



2024

# Quarterly Report

April 1, 2024 – June 30, 2024



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## Creating Conservation Through Partnerships



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## I. Program Overview

This report describes the activities conducted in the second quarter of 2024 under the three sister Candidate Conservation Agreements for the Texas hornshell mussel (THM) (*Popenaias popeii*) and other covered species. The Center for Environmental Health Monitoring and Management (CEHMM) administers a Candidate Conservation Agreement (CCA) for federal land and a Candidate Conservation Agreement with Assurances (CCAA) for non-federal and non-state (i.e. private) lands. The New Mexico State Land Office (SLO) administers a CCAA for state trust lands. The three conservation agreements are referred to collectively herein as the “CCA/As.” To the extent practicable, CEHMM and the SLO jointly implement the CCA/As in cooperation with the Bureau of Land Management (BLM) and the U.S. Fish and Wildlife Service (Service) through a common governance structure.

The purpose of the CCA/As is to:

- Develop, coordinate, and implement conservation actions to reduce and/or eliminate known threats to the THM and other covered species on federal, state, and private lands.
- Support ongoing efforts to maintain viable populations of THM and other covered species in currently occupied and suitable habitats.
- Encourage the development and protection of occupied and suitable THM habitat by incentivizing Participants to implement specific conservation measures.

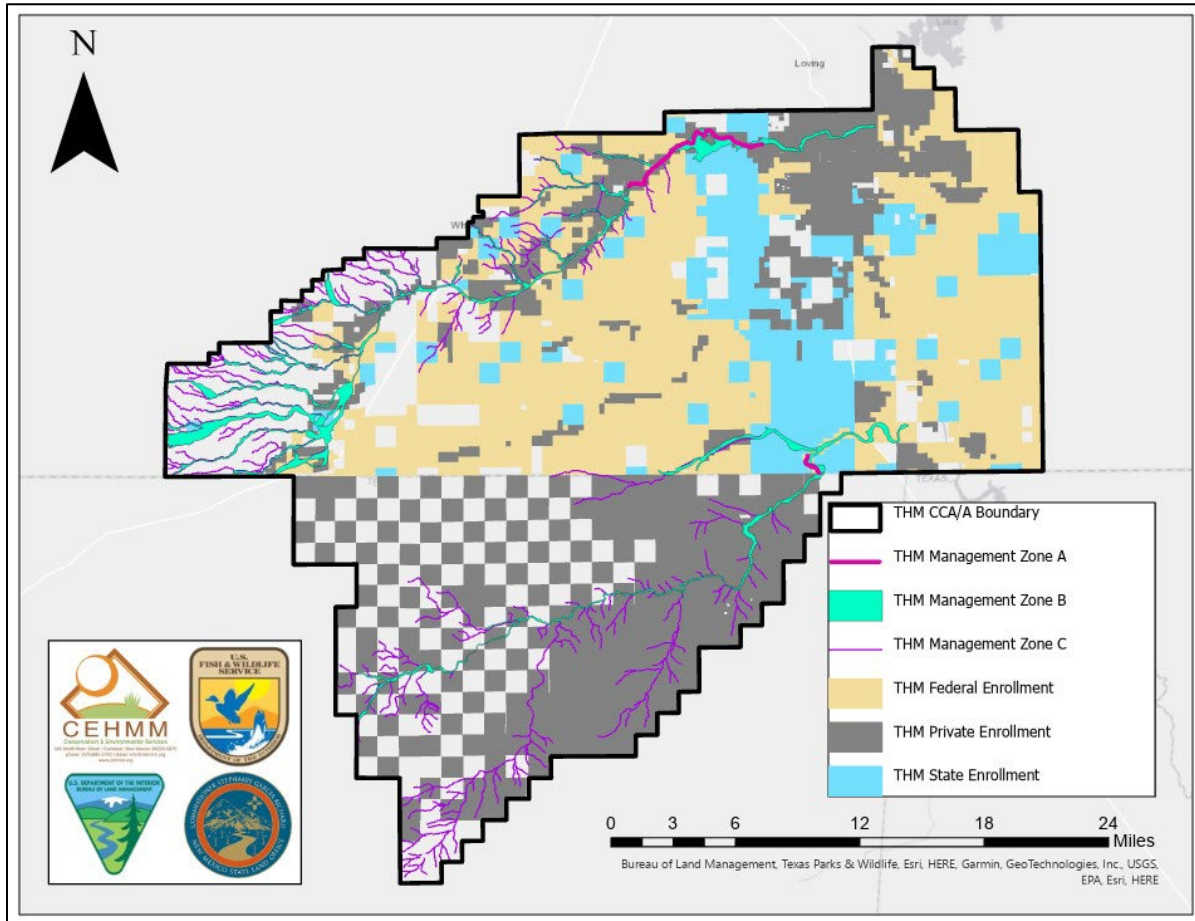
Under the CEHMM CCA, federal lessees, operators, or permittees, who join by voluntarily signing a Certificate of Participation (CP), receive a high degree of certainty that additional restrictions would not be placed on their otherwise legal activities if a covered species is listed. The CEHMM CCAA provides enrollees with incentives for voluntary conservation of at-risk species on non-federal lands and the SLO CCAA provides enrollees with incentives for voluntary conservation of at-risk species on state lands. By signing a Certificate of Inclusion (CI) under the CEHMM CCAA, the lessee, owner, or permittee voluntarily commits to implement specific conservation measures for the species on non-federal lands. By signing a CI under the SLO CCAA, the lessee, owner, or permittee voluntarily commits to implementing specific conservation measures for the species on state lands. Under the CCAAs, if one of the covered species is listed, private landowners or state land enrollees receive assurances that additional restrictions will not be placed on their otherwise legal activities.

Additional details about the CCA/As are available in the 2018 annual report and in the agreements themselves, which can be accessed at:

- <http://cehmm.org/thmreports>
- <https://www.fws.gov/species/texas-hornshell-popenaias-popeii>

## II. Enrollment and Funding

CEHMM administers 42 CIs under the CCAA and 33 CPs under the CCA. To date, CEHMM has enrolled 293,504.34 acres in the CCAA and 391,278.49 acres in the CCA. The SLO administers 28 CIs and has 112,284.17 acres enrolled in the CCAA. Fifty Participants are enrolled in multiple CCA/As due to their combination of land ownership types. The total amount of land enrolled in the CCA/As in 2024 is 797,067.00 acres. Figure 1 shows the CCA/A boundary, CCA/A management zones, and land ownership.



**Figure 1.** CCA/A Boundary, CCA/A Management Zones, and Land Ownership.

Annual acreage can vary since the Participants who opted for “All Activities Enrollment” are able to add or remove enrolled acreage based on their current areas of activity. The same acres can also be enrolled more than once by different Participants who are using the land for different activities; the totals therefore reflect multiple enrollments of the same parcels. CCA/A Participant and parcel acreage enrollment data for 2024 are shown in Table 1.

**Table 1.** CCA/A Enrollment 2024.

	CI	CP	Acres Enrolled in CCA	Acres Enrolled in CCAA
<b>CEHMM</b>	42	33	391,278.49	293,504.34
<b>SLO</b>	28	N/A	N/A	112,284.17
<b>TOTAL</b>	<b>70</b>	<b>33</b>	<b>391,278.49</b>	<b>405,788.51</b>

### III. Mitigation of Impacts to Habitat

During the second quarter of 2024, CEHMM received a total of 35 notices of new surface disturbances from industry, with 90.93 acres of new surface disturbances documented. These disturbances equated to \$84,550.89 in Habitat Conservation Fees earned under the CEHMM CCA and CCAA. The SLO received 32 notices of new surface disturbances from industry, with 141.11 acres of new surface disturbances documented during the second quarter of 2024. These disturbances earned the SLO CCAA \$159,227.22 in Habitat Conservation Fees. All of these disturbances took place in Management Zone D. CEHMM worked with the Participants to ensure all the proper conservation measures were followed including Reasonable and Prudent Practices for Stabilization (RAPPS) and Spill Prevention Control and Countermeasure (SPCC). These practices included water bars, silt fences, culverts, erosion blankets, waddles, and reseeded. These details are shown in Table 2 below.

**Table 2.** New Surface Disturbances in the Second Quarter of 2024.

	Well Pads	ROWs	Infrastructure	Total
<b>CEHMM</b>				
Notifications of New Surface Disturbances	5	24	6	<b>35</b>
Acres Disturbed	25.79	56.09	9.05	<b>90.93</b>
<b>SLO</b>				
Notifications of New Surface Disturbances	6	25	1	<b>32</b>
Acres Disturbed	63.95	70.74	6.42	<b>141.11</b>
<b>COMBINED</b>				
Notifications of New Surface Disturbances	11	49	7	<b>67</b>
Acres Disturbed	89.74	126.83	15.47	<b>232.04</b>

### IV. Compliance Monitoring

The CCA/As require CEHMM and the SLO to submit an annual compliance verification to the Service for each enrolled Participant. CEHMM assists the SLO with compliance verification through a Memorandum of Agreement for joint implementation of the CCAAs. During quarter two, CEHMM’s CCA/A compliance monitoring included inspection for failure to submit new surface disturbances. CEHMM utilized the New Mexico Oil Conservation Division (NMOCD) data, BLM right-of-way data, and field surveying to conduct inspections. In the second quarter, CEHMM conducted two days of field compliance monitoring to verify if projects had been built at that time. Through these efforts, three previously not-submitted projects were recovered and assessed for Habitat Conservation Fees.

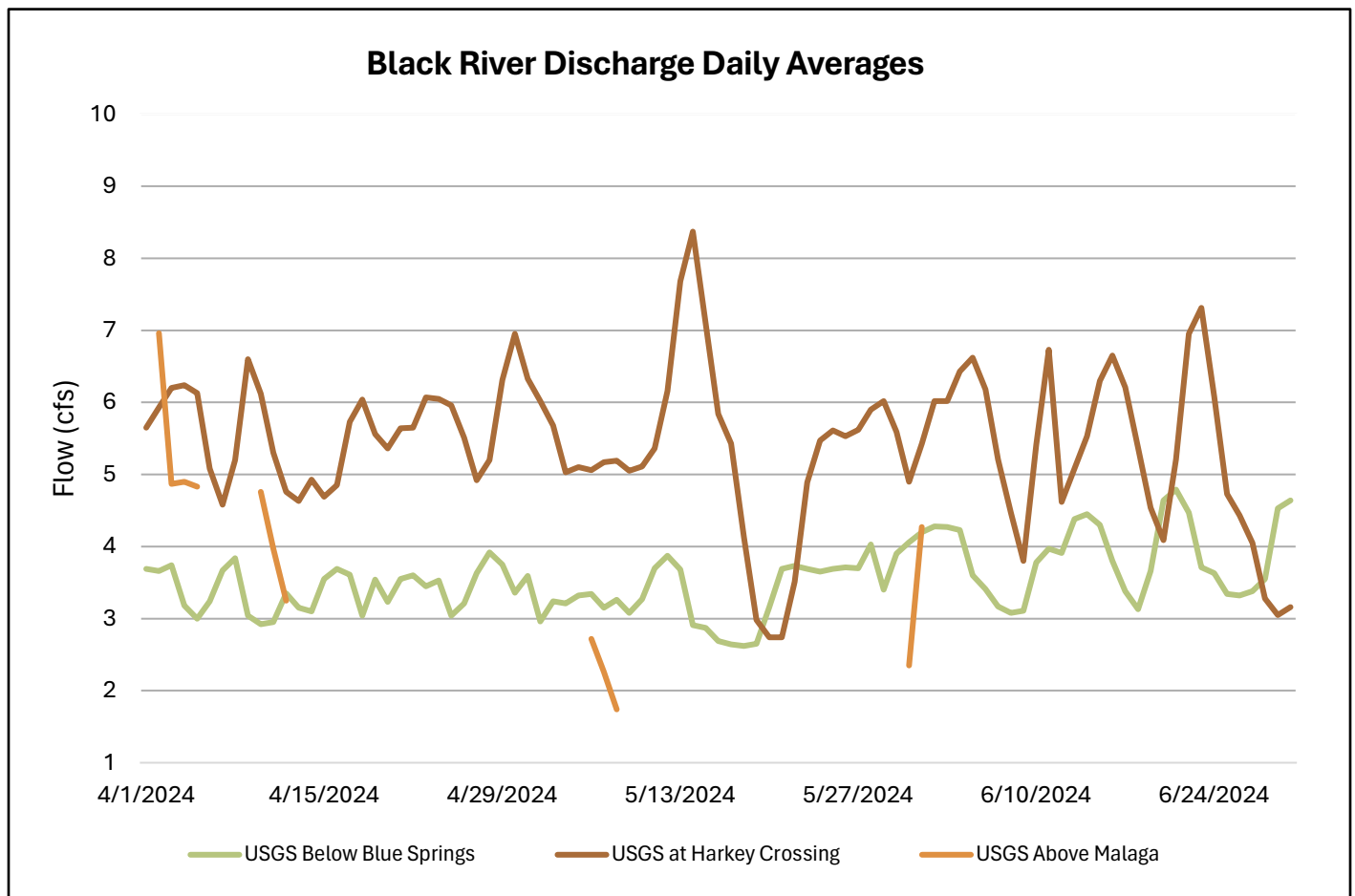
## V. River Monitoring

### Black River Monitoring

CEHMM staff utilizes three United States Geological Survey (USGS) gages to monitor the daily flow of the Black River. In order from the most upstream to the most downstream, the USGS gages that are monitored in the Black River are:

- Black River Below Blue Springs NR Whites City, NM - 08405350
- Black River at Harkey Crossing NR Malaga, NM – 08405400
- Black River Above Malaga, NM – 08405500

CEHMM staff has set alarms for all gages in the Black River; when flows are nearing or below 3.0 cubic feet per second (cfs), they are notified and can monitor the river more closely. During periods of low flow which may pose a threat to the THM, Participants in the CCA/A who withdraw water from or near the Black River are notified to allow them to implement any pumping curtailment conservation measures contained in their CIs/CPs. During quarter two, no low flow notifications were sent out. The USGS Above Malaga gage did not provide flow data this quarter, but physical observation confirmed that the Black River was flowing to the gage. Along with USGS gage monitoring, CEHMM physically monitored the Black River bi-weekly during quarter two. See Figure 2 for the second quarter daily average flow rates.

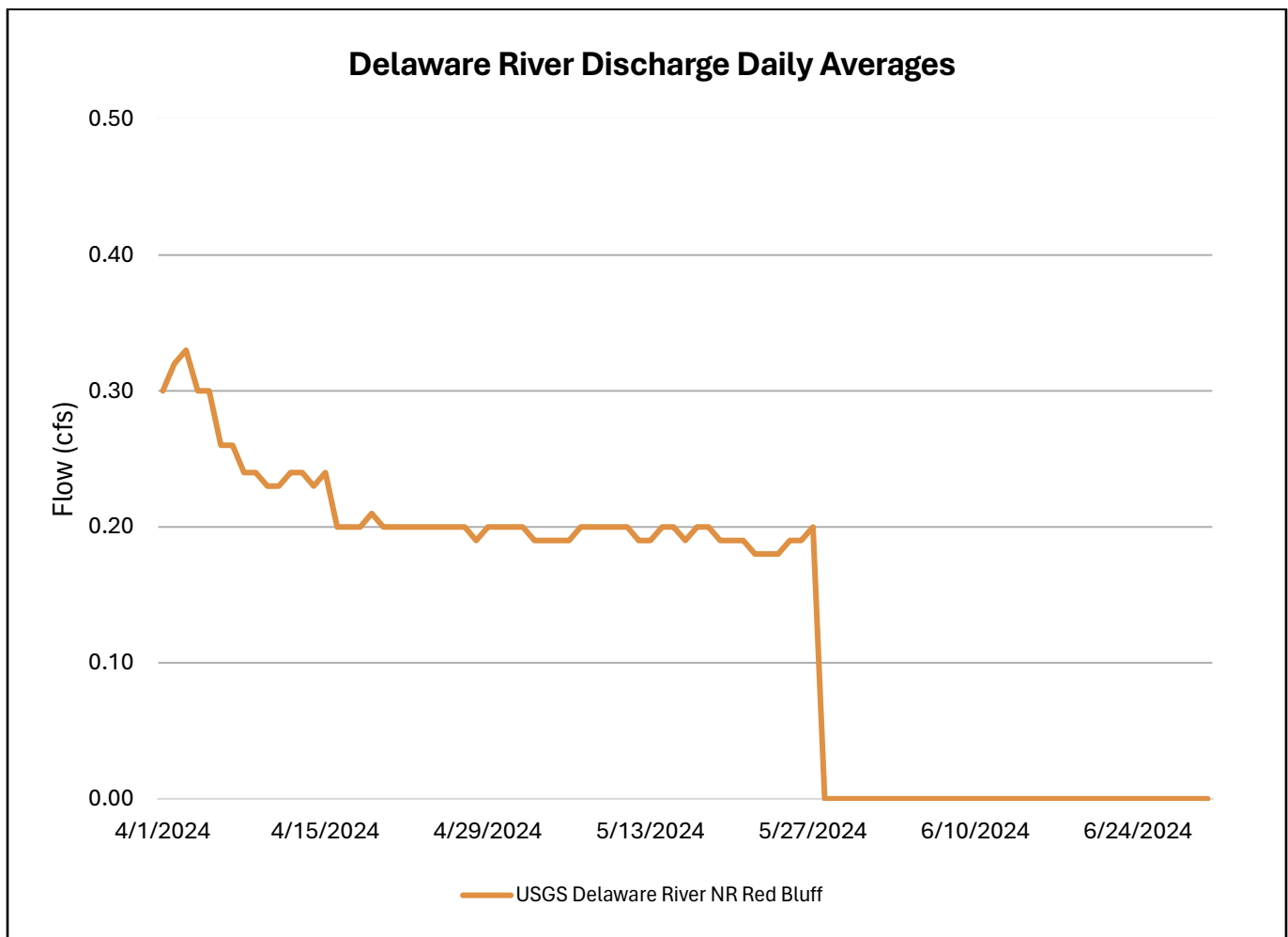


**Figure 2.** Black River Daily Average Discharge according to USGS stream gage data.



### **Delaware River Monitoring**

CEHMM staff utilizes the Delaware River NR Red Bluff, NM USGS gage to monitor the daily flow of the Delaware River. Along with USGS gage monitoring, CEHMM physically monitored the Delaware River bi-weekly during quarter two. See Figure 3 for the second quarter daily average flow rates.



**Figure 3.** Delaware River Daily Average Discharge according to USGS stream gage data.



## VI. Species Surveys

### Texas Hornshell Mussel Surveys

In June of 2024, CEHMM staff, the New Mexico Department of Game and Fish (NMDGF), the University of Miami-OH, and Shedd Aquarium employees, conducted annual transect mussel surveys as part of an ongoing THM population study. These tactile surveys involved manually searching for mussels by feeling the substrate of the undercut banks as well as the midchannel of the Black River. The surveys took place at historically surveyed riffle and pool locations within the occupied stretch of the Black River. By comparing current data with historical records, we aim to monitor changes in THM population size, distribution, and health, contributing to conservation efforts for this endangered species.

### Host Fish Surveys

In May of 2024, CEHMM staff, Industry Partners, and the NMDGF completed annual host fish surveys on the Black and Delaware rivers. The surveys were conducted using trammel nets and a backpack shocker. Information such as fish length, weight, and species was collected. When a blue sucker or gray redbhorse was caught, it was given a pit tag and then released, allowing us to monitor future recaptures.

## VII. Grants

### Sensor Array Study

In 2021, CEHMM submitted a grant proposal to the National Fish and Wildlife Foundation (NFWF) to fund a Sensor Array Study to better understand in situ conditions experienced by the endangered THM in the Black River. The NFWF awarded the grant in June 2022. The project established a sensor array within the occupied reach of the Black River in southeastern New Mexico. The water quality data loggers will allow CEHMM to monitor and better understand the water quality conditions endured by the endangered THM. Through the establishment of the sensor arrays, CEHMM will be able to further monitor and gain data to determine if, when, and for what period of time the THM are enduring intolerable environmental conditions. The results of this data collection are expected to provide key insights into environmental gradients among microhabitats, especially as we prepare for further climate driven variation.



**Figure 4.** CEHMM staff cleaning data logger housing units.

**Progress:** During the second quarter of 2024, CEHMM assessed the condition of the data loggers, cleaned the housing units for the loggers to ensure proper data was being collected, and replaced and recalibrated the data logger sensor caps.

### **Instream Flow Program Initiative for the THM**

In 2020, CEHMM and the SLO partnered on a proposal to the NFWF to fund the development of an instream flow program to protect the endangered THM and other at-risk species in the Black and Delaware rivers. The NFWF awarded the grant in 2021. This funding requires an in-kind matching contribution from the CCA/A program, and in 2021, the Executive Committee (EC) set aside \$250,000.00 for the match. Some or all of the match is being provided through in-kind contributions from the SLO and CEHMM, but the set-aside amount ensures the matching fund requirement is met. The overall objective of the initiative is to provide instream flow for the THM in the Black and Delaware rivers. This may be achieved through the purchase or lease of water rights, or through alternative mechanisms such as forbearance agreements or strategies that make water available for instream flow during otherwise dry periods or when high flows are needed for life history requirements.

**Progress:** During quarter two, CEHMM, the Consulting Team, and SLO met with a water user to gauge interest in potentially relocating the point of diversion downstream to promote water flow through the occupied reach. The meeting included introductions, objectives, and potential outcomes of moving the point of diversion. Future meetings are planned for quarter three.

## **VIII. Outreach**

### **Carlsbad High School Occupation Day**

In April 2024, CEHMM attended the Carlsbad High School Occupation Day and delivered three presentations to junior and senior class students. The presentations covered conservation and natural resources, careers in conservation and natural resources, and a day in the life of a wildlife biologist. Along with the presentations, CEHMM also had a booth that students could visit to get more information about CEHMM and our work.

### **NMED Southern Wetlands Roundtable**

In April 2024, CEHMM attended the New Mexico Environment Department (NMED) Southern Wetlands roundtable to learn about projects, regulatory updates, and environmental efforts taking place in New Mexico. A few projects of interest included the New Mexico Riparian Habitat Map, Tularosa Slab Aquatic Organism Passage, and the Systematic Conservation Planning with Marxan for NM Wetlands. For additional information about these projects, please visit New Mexico Environment Department website:

- <https://www.env.nm.gov/surface-water-quality/wetlands-projects/>

### **Whiteface Elementary School Presentation**

In May 2024, Matt Ramey presented to the entire 3rd-grade class of Whiteface Elementary School during their annual field trip to the Black River Center for Learning. The presentation covered the history of

CEHMM, the development of the candidate conservation agreements, the biology of the Texas Hornshell, and the hydrology and water quality necessary for the mussels to survive.

### **CEHMM 20 Year Anniversary**

On May 9, 2024, CEHMM celebrated its 20th anniversary. CEHMM invited stakeholders and the public to join us in recognizing and celebrating the accomplishments and achievements made throughout the years.

### **Inspired by Science Summer Camp**

In June 2024, CEHMM staff assisted the non-profit program Inspired by Science in Carlsbad, New Mexico. Throughout the week, CEHMM staff helped the children enrolled in the camp complete STEM projects such as an egg drop, building battery-powered cars, making slime, etc. Each day, the kids learned new scientific terminology relevant to the day's activities. This camp aims to help local children learn and experience how science can be both fun and engaging.

## IX. Signature

If you have any questions, please contact Matt Ramey at (575)-885-3700.

Signed: \_\_\_\_\_

Emily K. Wirth  
Executive Director

Date: \_\_\_\_\_



## X. Appendix A – USGS Discharge Gages in the CCA/A Boundary

