at any time is 439.2 acres, as approved in Technical Revision No. 5 (Revision No. TR-5) on March 9, 2017. Revision No. TR-5 also revised the reclamation plan to reduce topsoil replacement depth to 8 inches, to eliminate wetland and tree planting along shorelines, to leave 36.5 acres of sandy beaches at the recommendation of CPW, and to change the post-mining land use of a 64 acre field from dryland farmland to rangeland and recreation. With approval of Revision No. TR-5, the Division recalculated the required financial warranty for the site, and determined the amount to be less than what was held. The operator submitted Revision No. SR-1 to account for the reclamation plan changes approved in TR-5 and for reclamation work completed at the site since the Division's last inspection on November 22, 2016.

During the inspection, the Division observed that a significant amount of reclamation work has been completed at the site, including removing the dredge and other equipment left by the operation, excavating a channel to connect the two ponds (ponds still referred to as western and eastern in this report), grading shorelines to the approved final slope configuration, replacing topsoil, and planting the cover crop. According to Mr. King, most of the earthwork was completed by April of 2017, and the cover crop was planted in late May or early June of 2017. The portions of pond shoreline which were 5-8 feet in height with near vertical slopes had been knocked down and graded to 3H:1V or flatter. The Division estimates the disturbed area to consist of approximately 398 acres. Revision No. TR-5 allowed for additional acreage east of the pond to be disturbed for topsoil salvage. However, these areas were never disturbed since there was enough topsoil stockpiled on site to place a depth of 8 inches across disturbed areas to be revegetated.

The Division estimates there to be approximately 102 acres of exposed groundwater on site. According to comments received from the Office of the State Engineer (SEO) on October 13, 2017 (in response to Revision No. SR-1; see enclosed letter), the pond is registered under permit no. 53050-F and operates under LAWMA's plan for augmentation decreed by the Division 2 Water Court case no. 02CW18. According to the 2017 Augmentation Plan Projection for LAWMA's case no. 02CW181, the plan is currently augmenting evaporation from 102 acres of exposed surface area. However, the SEO indicates the operator needs to make application to their office to re-permit the pond for the expansion in use of permit no. 53050-F. The well permit currently covers an exposed surface area of 28.5 acres, which is 73.5 acres less than the existing 102 acres exposed. The SEO states that an application to expand the use of permit no. 53050-F was received by their office on March 4, 2015. However, the SEO required additional information which, to date, has not been submitted to their office. Therefore, it appears the operator is not in compliance with the SEO with regard to the amount of exposed groundwater on site. The Division is citing a problem in this report for failure to comply with applicable Colorado water laws and regulations governing injury to existing water rights, as required by Rule 3.1.6(1)(a). The Division recommends the operator contact the SEO immediately and work to gain compliance with their office with regard to the amount of exposed groundwater on site. By the corrective action date, the operator will need to demonstrate to the Division that the operation is in compliance with the SEO, or show evidence that the

operator is taking measures to bring the site into compliance with the SEO.

The Division observed some erosion features along portions of the pond shoreline, particularly along the northern and southern shorelines. It appeared the erosion damage was more prevalent along the areas left as sandy shoreline which will not receive topsoil placement or revegetation. Pursuant to Rule 3.1.5(3), all grading shall be done in a manner to control erosion and siltation of the affected lands. Therefore, the Division recommends the operator repair this erosion damage and continue to monitor these areas. If the erosion problem persists, the sandy shorelines may need to be flattened to less than 3H:1V since these areas will not be stabilized by vegetative cover. The operator should be aware that the site cannot be released if significant erosion problems are present.

The Division observed a more serious erosion problem along the eastern pond shoreline. In this area, the shoreline had been graded to the approved 3H:1V or flatter slope gradient. However, the top 1-3 feet of the shoreline is eroding rapidly due to increased wave action in this portion of the pond. The eastern shoreline is not stable at this time and appears to be migrating eastward toward an active agricultural water ditch that runs approximately parallel to the shoreline. In some areas, the edge of shoreline was already within 20-25 feet of the ditch. The Division estimates approximately 2,000 feet of shoreline is eroding in this manner (see enclosed Google Earth image of site showing close-up view of disturbed area). Therefore, the Division determined the approved reclamation plan is not adequate for the eastern shoreline and required the operator to submit a Technical Revision to propose a shoreline stabilization plan. Accordingly, the Division was unable to continue processing Revision No. SR-1 until costs for stabilizing the shoreline were proposed. The Division approved the operator's request to extend the Revision No. SR-1 decision date to December 23, 2017 to allow time for addressing the shoreline erosion problem.

The erosion problem along the eastern pond shoreline is not cited as a problem in this report, because on November 2, 2017, the operator submitted Technical Revision No. 6 (Revision No. TR-6) to address this issue. The Division approved Revision No. TR-6 on November 7, 2017, which revised the reclamation plan to include supply and installation of a 6 foot wide by 2,000 foot long riprap blanket (6 inch nominal) along the eastern pond shoreline which will first be regraded to correct the existing erosion. The Division recalculated the required financial warranty for the site to include costs for regrading and installing a riprap blanket along the eastern pond shoreline, repairing some erosion gullies along other portions of the shoreline, seeding the site, and conducting weed control. The Division estimated the required financial warranty to be in the amount of \$382,406.00. Therefore, on November 17, 2017, the Division approved Revision No. SR-1 for a reduction of \$1,200,594.00 from the currently held bond of \$1,583,000.00.

It should be noted the Division observed several weeds present on site, primarily annual weeds (i.e., Russian thistle, Kochia, wild sunflowers), but also a few state-listed noxious weed species (i.e., Tamarisk, Field bindweed). Some early growth Tamarisk trees were observed along the pond shoreline. Mr. King indicated the operator mechanically removed most of the Tamarisk trees that had been present on site last year. However, given the closeness of the site to the Arkansas River (a Tamarisk source) and site conditions, it will most likely require continual Tamarisk control efforts. Early growth Field bindweed was present particularly in the northeastern portion of the disturbed area. Pursuant to Rule 3.1.10(6), methods of weed control shall be employed for all prohibited noxious weed species, and whenever invasion of a reclaimed area by other weed species seriously threatens the continued development of the desired vegetation. Weed control methods shall also be used whenever the inhabitation of the reclaimed area by weeds threaten further spread of serious weed pests to nearby areas. Because the site is undergoing initial revegetation efforts, it is especially vulnerable to weed invasion. The Division recommends the operator implement the approved weed control plan at the site (especially for state-listed noxious weed species) as soon as possible, and continue to monitor the growth and spread of weeds in disturbed areas.



## **PHOTOGRAPHS**



**Photo 1.** View of northwestern portion of disturbed area showing cover crop (sorghum) that was planted in early summer.



**Photo 2.** View looking north across western shoreline of western pond with slopes flatter than 3H:1V and vegetative cover consisting of native grasses, forbs, and weeds.





**Photo 3.** View looking southeast across western shoreline of western pond with slopes flatter than 3H:1V and vegetative cover consisting of native grasses, forbs, and weeds. Note early growth Tamarisk tree present along shoreline (indicated).



**Photo 4.** View looking southeast across western shoreline of western pond with slopes flatter than 3H:1V and vegetative cover consisting of native grasses, forbs, and weeds. Note presence of Tamarisk along shoreline (indicated).





**Photo 5.** View looking east toward east shoreline of western pond, showing some erosion features present along the sandy shoreline.



**Photo 6.** View looking south across western shoreline of western pond, showing slopes at 3H:1V or flatter with vegetative cover consisting of native grasses, forbs, and annual weeds.





**Photo 7.** View looking east across southern shoreline of western pond, showing slopes at 3H:1V or flatter with vegetative cover consisting of native grasses, forbs, and annual weeds.



**Photo 8.** View looking west across southern shoreline of western pond, showing slopes at 3H:1V or flatter with vegetative cover consisting of native grasses, forbs, and annual weeds.





**Photo 9.** View looking north across disturbed land between pond and southern permit boundary with good establishment of native grasses.



**Photo 10.** View looking west across disturbed land between pond and southern permit boundary with fewer native grasses and more annual weeds.





**Photo 11.** View of early growth Tamarisk present along southern shoreline of eastern pond. The operator will need to implement the approved weed control plan for the site, especially for state-listed noxious weed species such as Tamarisk.



**Photo 12.** View of erosion gully present along southern shoreline of eastern pond, just east of channel connecting the two ponds.





**Photo 13.** View looking west across southern shoreline of channel area between two ponds, showing slopes at 6H:1V as approved for this area.



**Photo 14.** View looking north toward northern shoreline of channel area between two ponds, showing shoreline left as sandy beach as approved.





**Photo 15.** View looking across southern shoreline of eastern pond, showing erosion features present.



**Photo 16.** View looking east across southern shoreline of eastern pond where steep bank was knocked down and the shoreline graded to 3H:1V or flatter.





**Photo 17.** View looking south across portion of eastern shoreline of eastern pond which was graded 3H:1V but is eroding and requires additional stabilization measures.



**Photo 18.** View looking south across portion of eastern shoreline of eastern pond which was graded 3H:1V but is eroding and requires additional stabilization measures. Note approximately upper 2-3 feet of bank has slope gradients of near vertical.





**Photo 19.** Closer view of portion of eastern shoreline of eastern pond with erosion problem requiring additional stabilization measures.



**Photo 20.** View looking north across portion of eastern shoreline of eastern pond graded to 6H:1V as approved.





**Photo 21.** View looking west across northeastern portion of disturbed area, showing cover crop (sorghum) that was planted in early summer.



**Photo 22.** Close-up view of ground in northeastern portion of disturbed area, showing presence of Field bindweed. The operator will need to implement the approved weed control plan for the site, especially for state-listed noxious weed species such as Field bindweed.





**Photo 23.** View looking east across disturbed area between ponds, showing cover crop (sorghum) that was planted in early summer.



**Photo 24.** View looking north across western shoreline of eastern pond left as sandy beach as approved. Note presence of annual weeds which will require implementation of approved weed control plan for site.





**Photo 25.** View looking southeast across western shoreline of eastern pond, showing erosion features present along this portion of the shoreline.



**Photo 26.** View of edge of peninsula along western shoreline of eastern pond. Its rockier surface appears to protect the slope fairly well from wave action erosion.





**Photo 27.** View looking south across western shoreline of eastern pond left as sandy beach as approved.



**Photo 28.** View looking northwest across disturbed area between ponds, showing cover crop (sorghum) that was planted in early summer





**Photo 29.** View looking west across disturbed area between ponds where annual weeds are abundant. The operator will need to implement the approved weed control plan for the site, including for nuisance weed species which could hinder growth of desired vegetation.



**Photo 30.** View looking west across disturbed land north of western pond and south of access road. Note abundance of annual weeds in this area. The operator will need to implement the approved weed control plan for the site, including for nuisance weed species which could hinder growth of desired vegetation.



### GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>NA</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

#### Inspection Contact Address

David King  
Easter Colorado Aggregates, RLLLP  
P.O. Box 580  
Rye, CO 81069

Enclosure: Google Earth image of site showing permit area  
Google Earth image of site showing close-up of disturbed area  
Letter from SEO, received October 13, 2017

CC: George Tempel  
Midwestern Farms  
P.O. Box 246  
Wiley, CO 81092

Jackie Corday, CPW via email at: [Jacki.corday@state.co.us](mailto:Jacki.corday@state.co.us)  
Mel DePra via email at: [mfdepra@gmail.com](mailto:mfdepra@gmail.com)  
Wally Erickson, DRMS



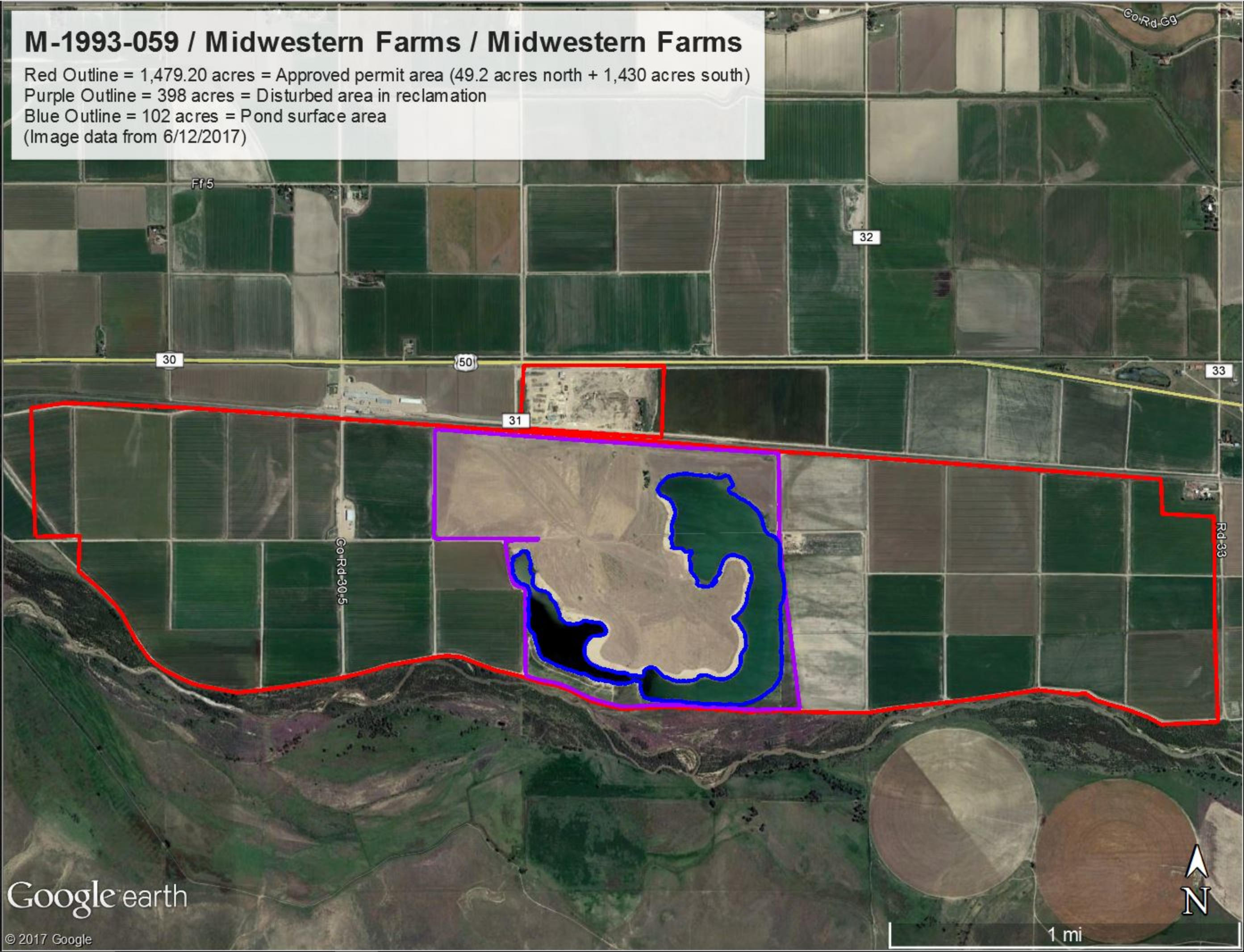
# M-1993-059 / Midwestern Farms / Midwestern Farms

Red Outline = 1,479.20 acres = Approved permit area (49.2 acres north + 1,430 acres south)

Purple Outline = 398 acres = Disturbed area in reclamation

Blue Outline = 102 acres = Pond surface area

(Image data from 6/12/2017)





# M-1993-059 / Midwestern Farms / Midwestern Farms (Close-Up of Disturbed Area)

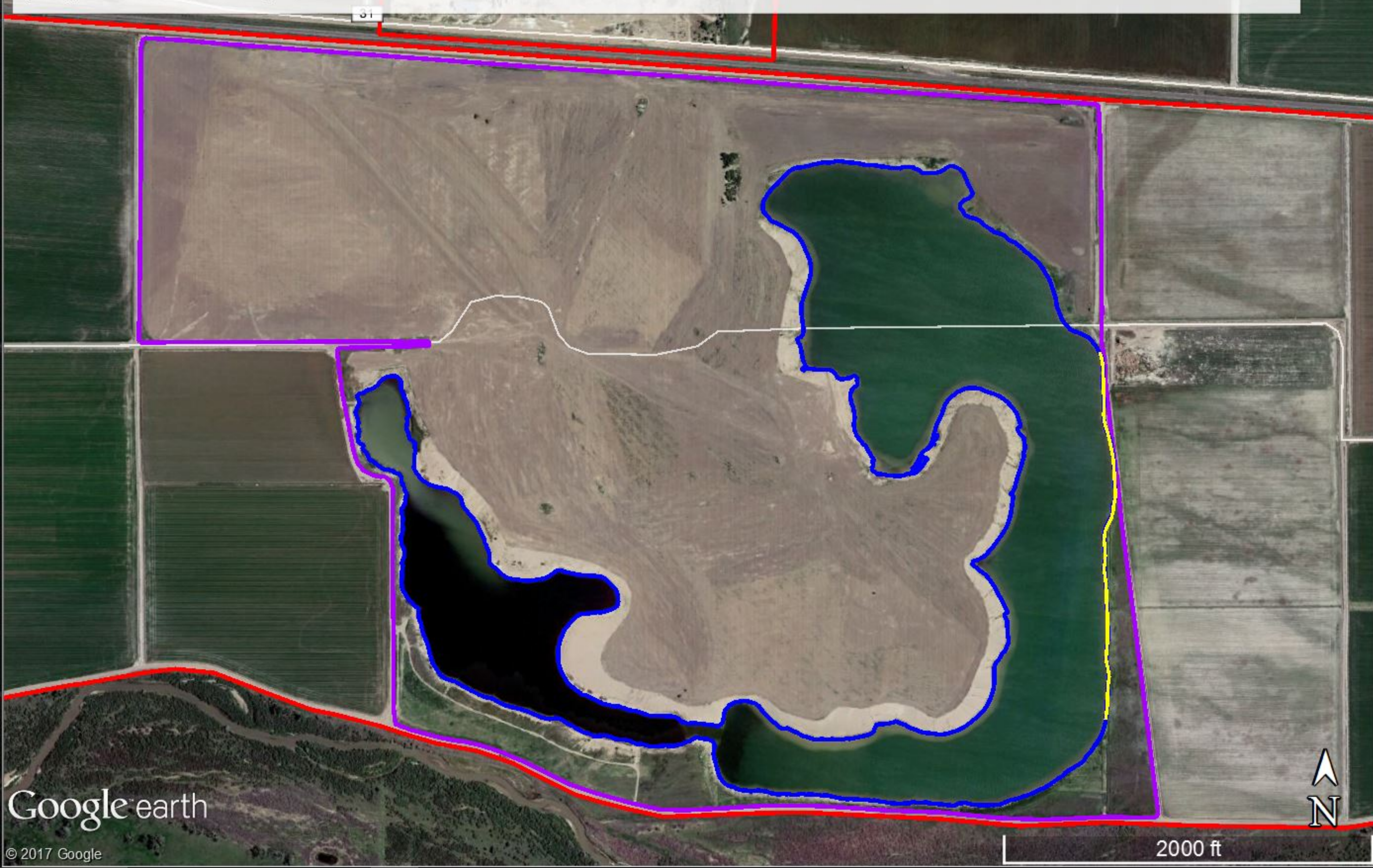
Red Outline = 1,479.20 acres = Approved permit area (49.2 acres north + 1,430 acres south)

Purple Outline = 398 acres = Disturbed area in reclamation

Blue Outline = 102 acres = Pond surface area

Yellow Outline = 2,000 feet = Approximate length of pond shoreline requiring additional stabilization measures

(Image data from 6/12/2017)







COLORADO

Division of Water Resources

Department of Natural Resources

Office of the State Engineer

1313 Sherman St, Suite 821

Denver, CO 80203

## Response to Reclamation Permit Financial Warranty Reduction Request Consideration

DATE: October 13, 2017

TO: Amy Eschberger, Environmental Protection Specialist

CC: Division 2 Office; District 67 Water Commissioner

FROM: Caleb Foy, P.E.

RE: Midwestern Farms, File No. M-1993-059  
Operator: Prowers County  
Contact: George Tempel  
Sec. 18, Twp. 23S, Rng. 42W, 6<sup>th</sup> P.M., Prowers County

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### CONDITIONS FOR APPROVAL

- ☒ If storm water is contained on-site, the applicant should be aware that, unless the storm water detention structures can meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, the structure may be subject to administration by this office. The applicant should review DWR's *Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado* (available at: <http://water.state.co.us/DWRIPub/Documents/DWR%20Storm%20Water%20Statement.pdf>) to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use *Colorado Stormwater Detention and Infiltration Facility Notification Portal*, located online at: <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>, to meet the notification requirements.
- ☒ The proposed operation will consume ground water by: ☒ evaporation, ☒ dust control, ☒ reclamation, ☒ water removed in the mined product, ☒ processing, ☐ other:.
- All conditions of approval for well permit no. 53050-F terms and conditions of the decree entered by the Division 2 Water Court in case no. 02CW181 shall be followed.
- ☒ Should the combined exposed surface area of the two gravel pit ponds exceed 28.5 acres, as allowed by permit no. 53050-F, the applicant must make application to this office to repermit the gravel pit ponds for the expansion in use of permit no. 53050-F.

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**COMMENTS:** The two gravel pit ponds are currently registered under permit no. 53050-F and operate under LAWMA's plan for augmentation decreed by the Division 2 Water Court in case no. 02CW181. According to the 2017 Augmentation Plan Projection for LAWMA's case no. 02CW181, the plan is currently augmenting evaporation from 102 acres of exposed surface area.

Office of the State Engineer

1313 Sherman Street, Room 821, Denver, CO 80203 P 303.866.3581

[www.water.state.co.us](http://www.water.state.co.us)





An application to expand the use of permit no. 53050-F was received by this office on March 4, 2015 under receipt no. 3668653; however, the application was returned to the applicant for additional information by letter dated November 18, 2015 (a copy is available online at: <http://dwrweblink.state.co.us/dwrweblink/0/doc/2889322/Page1.aspx?searchid=b5637bc4-5271-4f22-94c0-9debee56db18>). To date, the applicant has not responded to the request for additional information.