

January 31, 2023

Brent Esplin
Regional Director
Missouri Basin and Arkansas-Rio Grande-Texas Gulf Regions
Bureau of Reclamation
P.O. Box 36900
Billings, MT 59107-6900

Subject: Southern Delivery System Permit Compliance Annual Report (Calendar Year 2022)

Mr. Esplin:

Colorado Springs Utilities, the Southern Delivery System (SDS) Project Manager, hereby submits the attached Permit Compliance Annual Report (PCAR) for Calendar Year 2022. This report demonstrates the SDS Project's progress in successfully implementing the commitments prescribed in the SDS Record of Decision (ROD), Reference No.: GP-2009-01, as well as meeting the annual reporting requirements for other programmatic permits and approvals.

Due to SDS becoming operational in April 2016, this report addresses compliance for both construction and operational activities associated with the project. Applicable compliance activities associated with Phase II planning and design will be incorporated into future PCARs; however, until Phase II enters the construction phase, all future reports will focus on operational compliance.

I certify that, to the best of my knowledge, the content of this report is true and accurate. As noted herein, SDS has complied with all applicable permit requirements.

Please contact me at 719-668-8740, with any questions regarding the attached report.

Sincerely,

A handwritten signature in blue ink that reads "Lisa Barbato". The signature is written in a cursive, flowing style.

Lisa Barbato
Chief System Planning and Projects Officer

Enclosure

cc: City of Fountain, Dan Blankenship, Director of Utilities

Colorado Department of Public Health and Environment, Jill Hunsaker Ryan, Director,
Water Quality Control Division

Colorado Parks and Wildlife, Brett Ackerman, Regional Manager, Southeast Region
Fountain Creek Watershed Flood Control and Greenway District, Bill Banks, Executive
Director

Pueblo County Planning & Development, Carmen Howard, Director

Pueblo West Metropolitan District, Jim Blasing, Director of Utilities

Security Water and Sanitation District, Roy Heald, District Manager

U.S. Army Corps of Engineers, Patrick Stevens, Lieutenant Colonel, U.S. Army, District
Commander

Bureau of Reclamation, Terry Stroh, Environmental Specialist

El Paso County, Craig Dossey, Executive Director, Planning and Community Development
Department

Southern Delivery System Permit Compliance Annual Report Calendar Year 2022

Prepared for:

Bureau of Reclamation

**Colorado Department of Public Health and
Environment**

Colorado Parks and Wildlife

El Paso County

Pueblo County

**Fountain Creek Watershed, Flood Control, and
Greenway District**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager
on behalf of the SDS Participants**

January 2023

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Acronyms and Abbreviations

1041 Permit	Pueblo County 1041 Permit No. 2008-002
BMPs	Best Management Practices
CPW	Colorado Parks and Wildlife
CDPHE	Colorado Department of Public Health and Environment
CWC	Colorado Wildlife Commission
CWCB	Colorado Water Conservation Board
EMS	Environmental Management System
FEIS	Final Environmental Impact Statement
FWMP	Fish and Wildlife Mitigation Plan
mgd	million gallons per day
NEPA	National Environmental Policy Act
PCAR	Permit Compliance Annual Report
PDC	Pueblo Dam Connection
Reclamation	Bureau of Reclamation
ROD	Record of Decision
SDS	Southern Delivery System Project
SDS Participants	City of Colorado Springs, City of Fountain, Security Water District, and Pueblo West Metropolitan District
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey
WRRF	water resource recovery facility
WTP	water treatment plant

Executive Summary

The Southern Delivery System Project (SDS) is a regional water delivery system that serves the City of Colorado Springs (via Colorado Springs Utilities), City of Fountain, Security Water District, and Pueblo West Metropolitan District (collectively, the SDS Participants).

Purpose

The purpose of the SDS Permit Compliance Annual Report (PCAR), submitted by Colorado Springs Utilities as the SDS Project Manager, is to demonstrate progress in successfully implementing the commitments as prescribed in the Record of Decision (ROD) to the Bureau of Reclamation (Reclamation). Colorado Springs Utilities also reviewed the other seven programmatic permits/approvals that are in place to identify the annual reporting requirements of each. The following five permits/approvals have annual reporting requirements addressed in this report:

- El Paso County Location Approvals
 - Planning Commission Resolution U-09-002, March 2, 2010, Southern Delivery System Raw Water Pipelines, Amended by Resolution U-12-001, October 18, 2012
 - Planning Commission Resolution U-09-003, March 2, 2010, Southern Delivery System Finished Water Pipelines, Amended by Resolution U-12-003, October 18, 2012
 - Planning Commission Resolution U-09-004, March 16, 2010, Southern Delivery System Bradley Pump Station
 - Planning Commission Resolution U-09-005, March 16, 2010, Southern Delivery System Upper Williams Creek Reservoir, Amended by Resolution U-12-002, October 18, 2012
 - Planning Commission Resolution U-09-007, March 16, 2010, Southern Delivery System Exchange Flow System, Amended by Resolution U-12-004, October 18, 2012
- El Paso County 1041 Permits
 - Development Services Department, File No. AASI-13-002, Southern Delivery System Finished Water Section 1C, Administratively Approved January 2, 2014
 - Development Services Department, File No. AASI-13-005, Southern Delivery System Finished Water Section 3, Administratively Approved January 29, 2014
 - Development Services Department, File No. AASI-14-001, Southern Delivery System Raw Water Pipeline Section S4AC, Administratively Approved February 18, 2014
- Pueblo County Board of County Commissioners Resolution No. P&D 09-22 approving 1041 Permit No. 2008-02, April 21, 2009

- Fountain Creek Watershed, Flood Control, and Greenway District (District) Resolution 2010-01, February 26, 2010
- Colorado Department of Public Health and Environment (CDPHE) 401 Certification No. 4224, April 23, 2010, which includes the requirement to provide copies of all other annual reports

The following two programmatic permits/approvals do not specifically include annual reporting requirements:

- Memorandum of Agreement with the State of Colorado, Department of Natural Resources on behalf of the Colorado Division of Wildlife regarding the Fish and Wildlife Mitigation Plan, May 18, 2010
- United States Army Corps of Engineers (USACE) Clean Water Act Section 404 Individual Permit No. SPA-2005-00131-SCO, May 20, 2010

Reporting Requirements

The ROD requires annual reporting to summarize the SDS's progress made in implementing the ROD commitments. Colorado Springs Utilities has elected to develop a single SDS PCAR that addresses the ROD commitments and the other annual or periodic reporting requirements included in the programmatic permits/approvals that are listed above. This 2022 report focuses on commitments associated with project operations and mitigation project progress.

Summary of SDS Activities During this Reporting Period

Vegetation restoration efforts continued on applicable Phase I work packages. Structure demolition on properties associated with the Bostrom Reservoir site was completed.

Compliance with programmatic permit/approval commitments and construction permit requirements continued to be tracked in 2022 through an Environmental Management System (EMS).

Future SDS Activities

Compliance monitoring will continue for ongoing operational activities. Phase II construction activities have not been scheduled. There have been no material changes to the project as described in the 2009 EIS.

1.0 Introduction

1.1 Purpose

The purpose of the SDS Permit Compliance Annual Report (PCAR), submitted by Colorado Springs Utilities as SDS Project Manager, is to demonstrate the progress in successfully implementing the commitments identified in the ROD (Reclamation 2009). This PCAR has been prepared to be consistent with the ROD and other permits issued by agencies having jurisdiction over SDS, specifically the following programmatic permits/approvals:

- Bureau of Reclamation Record of Decision for the Southern Delivery System Final Environmental Impact Statement, Record of Decision Reference No. GP-2009-01, March 20, 2009
- El Paso County Location Approvals
 - Planning Commission Resolution U-09-002, March 2, 2010, Southern Delivery System Raw Water Pipelines, Amended by Resolution U-12-001, October 18, 2012
 - Planning Commission Resolution U-09-003, March 2, 2010, Southern Delivery System Finished Water Pipelines, Amended by Resolution U-12-003, October 18, 2012
 - Planning Commission Resolution U-09-004, March 16, 2010, Southern Delivery System Bradley Pump Station
 - Planning Commission Resolution U-09-005, March 16, 2010, Southern Delivery System Upper Williams Creek Reservoir, Amended by Resolution U-12-002, October 18, 2012
 - Planning Commission Resolution U-09-007, March 16, 2010, Southern Delivery System Exchange Flow System, Amended by Resolution U-12-004, October 18, 2012
- El Paso County 1041 Permits
 - Development Services Department, File No. AASI-13-002, Southern Delivery System Finished Water Section 1C, Administratively Approved January 2, 2014
 - Development Services Department, File No. AASI-13-005, Southern Delivery System Finished Water Section 3, Administratively Approved January 29, 2014
 - Development Services Department, File No. AASI-14-001, Southern Delivery System Raw Water Pipeline Section S4AC, Administratively Approved February 18, 2014
- Pueblo County Board of County Commissioners Resolution No. P&D 09-22 approving 1041 Permit No. 2008-02, April 21, 2009
- Fountain Creek Watershed, Flood Control, and Greenway District (District) Resolution 2010-01, February 26, 2010

- Colorado Department of Public Health and Environment (CDPHE) 401 Certification No. 4224, April 23, 2010, which includes the requirement to provide copies of all other annual reports

Colorado Springs Utilities reviewed all eight of the programmatic permits/approvals that are in place to identify annual reporting requirements of each. The following two programmatic permits/approvals do not specifically include annual reporting requirements:

- Memorandum of Agreement with the State of Colorado, Department of Natural Resources on behalf of the Colorado Division of Wildlife regarding the Fish and Wildlife Mitigation Plan, May 18, 2010
- United States Army Corps of Engineers Clean Water Act Section 404 Individual Permit No. SPA-2005-00131-SCO, April 26, 2010

Colorado Springs Utilities prepared an Environmental Commitment Plan and developed a Phase I Environmental Management System (EMS) to track compliance with the commitments associated with all of the programmatic permits/approvals.

1.2 Southern Delivery System Project Overview

SDS is a regional water delivery project that serves the City of Colorado Springs (via Colorado Springs Utilities), City of Fountain, Security Water District, and Pueblo West Metropolitan District (collectively, the SDS Participants).

The first phase of SDS includes construction of the following facilities:

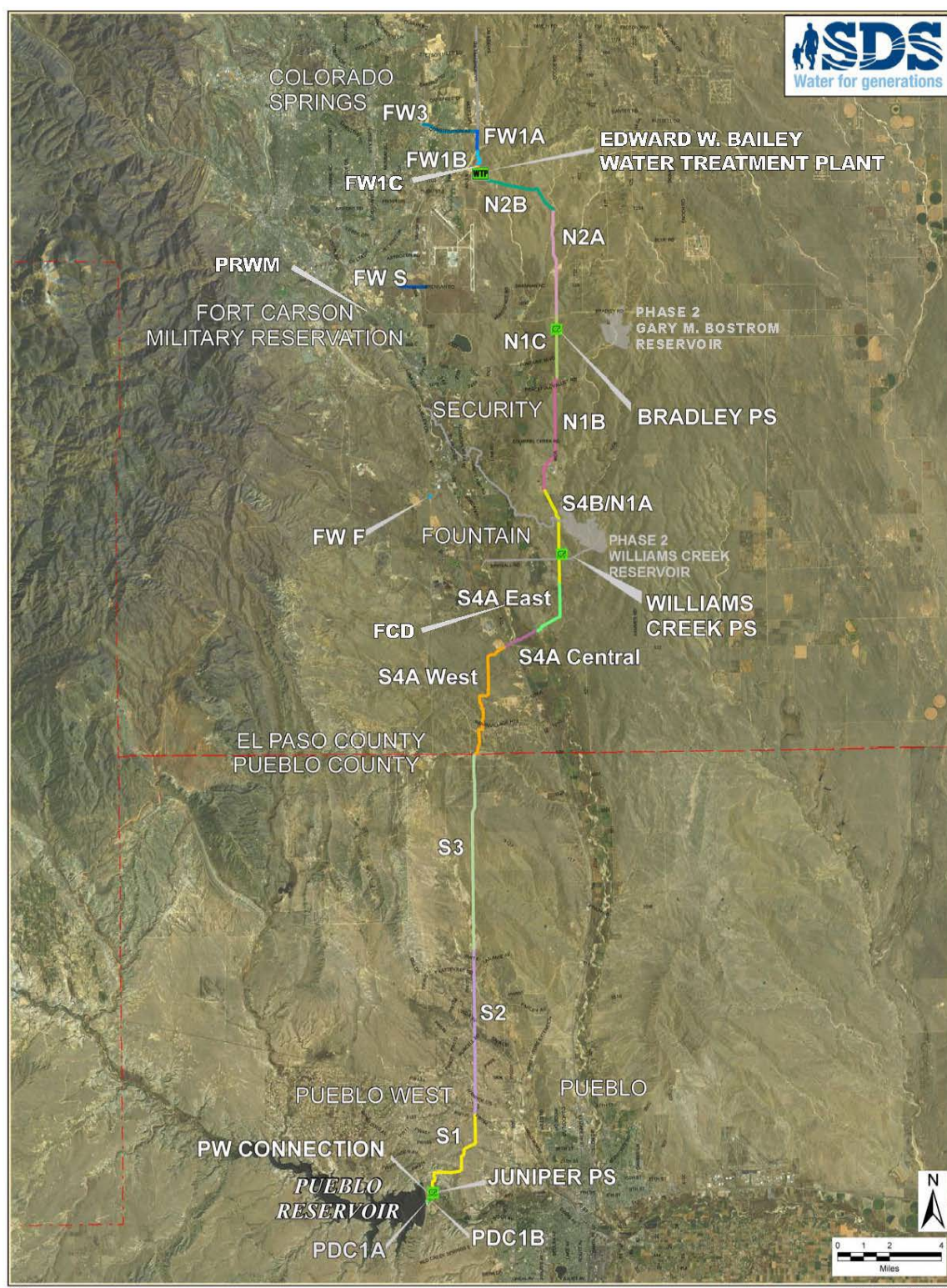
- 50 miles of raw water pipeline (66- and 72-inch diameter)
- Two 78-million-gallon-per-day (mgd) raw water pump stations and one 50-mgd raw water pump station (expandable in Phase 2)
- A water treatment plant, the Edward W. Bailey Water Treatment Plant (Bailey WTP) with a capacity of 50 mgd (expandable in Phase 2)
- Approximately seven miles of finished water pipelines up to 54 inches in diameter

Phase 2 of SDS includes the following:

- A 30,500 acre-feet terminal storage reservoir on upper Williams Creek, Gary M. Bostrom Reservoir
- Expansion of the 50-mgd raw water pump stations and Bailey WTP to 100-mgd capacity
- Expansion of the treated water delivery system
- A 28,000 acre-feet exchange storage reservoir on Williams Creek, Williams Creek Reservoir, and conveyance facilities to transfer water to and from Fountain Creek for exchange operations

SDS has been broken down into various work packages. The work packages and the facilities identified above are shown on Figure 1.

FIGURE 1. SOUTHERN DELIVERY SYSTEM WORK PACKAGES AND FACILITIES



1.3 SDS Participant Information

Contact details for the SDS Participants and their authorized agent are as follows.

1.3.1 SDS Participants

Colorado Springs Utilities

(Authorized agent acting on behalf of Participants)

Contact: Joseph Rasmussen, Manager
Leon Young Service Center
1521 South Hancock Expressway
P.O. Box 1103, MC 1821
Colorado Springs, CO 80947-1821
Phone: (719) 668-4173; Fax: (719) 668-5651
E-mail: jrasmussen@csu.org

Kevin Binkley, Programs Supervisor
Leon Young Service Center
1521 South Hancock Expressway
P.O. Box 1103, MC 1821
Colorado Springs, CO 80947-1821
Phone: (719) 668-3748
E-mail: kbinkley@csu.org

Security Water District (Participant)

Contact: Roy Heald, District Manager
231 Security Blvd.
Security, CO 80911
Phone: (719) 392-3475; Fax: (719) 390-7252
E-mail: r.heald@securitywsd.com

City of Fountain (Participant)

Contact: Dan Blankenship, Director of Utilities
116 S. Main St.
Fountain, CO 80817
Phone: (719) 322-2040; Fax: (719) 322-2011
E-mail: dblankenship@fountaincolorado.org

Pueblo West Metropolitan District (Participant)

Contact: Jim Blasing, Director of Utilities
20 West Palmer Lake Drive
Pueblo West, CO 81007
Phone: (719) 547-5047; Fax: (719) 547-0719
E-mail: jblasing@pwmd-co.us

Jeffrey DeHerrera, Deputy Director
E-mail: jdeherrera@pwmd-co.us

Bobby Banham, Operations Manager
E-mail: bbanham@pwmd-co.us

1.4 Southern Delivery System Project Regulatory Review Process

SDS has undergone, and continues to undergo, significant regulatory oversight at the federal, state, and local levels. At the federal level, Reclamation has performed extensive and detailed environmental studies as a part of the National Environmental Policy Act (NEPA) process, the culmination of which was a Final Environmental Impact Statement (FEIS) and issuance of a ROD.

The ROD for SDS was issued on March 20, 2009. It identified SDS, as shown on Figure 1, as the Preferred Alternative. SDS has been determined to cause “the least damage to the biological and physical environment” (Reclamation 2009). The ROD included extensive commitments by the SDS Participants to significant, long-term mitigation measures.

Because SDS crosses wetlands and other waters of the United States, it required a permit from the USACE under the dredge and fill material permit program established under Section 404 of the federal Clean Water Act. A Section 404 Permit was received for SDS on April 26, 2010. Colorado Springs Utilities has developed new wetlands as compensatory mitigation under the Section 404 Permit and provided copies of the mitigation plans to the Fountain Creek Watershed, Flood Control, and Greenway District for review. The jurisdictional wetlands mitigation project was reviewed and approved by the USACE and Fountain Creek Watershed, Flood Control, and Greenway District prior to its construction in September 2011. On January 22, 2015, the USACE determined that the wetland mitigation project was established and complete.

At the state level, the SDS Section 404 Permit received a Certification under Section 401 of the Clean Water Act from the Colorado Department of Public Health and Environment (CDPHE) on April 23, 2010. In February 2011, the State Water Quality Control Commission denied a challenge to the CDPHE (Water Quality Control Division) certification and upheld the certification. In April 2012, the Pueblo County District Court determined that the Commission action was not supported by the administrative record and remanded the certification. In July 2013, the Colorado Court of Appeals ruled that the state Water Quality Control Commission’s approval of the SDS certification was consistent with applicable laws and regulations and was supported by substantial evidence.

Colorado Parks and Wildlife (CPW) also reviewed SDS, and the SDS Fish and Wildlife Mitigation Plan (FWMP) was prepared collaboratively with CPW staff and approved by both the Colorado Wildlife Commission (CWC) and the Colorado Water Conservation Board (CWCB) (Colorado Springs Utilities, City of Fountain, Security Water District, Pueblo West Metropolitan District, and Colorado Division of Wildlife 2010). A Memorandum of Agreement implementing the FWMP was executed with the CPW on May 18, 2010.

At the county, regional, and city levels, SDS is subject to a variety of regulatory reviews and associated mitigation requirements, including the following:

- Pueblo County 1041 Permit (No. 2008-002),
- El Paso County Approval of Location, Site Development Plan, and 1041 Permit processes, and

- Land use approval by the Fountain Creek Watershed, Flood Control, and Greenway District (District).

Collectively, these permit conditions include comprehensive and extensive mitigation requirements, which are detailed in the respective resolutions of approval.

2.0 Listing of Permit Compliance Reporting Requirements for SDS

A detailed and specific listing of the permit compliance reporting requirements for SDS for the six programmatic permits and approvals received for SDS that have annual reporting requirements is provided in Attachment 1 – Annual Implementation Progress Matrix.

The Annual Implementation Progress Matrix contains:

- A listing of the environmental commitments for SDS with annual reporting requirements (columns 1 and 2).
- A description of SDS implementation progress towards compliance with each of the commitments (column 3).
- A field to show if additional documentation is included in an attachment to this report (column 4).
- Items that are specific to either construction or operations have been color coded.

Supporting documentation listed in column 4 is provided in the following attachments:

- Attachment 2 - Monthly Average Flow Data from United States Geological Survey (USGS) Gauge Station
- Attachment 3 - Water Quality Monitoring Data
- Attachment 4 - Complaint Log
- Attachment 5 - Emergency Response Log
- Attachment 6 - Log of Work Occurring During Non-Typical Work Hours
- Attachment 7 - Expenditures for Wastewater System Improvements
- Attachment 8 - Summary of Storage, Diversion, Delivery of Water in Pueblo County
- Attachment 9 - Summary of Participants' Return Flows to Fountain Creek Including Storage and Releases of Such Return Flows
- Attachment 10 - Summaries of Exchanges by Participants between Pueblo Reservoir and the Fountain Creek Confluence
- Attachment 11 - Pueblo Flow Management Program
- Attachment 12 - Geomorphology Monitoring

3.0 Summary of SDS Activities Undertaken During the Reporting Period

SDS Work Package Activities

A number of actions have been taken during this reporting period related to the construction of SDS. Some of the key activities during this reporting period include the following:

Gary M. Bostrom Reservoir

30% design for the Gary M. Bostrom Reservoir was completed in 2016. Demolition of existing structures on acquired properties associated with the Bostrom Reservoir site occurred and was completed in 2022. The location of the Gary M. Bostrom Reservoir is shown on Figure 1.

Pinello Ranch Wetland Mitigation (PRWM) Project

Construction of the PRWM project commenced in November 2016, while construction and planting activities were completed in 2017. Activities in 2022 at the PRWM site included installation of a culvert, vegetation maintenance and noxious weed mitigation. The PRWM project will be used to mitigate a portion of the 12.0 acres of non-jurisdictional wetlands that will be permanently impacted as a result of SDS current and future activities. The location of PRWM is shown on Figure 1.

Additional SDS Activities

In addition to the milestones listed above, Colorado Springs Utilities engaged in the following initiatives of note during the reporting period:

- SDS entities complied with the terms of the Pueblo Flow Management Program. Colorado Springs Utilities exchanges were curtailed to meet the recreational flow targets during the months of October, and November 2021 and March, April, May, July, August, and September 2022. No other SDS entities were exchanging during this period. While exchanges were curtailed the flow in the Arkansas River below Pueblo Dam did not drop below 50 cfs and no releases were made by Colorado Springs Utilities or Board of Water Works Pueblo per the Low Flow Agreement.

Other Activities

- Stormwater – the City of Colorado Springs, Colorado Springs Utilities, and the County of Pueblo entered into an Intergovernmental Agreement (IGA) on April 27, 2016, related

to stormwater management activities. The IGA annual report of final expenditures for the 2021 calendar year was submitted on June 30, 2022. This report is submitted to Pueblo County separately and is not submitted as part of this annual report.

4.0 Future SDS Activities

Anticipated activities for 2023 include:

- Compliance monitoring for operational activities.
- Planning activities associated with a future system outage to allow for inspection of the entire pipeline.
- Assessing potential water deliveries for entities that have met permit requirements.

5.0 References

- Bureau of Reclamation. 2008. Southern Delivery System Final Environmental Impact Statement. December.
- Bureau of Reclamation. 2009. Record of Decision for the Southern Delivery System Project Final Environmental Impact Statement. Record of Decision Reference No. GP-2009-01. Colorado Department of Public Health and Environment. 2010. Section 401 Water Quality Certification; Colorado 401 Certification No.: 4224; U.S. COE 404 Permit No.: SPA-1995-00131-SCO; Description: Southern Delivery System; Location: El Paso and Pueblo Counties; Watercourse: Arkansas River, Fountain Creek and tributaries; Designation: Reviewable (MA01, MA02, MA03, FO02a, FO02b); Use Protected: (FO04, LA01a, LA01b). April 23
- Colorado Springs Utilities, City of Fountain, Security Water District, Pueblo West Metropolitan District, and Colorado Division of Wildlife. 2010. Southern Delivery System Fish and Wildlife Mitigation Plan. March 11.
- El Paso County. 2010a. Planning Commission Resolution U-09-002. For the Approval of Location of the Southern Delivery System Raw Water Pipeline within the A-5 (Agricultural), PUD (Planned Unit Development), RR - 2.5 (Rural Residential) and RR-5 (Residential Rural) Zone District. March 2. Amended by Resolution U-12-001, October 18, 2012
- El Paso County. 2010b. Planning Commission Resolution U-09-003. For the Approval of Location of the Southern Delivery System Finished Water Pipeline within the PUD (Planned Unit Development) Zone District. March 2. Amended by Resolution U-12-003, October 18, 2012.
- El Paso County. 2010c. Planning Commission Resolution U-09-004. For the Approval of Location of the Southern Delivery System Bradley Pump Station within the RR-5 (Residential Rural) Zone District. March 16.
- El Paso County. 2010d. Planning Commission Resolution U-09-005. For the Approval of Location of the Upper Williams Creek Reservoir within the RR-5 (Residential Rural) Zone District. March 16. Amended by Resolution U-12-002, October 18, 2012.
- El Paso County. 2010e. Planning Commission Resolution U-09-007. For the Approval of Location of the Exchange Flow System within the RR-5 (Residential Rural) Zone District. March 16. Amended by Resolution U-12-004, October 18, 2012.
- El Paso County. 2014a. Development Services Department, File No. AASI-13-002, Southern Delivery System Finished Water Section 1C. Administratively Approved Permit Issued to Conduct a Designated Activity of State Interest or to Engage in Development in a Designated Area of State Interest in El Paso County, Colorado. January 2.

- El Paso County. 2014b. Development Services Department, File No. AASI-13-005, Southern Delivery System Finished Water Section 3. Administratively Approved Permit Issued to Conduct a Designated Activity of State Interest or to Engage in Development in a Designed Area of State Interest in El Paso County, Colorado. January 29.
- El Paso County. 2014c. Development Services Department, File No. AASI-14-001, Southern Delivery System Raw Water Pipeline Section S4AC. Administratively Approved Permit Issued to Conduct a Designated Activity of State Interest or to Engage in Development in a Designed Area of State Interest in El Paso County, Colorado. February 18.
- Fountain Creek Watershed, Flood Control, and Greenway District. 2010. Board of Directors Resolution 2010-01 – Land Use. A Resolution recommending that the El Paso County Planning Commission approve applications by Colorado Springs Utilities and on behalf of the Project Participants for location approvals for the Southern Delivery System located within the Fountain Creek Watershed Management Area and approving those portions of the Southern Delivery System located within the Fountain Creek Corridor. February 26.
- Pueblo County. 2009. 1041 Permit No. 2008-002. The Board of County Commissioners of Pueblo County Colorado; A Resolution Approving 1041 Permit No.2008-002 With Terms and Conditions for Construction and Use of a Municipal Water Project Known as the Southern Delivery System within Pueblo County, Colorado. April 21.
- State of Colorado. 2010. Memorandum of Agreement by and between the State of Colorado, acting by and through the Department of Natural Resources, for the use and benefit of the Division of Wildlife and Colorado Springs Utilities, acting as the Project Manager for the Southern Delivery System. May 18.
- U.S. Army Corps of Engineers. 2010. Department of the Army Permit; Permittee: Colorado Springs Utilities; Permit No. SPA-2005-00131-SCO; Issuing Office: Albuquerque District, U.S. Army Corps of Engineers. April 26.

Implementation Progress Matrix

ATTACHMENT 1

Annual Implementation Progress Matrix

Reporting Requirements		CY2022 Annual Report Information	
Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
Bureau of Reclamation - Record of Decision			
Environmental Commitments			
p. 11, ¶1	Such contracts will, at a minimum, include a requirement for the SDS Participants to submit to Reclamation an annual compliance report that certifies progress in successfully implementing these commitments in a timely manner as prescribed in this ROD and any contracts.	This Permit Compliance Annual Report is being prepared to demonstrate the progress in successfully implementing the commitments as prescribed in the ROD and the annual reporting requirements found in the other programmatic permits and approvals including: the Pueblo County 1041 Permit, the El Paso County Location Approvals, El Paso County 1041 Permits, the CDPHE 401 Water Quality Certification and the Fountain Creek Watershed, Flood Control and Greenway District approval.	No
Participants' Commitments: General Commitments			
p. 12, Bullet 1	Comply with all applicable permits, regulations, and laws including but not limited to CDPHE, USCOE 404, and local land use permits obtained for the SDS Project.	Compliance with permit and regulatory requirements is being tracked through the implementation of an Environmental Management System (EMS). In addition, the construction contract documents for each of the work packages include permit and regulatory compliance requirements. The EMS ensures that all applicable actions necessary for compliance are taken in a timely manner.	No
p. 12, Bullet 2	Construct and operate the SDS Project in a manner that does not differ substantially from that evaluated in this FEIS, except under emergency conditions, and unless additional and appropriate environmental investigations are completed by Reclamation and approval is then given to Participants to alter construction or operation of the SDS Project.	The SDS Participants constructed and will operate the preferred alternative that was identified in the FEIS in a manner that does not differ substantially from that evaluated in the FEIS.	No
Participants' Commitments: Surface Water			
p. 12, Bullet 1	Comply with the Upper Arkansas Voluntary Flow Management Program except during emergency conditions as defined in Section 2.b. of the Memorandum Of Understanding for Settlement of Case No. 04CW129, Water Division 2 (Chaffee County Recreation In-Channel Diversion).	The SDS Participants complied with the Upper Arkansas Voluntary Flow Management Program.	No
p. 13, Bullet 2	Comply with the Pueblo Flow Management Program pursuant to existing intergovernmental agreements. If Reclamation and the Participants receive credible information that project operations are impairing physical diversion of a senior water right, contrary to Colorado water law, the Participants will immediately initiate discussions among the parties, including the party alleging the impairment of Reclamation, to develop a solution and remedy the impairment in compliance with Colorado water law.	SDS Participants complied with the Pueblo Flow Management Program and details are shown in Attachments 8-11.	Attachments 8 through 11.

ATTACHMENT 1

Annual Implementation Progress Matrix

Reporting Requirements		CY2022 Annual Report Information	
Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
p. 13, Bullet 3	Participants will consult with Reclamation each year on the average annual flow in Fountain Creek. If the average annual stream flow of Fountain Creek as measured at Pueblo (USGS gauge station number 07106500) exceeds the scope and range of the flow estimated and analyzed in the Final Environmental Impact Statement (see Table 33 of the FEIS), then Participants will coordinate with Reclamation, within their adaptive management plan, to evaluate the cause(s) for the change in flows and determine whether appropriate response actions, such as monitoring and/or mitigation measures, are warranted. Each year, Participants will report to Reclamation the average annual flow in Fountain Creek at Pueblo together with other relevant data.	The average annual flow during this reporting period in Fountain Creek as measured at USGS gauge station number 07106500 was approximately 102 cubic feet per second (cfs). Table 33 of the FEIS reported the average annual simulated streamflow at this location under existing conditions as 188 cfs and under the preferred alternative (Alt 2) as 253 cfs. Flows did not exceed the scope and range identified in the FEIS. See Attachment 2 for the monthly average flow data from USGS Gauge Station Number 07106500.	Attachment 2 - Monthly Average Flow Data from USGS Gauge Station Number 07106500
p. 13, ¶1	Surface water mitigation measures will resolve adverse effects to physical diversions of senior water rights.	The SDS Participants are implementing the surface water mitigation measures per the Upper Arkansas Voluntary Flow Management Program and the Pueblo Flow Management Program.	No
Participants' Commitments: Water Quality			
p. 13, Bullet 1	Include water quality monitoring and adaptive management within the integrated adaptive management program (see Participants' General Commitments).	The Monitoring Plan has been completed and was submitted to the Bureau of Reclamation on March 18, 2011.	No
p. 13, Bullet 2	Begin implementing water quality monitoring when construction of the project begins. This will allow about three years of baseline data to be collected before project operations begin.	A Joint Funding Agreement was executed with the U.S. Geological Survey (USGS) on the water quality monitoring program. Water quality monitoring began in January, 2011.	Attachment 3 - Water Quality Monitoring Data
p. 13, Bullet 3	Submit water quality monitoring data, including trend analyses, for the preceding calendar year to Reclamation by January 31st of the subsequent year.	A Joint Funding Agreement was executed with the U.S. Geological Survey (USGS) on the water quality monitoring program. Water quality monitoring began in January, 2011. See Attachment 3 for the water quality monitoring data. USGS reports data on a water year basis (October-September). The annual report will present data based on that reporting period. Trend analysis is not included in this report because Section 14.0 of the IAMP submitted to Reclamation indicates periodic reviews are to begin a minimum of 10 years following the initiation of the SDS Project operations. SDS began operation in April 2016, so trend analysis will not begin until the 2026 reporting year.	Attachment 3 - Water Quality Monitoring Data
p. 13, Bullet 4	If the Colorado Department of Public Health and Environment (CDPHE) determines that operation of the SDS Project is causing significant adverse water quality effects, the Participants will coordinate with Reclamation, CDPHE, and other interested parties to evaluate and select measures to mitigate adverse effects.	CDPHE has not indicated that any adverse water quality effects have occurred due to the operation of SDS.	No

ATTACHMENT 1

Annual Implementation Progress Matrix

Reporting Requirements		CY2022 Annual Report Information	
Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
p. 13, Bullet 5	In the event that operation of the SDS Project causes, or threatens to cause, stream flows in the Arkansas River or other waterways to diminish to low levels that will contribute significantly to elevated concentrations/densities of dissolved selenium, <i>E. coli</i> , or sulfate, the Participants will coordinate with Reclamation, CDPHE, CDOW, and other interested parties to evaluate and select measures to mitigate adverse effects.	The SDS Project has not caused or threatened to cause stream flows to diminish to such low levels.	No
p. 13, ¶1	Development and implementation of a water quality monitoring and adaptive management plan will provide a means of detecting changes in water quality, judging whether they are likely caused by operation of the SDS Project, and addressing actual effects in a systematic manner. Additionally, implementation of the geomorphology mitigation measures (below) will reduce suspended sediment and total recoverable iron concentrations in Fountain Creek and the lower Arkansas River.	The Monitoring Plan, Geomorphic Mitigation Plan and IAMP have been completed. These plans were submitted to the Bureau of Reclamation in March 2011. The plans will be implemented during the operation of the SDS project in accordance with this commitment.	No
Participants' Commitments: Geomorphology			
p. 14, Bullet 3	Design and construct an energy dissipation structure that will protect against erosion at the outlet of the pipeline from Williams Creek Reservoir to Fountain Creek.	An energy dissipation structure at the pipe outlet will be incorporated in the final design of the Williams Creek Reservoir project.	No
p. 14, Bullet 4	Evaluate and implement appropriate future geomorphic stabilization projects, if such future projects are determined to be necessary after the project is operational.	The Geomorphic Mitigation Plan provides a means for evaluating geomorphic impacts and determining the need for stabilization projects. No need has been identified during the reporting period.	No
p. 14, ¶1	When implemented, these recommendations will mitigate potential adverse effects on geomorphology by avoiding or minimizing effects of return flow discharges through an energy dissipation structure, compensating for anticipated effects, and responding to effects identified after project operations begin.	This requirement is a summary statement of the specific water quality commitments described in the above listed bullets of this section. A Geomorphic Mitigation Plan has been completed and will be implemented during the construction and operation of SDS in accordance with this commitment.	No
Participants' Commitments: Aquatic Life			
p. 15, Bullet 2	In the event that the operation of the SDS Project causes, or threatens to cause, stream flows in Fountain Creek or the Arkansas River to diminish to low levels that could contribute significantly to impairment of aquatic life, coordinate with Reclamation, CDPHE, CDOW and other interested parties to evaluate and select measures to mitigate adverse effects.	The SDS Project has not caused or threatened to cause stream flows to diminish to low levels.	No
p. 15, Bullet 4	Monitor the effects of the operation of the SDS Project upon aquatic life in Fountain Creek and the Arkansas River between Pueblo Dam and the Las Animas Gage. Aquatic sampling will be conducted once per year at up to 10 locations. Monitoring methods and locations will be identified in the proposed wildlife mitigation plan that will be submitted to the Colorado Wildlife Commission pursuant to C.R.S. 37-60-122.2. Use the information from this monitoring in the adaptive management program for the SDS Project.	Aquatic sampling was performed per the Wildlife Mitigation Plan. There is no indication of adverse impacts to date as a consequence of the limited project operation.	No

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Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
p. 15, ¶1	When implemented, these recommendations will mitigate potential adverse effects on aquatic life by avoiding or minimizing effects, compensating for anticipated effects, and detecting and responding to effects identified after project operations begin.	The SDS Participants have implemented the Fish & Wildlife Mitigation Plan as well as the agreements from the MOA with the Colorado Department of Natural Resources during the construction phase and will continue to do so during the operation of SDS.	No
Participants' Commitments: Wetlands, Waters, and Riparian Vegetation			
p. 16, Bullet 5	Control Tamarisk that may establish around newly constructed reservoirs.	This requirement is not applicable yet as no SDS reservoir construction has commenced during this reporting period.	No
Participants' Commitments: Vegetation			
p. 17, Bullet 8	Monitor construction areas for 3 years after construction to assess if noxious weeds have invaded the site. If noxious weeds are present, weed control plans will be formulated and completed.	As part of the pre-construction vegetation surveys completed for each work package, a noxious weed survey was conducted. The noxious weed survey includes recommended weed control methods. This information was incorporated into the contract documents. Monitoring of construction areas will continue for three years after construction to ensure that any necessary weed control is performed. In 2022, applicable work packages were monitored for noxious weeds, control plans were followed and observed noxious weeds were treated consistent with these plans.	No
p. 17, Bullet 9	Because the project may indirectly increase the spread of tamarisk, the Participants will work with the Colorado Department of Agriculture's Colorado Noxious Weed Management Team on tamarisk issues in the Arkansas Valley including submitting a request for partnership evaluation.	The Fish and Wildlife Mitigation Plan has identified the inlet area at the Pueblo Reservoir as an area of specific interest and identified the Colorado Department of Agriculture's Colorado Noxious Weed Management group as a consulting agency. Appropriate coordination will continue to occur.	No
p. 17, ¶1	Impacts to plant species and communities of concern and other sensitive vegetation areas can be avoided and minimized during final design and implementation. Because mitigation measures such as transplanting of individuals are often unsuccessful, avoidance and minimization will ensure survival, especially of plant species of concern. Seeding disturbed areas, replacing mature trees, and controlling noxious weeds will replace existing vegetation types and structural diversity and will ensure that high quality habitat remained.	As described in the previous responses of this section, numerous measures were implemented to minimize potential impacts to plant species and communities of concern and other sensitive vegetation areas. No concerns have been identified to date for this item or the previous items of this section.	No
Participants' Commitments: Visual Resources			
p. 20, Bullet 1	Vegetate earthen dam faces with native herbaceous plants to match the adjacent undisturbed prairie plant communities.	This requirement is not applicable yet as the final design of the Gary M. Bostrom Reservoir and Williams Creek Reservoir did not begin during this reporting period.	No
El Paso County - Location Approvals			
El Paso County - Location Approvals did not contain operational requirements.			
El Paso County - 1041 Permits			
El Paso County - 1041 Permits did not contain operational requirements.			

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Reporting Requirements		CY2022 Annual Report Information	
Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
Pueblo County - 1041 permit			
7. Expenditures for Wastewater System Improvements, p. 12	In order to continue its efforts to protect against future spills to Fountain Creek, to increase its opportunities for reuse, and to mitigate possible water quality impacts by the SDS Project to Fountain Creek, Colorado Springs Utilities shall commit to invest an additional \$75,000,000 in its wastewater system. Expenditures will be made as part of the wastewater collection system rehabilitation programs or wastewater reuse systems between January 1, 2009 and December 31, 2024 as required. These expenditures shall be for projects not currently required by other regulatory permits, agency enforcement or court orders, consent agreements, or governmental regulations existing as of January 30, 2009. These expenditures will include the Local Collector Evaluation and Rehabilitation Program (LCERP) for the improvement and fortification of wastewater lines which could adversely affect Fountain Creek or its tributaries. These expenditures are subject to annual appropriation by the Colorado Springs City Council. Beginning in 2010, by January 31 of each year, Colorado Springs Utilities shall provide an annual report to Pueblo County describing such expenditures for the prior year.	Colorado Springs Utilities submitted a wastewater expenditures report documenting 2009 expenditures to Pueblo County on January 29, 2010. The report for 2010 was submitted to Pueblo County on January 31, 2011. The report for 2011 was submitted to Pueblo County on January 26, 2012. The report for 2012 was submitted to Pueblo County on January 31, 2013. The report for 2013 was submitted to Pueblo County on January 31, 2014. The report for 2014 was submitted to Pueblo County on January 28, 2015. The report for 2015 was submitted to Pueblo County on January 16, 2016. The report for 2016 was submitted to Pueblo County on January 31, 2017. The report for 2017 was submitted to Pueblo County on January 29, 2018. The report for 2018 was submitted to Pueblo County on January 31, 2019. The report for 2019 was submitted to Pueblo County on January 30, 2020. The report for 2020 was submitted to Pueblo County on January 30, 2021. The report for 2021 was submitted to Pueblo County on January 28, 2022. The report for 2022 is being prepared and will be submitted to Pueblo County with this Annual Report on or before January 31, 2023.	Attachment 7 - Expenditures for Wastewater System Improvements Annual Report
Mitigation Appendix ENF-1, Project Detail, Item 2, p. 23 of 28	2. Submit an annual report to Pueblo County that will provide a summary of activities related to the SDS Project and the Conditions of the Permit. These reports will be due annually on or before January 31, beginning the year following commencement of water deliveries through the SDS pipeline. The reports shall include a signed certification of compliance with the Permit. Contents of the report will include, but will not be necessarily limited to:	This report will satisfy the requirement for the annual report following delivery of water through the SDS pipeline.	
	a. Summary of storage, diversion, delivery of water in Pueblo County.	Summary data from the project Participants related to the SDS Project is located in Attachment 8.	Attachment 8 - Summary of Storage, Diversion, Delivery of Water in Pueblo County related to the SDS Project

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Annual Implementation Progress Matrix

Reporting Requirements		CY2022 Annual Report Information	
Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
	b. Summary of Participants’ return flows to Fountain Creek including storage and releases of such return flows (maximum daily flows, average annual and monthly flows and amounts).	Summary data from the project Participants in located in Attachment 9.	Attachment 9 - Summary of Participants’ SDS Return Flows to Fountain Creek Including Storage and Releases of Such Return Flows
	c. Summaries of exchanges by Participants between Pueblo Reservoir and the Fountain Creek confluence (monthly and annual rates of flow and quantities).	Summary data from the project Participants in located in Attachment 10.	Attachment 10 - Summaries of Exchanges by Participants between Pueblo Reservoir and the Fountain Creek Confluence
	d. Use of any new water rights to be delivered or stored through SDS (amount, time, source).	There were no new water rights to be delivered or stored through SDS during the reporting period.	No
	e. Water quality monitoring.	A Joint Funding Agreement was executed with the U.S. Geological Survey (USGS) on the water quality monitoring program. Water quality monitoring began in January 2011. See Attachment 3 for the water quality monitoring data. In June 2021, the USGS moved the 07099970 Arkansas River at Moffat Street at Pueblo, CO site to better represent in river conditions. Historical discrete water quality data that was published for site 07099970 has been migrated to site 07099971. Colorado Springs Utilities continues to use effluent monitoring data from its Water Resource Recovery Facilities (WRRFs) to demonstrate the plants are operating in accordance with the specifications and standards associated with permits for its WRRFs. The only permit limit exceedance for the reporting period was at the JD Phillips Water Resource Recovery Facility (JDPWRRF) for the Daily Maximum Ammonia. This exceedance occurred on February 14, 2022, during a scheduled aeration basin swap.	Attachment 3 - Water Quality Monitoring Data

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Reporting Requirements		CY2022 Annual Report Information	
Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
	f. Geomorphology monitoring.	Geomorphic monitoring data has been collected under an existing program led by the USGS in partnership with Colorado Springs Utilities and the City of Colorado Springs Engineering Department. Ten cross sections established at designated points along Fountain Creek are monitored for degradation, aggradation, and other changes to the geomorphic surface. Each cross section is surveyed once per year during low stream flow; preferably in the winter when leaves and other organic material on the ground is at a minimum. Survey data from 2015 has been provided as pre-SDS operations baseline conditions along with survey data from the reporting period (2022) for comparative purposes. These data present topographic survey data, Light Detection and Ranging (LiDAR) survey data, and elevation rasters, collected or generated during 2022 as part of that monitoring effort. Topographic survey points were collected using real-time kinematic Global Navigation Satellite Systems (RTK-GNSS). These point data, along with LiDAR point clouds, were used to generate digital elevation maps (2022). These survey data and maps provide an annual assessment of the geomorphic changes at each study area.	Attachment 12 - Geomorphology Monitoring
	g. Status of adaptive management plans on Fountain Creek.	The Monitoring Plan and Integrated Adaptive Management Plan were submitted to the Bureau of Reclamation on March 18, 2011 and acknowledged by Reclamation on March 24, 2011. The Geomorphic Mitigation Plan was submitted to Reclamation on March 15, 2011 and approved on April 26, 2011. Colorado Springs Utilities participates in a Joint Funding Agreement with the USGS regarding implementation of the Monitoring Plan.	No
	h. Status of payments into the Fountain Creek monetary mitigation fund.	On January 14, 2020, Colorado Springs Utilities made a final payment of \$10,706,513 to the Water Activity Enterprise of the Fountain Creek Watershed, Flood Control and Greenway District (FCWFCD) in satisfaction and completion of requirements outlined in the Southern Delivery System (SDS) 1041 Permit Condition No. 6. Between 2016 and 2020, a total of \$52,002,156 including interest was provided to the FCWFCD.	No
	i. Status of expenditures for wastewater system improvements for Participants (and third party users in the Fountain Creek basin) per Permit Conditions.	Summary data are in located in Attachment 7.	Attachment 7 - Expenditures for Wastewater System Improvements

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Annual Implementation Progress Matrix

Reporting Requirements		CY2022 Annual Report Information	
Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
	j. Reports on the operation of the Pueblo Flow Management Program and the Low Flow Program (rates, and quantities, and times of foregone exchanges, releases, and reception documentation).	A Memorandum of Understanding (MOU) was executed between the Pueblo Board of Water Works and Colorado Springs Utilities on April 17, 2009 that provides the terms and conditions under which each of the entities will contribute to and assist in the maintenance of a storage pool in Pueblo Reservoir. SDS entities complied with the terms of the Pueblo Flow Management Program. Colorado Springs Utilities exchanges were curtailed to meet the recreational flow targets during the months of October, and November 2021 and March, April, May, July, August and September 2022. No other SDS entities were exchanging during this period. While exchanges were curtailed the flow in the Arkansas River below Pueblo Dam did not drop below 50 cfs and no releases were made by Colorado Springs Utilities or Board of Water Works Pueblo per the Low Flow Agreement.	Attachment 11
	k. Status of lake level management cooperative efforts with other entities at Pueblo Reservoir.	Colorado Springs Utilities remains committed to participate in the development of a reservoir management plan for Pueblo Reservoir at such time as the Bureau of Reclamation and the Southeastern Colorado Water Conservancy District decide to proceed forward.	No
	l. Status of conservation and local reuse.	Colorado Springs Utilities, on behalf of the SDS Participants, remains committed to incorporating conservation and local reuse as important aspects of its water management plan. Colorado Springs Utilities prepared the 2015 Water Use Efficiency Plan that align with Springs Utilities' Integrated Water Resources Plan. Colorado Springs Utilities incorporated the 2015 Water Use Efficiency Plan into its updated Integrated Water Resources Plan. As part of this implementation, Colorado Springs Utilities recently modified its Water Shortage Ordinance to only allow outdoor watering three (3) days per week. In 2018, both the City of Fountain and the Security Water District updated their respective water conservation/efficiency plans. Pueblo West Metropolitan District implemented its Water Conservation Plan in 2013, which was also incorporated into its 2017 Water Master Plan. Colorado Springs Utilities' Water Efficiency Plan was updated in 2022.	No

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Reference	Permit or Approval Document Requirement	Implementation Progress	Attachment Provided
	m. Payments to Pueblo County in lieu of property taxes.	The payment in-lieu of property tax for 2016 for the properties acquired in Pueblo County was made on April 25, 2016. The payment in-lieu of property tax for 2017 for the properties acquired in Pueblo County was made on April 13, 2017. The payment in-lieu of property tax for 2018 for the properties acquired in Pueblo County was made on April 23, 2018. The payment in-lieu of property tax for 2019 for the properties acquired in Pueblo County was made on April 25, 2019. The payment in-lieu of property tax for 2020 for the properties acquired in Pueblo County was made on April 23, 2020. As the properties were sold in 2019, the 2020 payment was the last payment required under this condition.	No
	n. Copies of the annual reports on the SDS Project submitted to Reclamation.	This report will satisfy the requirement for the annual report following delivery of water through the SDS pipeline.	No
CDPHE - 401 Water Quality Certification			
Certification Statement, Bullet 4, p. 6	All collected raw data and annual reports developed as a requirement of other agency conditions will be submitted to the Division at the same time they are submitted to the requiring regulatory agency. Data and reports will be submitted directly to the Environmental Data Unit in an electronic data format agreed to by the Division.	The SDS Permit Compliance Annual Report addresses the annual reporting requirements for all of the major programmatic permits. Pertinent raw data and reports are being submitted as part of this annual report, of which CDPHE is a recipient.	No
Fountain Creek WFCGD - Resolution 2010-01			
Technical Advisory Committee Condition 2, p. 3 (Also Citizen Advisory Committee Condition 2)	<p>The Integrated Adaptive Management Plan (IAMP) shall be submitted to the District for review, and periodic reports on water quality and quantity shall be provided to the District.</p> <p>The Integrated Adaptive Management Plan (IAMP) will include how mitigation will be performed in case there are problems that were not anticipated during the project. This will include means and methods to address impacts from the project and specific triggers to initiate the process. Once the IAMP is finalized there will be an opportunity for comment.</p>	The IAMP has been completed and was submitted to the Bureau of Reclamation on March 18, 2011. The IAMP has been provided to the District.	No

Monthly Average Flow Data from USGS Gauge Station No. 07106500 Fountain Creek at Pueblo

The USGS provides data based on a water year (October through September).

ATTACHMENT 2

Monthly Average Flow Data
USGS Gauge Station No: 07106500
FOUNTAIN CREEK AT PUEBLO, CO
Pueblo County, Colorado
Hydrologic Unit Code 11020003
Latitude 38°17'16", Longitude 104°36'02" NAD27
Drainage area 925 square miles
Gage datum 4,705 feet above sea level NGVD29

00060, Discharge, cubic feet per second,														
YEAR	Monthly mean in cfs (Calculation Period: 2021-10-01 -> 2022-09-30) Period-of-record for statistical calculation restricted by user												Annual Average Flow	Long-Term Average Annual Simulated Streamflow
	2021			2022										
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
Mean of Monthly Discharge	103	122	118	102	90	90	72	88	91	182	121	42	102	253

- Notes:
- 1. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis/monthly>) on November 23, 2022.
 - 2. The annual average is computed from the monthly mean data published by the U.S. Geological Survey.
 - 3. The long-term average annual simulated streamflow for the preferred alternative (Alt 2) was taken from Table 33 of the FEIS.

Water Quality Monitoring Data

A Joint Funding Agreement was executed with the USGS to begin the water quality monitoring program in January 2011. Data are provisional until they go through the USGS quality assurance process. Cells shaded in blue represent data that exceed CDPHE Reg. 32 Water Quality standards for Middle Arkansas River Basin segment 3, Lower Arkansas River Basin segment 1a, and Fountain Creek Basin segments 1a, 2a, 2b, and 6.

Colorado Springs Utilities continues to use effluent monitoring data from its Water Resource Recovery Facilities (WRRFs) to demonstrate the plants are operating in accordance with the specifications and standards associated with permits for its WRRFs. The only permit limit exceedance for the reporting period was at the JD Phillips Water Resource Recovery Facility (JDPWRRF) for the Daily Maximum Ammonia. This exceedance occurred on February 14, 2022, during a scheduled aeration basin swap.

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #1 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO. USGS Site # 07103700	10-05-2021	J	614	13	9.2	7.8	252	9.3	3.5	< 0.02	610	> 2,400	0.11
	11-02-2021		612	14	10.3	7.9	232	4.1	3.4	< 0.02	330	1,200	0.06 n
	12-09-2021		601	10	10.7	8	326	2.7	1.1	< 0.02	380	630	0.12
	01-13-2022		613 S	9 S	10.8 S	8.1 S	327 S	3.0 S	2.4 S	< 0.02 S	160 S	520 S	0.16 S
	02-09-2022		611 S	13 S	11.4 S	8 S	305 S	0.8 S	2.6 S	< 0.02 S	73 S	290 S	0.2 S
	03-09-2022		602 S	10 S	11.4 S	8 S	297 S	-0.1 S	4.2 S	< 0.02 S	90 S	330 S	0.18 S
	04-13-2022		603 S	11 S	10.9 S	8 S	312 S	2.0 S	1.2 S	< 0.02 S	170 S	580 S	0.21 S
	05-10-2022		609 S	9 S	9.2 S	8.3 S	318 S	9.3 S	2.7 S	< 0.02 S	61 S	770 S	0.15 S
	06-15-2022		609 S	14 S	8.4 S	8.1 S	276 S	13.2 S	3 S	< 0.02 S	260 S	> 2,400 S	0.15 S
	07-12-2022		613 S	11 S	8.0 S	8.2 S	393 S	14.9 S	2.8 S	< 0.02 S	1,600 S	> 2,400 S	TBR
	07-20-2022		612 S	30 S	6.7 S	8 S	180 S	21.7 S	500 S	--	73,000 S	> 240,000 S	0.37 S
	08-04-2022		612 S	10 S	7.5 S	8.3 S	320 S	18.9 S	15 S	< 0.02 S	780 S	16,000 S	0.13 S
	09-08-2022		610 S	10 S	7.9 S	8.2 S	303 S	14.9 S	4.2 S	< 0.02 S	73 S	190 S	0.12 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			6.0 (minimum)	6.5-9.0		Apr.-Oct.=24.3 Nov.-Mar.=13.0		See note 1	126		4.6 (chronic)

Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.
4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualifier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #2 MONUMENT CREEK AT BIJOU ST. AT COLO. SPRINGS, CO USGS Site # 07104905	10-04-2021		617	18	9.0	8.1	771	11.6	2	0.04 n	340	> 2,400	3
	11-01-2021		616	35	9.5	8.8	752	10.1	5.3	0.45	280	> 2,400	2.1
	11-09-2021		614	24	9.6	8.4	751	10.7	5.1	0.16	--	--	--
	12-07-2021		609	27	10.8	8.5	752	6.7	3.4	0.12	110	2,400	2.8
	01-03-2022		612 S	18 S	10.8 S	8.2 S	1,220 S	4.4 S	2.8 S	0.33 S	290 S	2,400 S	3.4 dS
	02-01-2022		608 S	12 S	11 S	8.1 S	903 S	2.0 S	1.8 S	0.04 S	84 S	870 S	4.3 S
	03-04-2022		607 S	24 S	10.1 S	8.2 S	945 S	6.3 S	4.1 S	0.16 S	370 S	2,400 S	3.8 rdcS
	04-11-2022		606 S	23 S	10.7 S	8.7 S	812 S	8.4 S	2.7 S	< 0.02 S	23 S	490 S	3.4 S
	05-04-2022		609 S	18 S	9.2 S	8.4 S	812 S	10.6 S	1.9 S	0.04 nS	730 S	1,700 S	3.6 S
	06-06-2022		611 S	19 S	8.1 S	8.4 S	744 S	15.6 S	3.1 S	0.02 nS	140 S	> 2,400 S	2.6 S
	07-05-2022		614 S	23 S	7.5 S	8.2 S	588 S	18.8 S	7.8 S	0.04 nS	550 S	24,000 S	TBR
	08-02-2022		613 S	24 S	7.4 S	8.3 S	668 S	19.5 S	7.6 S	< 0.02 S	300 S	6,300 S	2 S
	09-06-2022		617 S	17 S	8.0 S	8.5 S	693 S	16.8 S	1.4 S	< 0.02 S	280 S	> 2,400 S	2 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

- Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.
4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #3 FOUNTAIN CREEK AT COLORADO SPRINGS, CO USGS Site # 07105500	10-04-2021		619	32	9.1	8.0	656	12.5	2.1	0.03 n	400	> 2,400	2
	11-01-2021		617	49	9.5	8.1	666	9.4	4.7	0.2	270	> 2,400	1.8
	11-09-2021		616	48	9.5	8.1	646	9.4	3.5	0.08	--	--	--
	12-07-2021		610	48	10.6	8.3	683	6.1	3.7	0.04 +c	150	> 2,400	2.1
	01-03-2022		613 S	36 S	10.8 S	8.0 S	985 S	4.1 S	3.5 S	0.16 S	410 S	1,600 S	2.9 S
	02-01-2022		610 S	21 S	11.2 S	8.1 S	823 S	2.6 S	2.1 S	0.04 nS	29 S	580 S	3 S
	03-04-2022		609 S	34 S	10.2 S	8.2 S	789 S	6.4 S	5.8 S	0.08 S	79 S	1,300 S	2.9 S
	04-11-2022		607 S	30 S	10.1 S	8.5 S	690 S	9.4 S	2.1 S	< 0.02 S	36 S	1,200 S	2.7 S
	05-04-2022		611 S	52 S	9.4 S	8.3 S	697 S	10.4 S	2.6 S	0.03 nS	240 S	> 2,400 S	2.3 S
	06-06-2022		612 S	39 S	8.1 S	8.3 S	635 S	15.4 S	3.6 S	< 0.02 S	120 S	> 2,400 S	1.9 S
	07-05-2022		615 S	30 S	7.4 S	8.2 S	634 S	19.6 S	6.9 S	0.04 nS	500 S	20,000 S	TBR
	08-02-2022		614 S	30 S	7.2 S	8.2 S	709 S	21.3 S	6.9 S	< 0.02 S	480 S	11,000 S	1.9 S
	09-06-2022		619 S	32 S	7.9 S	8.2 S	705 S	19.5 S	1.7 S	< 0.02 S	290 S	> 2,400 S	2 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.
4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #4 FOUNTAIN CR BLW JANITELL RD BLW COLO. SPRINGS, CO USGS Site # 07105530	10-04-2021	J	621	86	8.5	8.0	660	19.3	2.5	0.09	390	> 2,400	1.8
	11-01-2021		619	92	8.8	7.9	694	14	3.9	0.15	580	> 2,400	2
	11-09-2021		616	92	9.2	8.0	663	14.2	2.8	0.05	--	--	--
	12-07-2021		611	90	9.8	8.1	685	11.6	3.6	0.08	140	1,700	2.2
	01-03-2022		614 S	84 S	9.3 S	7.8 S	947 S	11.2 S	3.6 S	0.07 S	1,600 S	> 2,400 S	2.3 S
	02-01-2022		611 S	47 S	10.5 S	8.2 S	803 S	9.7 S	2.3 S	0.03 nS	99 S	1,700 S	2.9 S
	03-04-2022		609 S	44 S	10.5 S	8.3 S	809 S	11.1 S	2.7 S	0.04 S	66 S	1,300 S	2.8 S
	04-11-2022		606 S	97 S	10.4 S	8.6 S	685 S	14.9 S	5.2 S	0.02 nS	1,100 S	> 2,400 S	2.1 S
	05-04-2022		612 S	79 S	8.4 S	8.3 S	724 S	16.4 S	8.1 S	0.05 S	190 S	> 2,400 S	2.2 S
	06-06-2022		613 S	71 S	7.8 S	8.2 S	683 S	18.7 S	3.5 S	0.04 S	160 S	> 2,400 S	2 S
	06-25-2022		615 S	1,060 S	7.8 S	7.9 S	328 S	18.4 S	390 S	--	15,000 S	> 240,000 S	1.4 S
	07-05-2022		616 S	52 S	7.3 S	8.2 S	664 S	22.7 S	9.7 S	0.06 S	450 S	14,000 S	TBR
	08-02-2022		615 S	73 S	6.9 S	8.1 S	731 S	25.1 S	6 S	0.04 nS	270 S	12,000 S	1.8 S
	09-06-2022		620 S	74 S	8.7 S	8.4 S	703 S	23.6 S	2.8 S	0.03 nS	1,000 S	> 24,000 S	1.9 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.

2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.

3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.

4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #5 FOUNTAIN CREEK AT SECURITY, CO USGS Site # 07105800	10-05-2021		624	75	8.6	8.6	766	20.2	7.3	0.22	120	2,000	2.9
	11-02-2021		622	107	9.1	8.2	732	10.5	12	0.26	160	2,400	2.2
	12-07-2021		616	97	9.8	8.5	745	9.6	9.7	0.26	58	2,000	2.7
	01-13-2022		623 S	40 S	10.0 S	8.4 S	878 S	8.7 S	3.9 S	0.75 S	40 S	1,000 S	3.5 S
	02-09-2022		621 S	37 S	10.2 S	8.5 S	1,030 S	8.4 S	4.6 S	0.02 nS	15 S	650 S	3.9 S
	03-09-2022		614 S	32 S	11.2 S	8.6 S	1,030 S	6.1 S	4 S	0.05 S	6 S	520 S	4.2 S
	04-13-2022		615 S	57 S	11.5 S	9.1 S	805 S	10.0 S	4.4 S	< 0.02 S	25 S	460 S	2.7 S
	05-10-2022		619 S	54 S	8.1 S	8.7 S	874 S	21.6 S	7.9 S	0.05 S	9 S	2,000 S	3.2 S
	06-15-2022		619 S	83 S	8.4 S	8.9 S	787 S	24.4 S	5.2 S	< 0.02 S	14 S	> 2,400 S	TBR
	07-12-2022		624 S	41 S	8.7 S	9.1 S	826 S	26.6 S	2.6 S	0.02 nS	41 S	2,900 S	TBR
	08-09-2022		625 S	146 S	6.7 S	8.3 S	675 S	25.8 S	46 S	< 0.02 S	600 S	24,000 S	1.8 S
	09-07-2022		625 S	44 S	9.1 S	9.1 S	834 S	25.4 S	2.8 S	< 0.02 S	75 S	4,600 S	2.6 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

- Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
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4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #6 FOUNTAIN CR BELOW JIMMY CAMP CR NR FOUNTAIN, CO USGS Site # 383854104413601	10-01-2021		628	107	8.6	8.1	784	13.8	9	0.06	280	> 2,400	2.2
	11-08-2021		626	105	9.4	8	785	8.6	9.9	0.41	110	2,400	2.7
	12-01-2021		628	80	10.2	8.1	802	6.4	7.4	0.13	43	1,300	2.7
	01-05-2022		619 S	95 S	10.9 S	8.3 S	912 S	3.9 S	10 S	0.04 S	140 S	1,300 S	3 S
	02-10-2022		624 S	71 S	10.6 S	8.3 S	1,020 S	7.0 S	7.7 S	0.02 nS	71 S	1,700 S	3.1 S
	03-01-2022		628 S	75 S	10.8 S	8.4 S	976 S	6.5 S	6.2 S	< 0.02 S	< 10 S	400 S	3.5 S
	04-14-2022		622 S	62 S	11.3 S	8.5 S	882 S	5.9 S	5 S	0.02 nS	24 S	770 S	3.2 S
	05-05-2022		624 S	86 S	9.4 S	8.6 S	869 S	14.7 S	18 S	0.05 S	250 S	> 2,400 S	3 S
	06-09-2022		624 S	103 S	8.0 S	8.4 S	798 S	16.9 S	14 S	0.02 nS	75 S	16,000 S	2 S
	07-07-2022		626 S	111 S	7.4 S	8.3 S	808 S	22.2 S	17 S	0.04 nS	930 S	> 24,000 S	2.5 S
	08-04-2022		628 S	101 S	7.6 S	8.3 S	880 S	19.8 S	9.2 S	< 0.02 S	170 S	16,000 S	2.8 S
	09-16-2022		625 S	44 S	8.0 S	8.4 S	847 S	17.9 S	5.2 S	0.03 nS	82 S	> 2,400 S	2.5 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

- Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
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4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #7 FOUNTAIN CREEK NEAR FOUNTAIN, CO. USGS Site # 07106000	10-01-2021		630	106	8.6	8.1	841	14.7	24	0.03 n	160	> 2,400	2.7
	11-08-2021		629	109	9.3	8.0	832	10.0	11	0.37	46	> 2,400	2.8
	12-01-2021		630	107	10.3	8.1	840	7.1	8	0.07	10	1,100	2.8
	01-05-2022		620 S	107 S	10.7 S	8.2 S	949 S	4.9 S	11 S	0.03 nS	34 S	1,300 S	3.1 S
	02-09-2022		626 S	82 S	9.7 S	8.4 S	1,090 S	8.8 S	9.2 S	0.02 nS	8 S	1,400 S	3.6 S
	03-01-2022		628 S	85 S	9.8 S	8.4 S	1,020 S	10.6 S	6.2 S	< 0.02 S	10 S	130 S	3.9 S
	04-11-2022		616 S	69 S	8.3 S	8.7 S	893 S	17.1 S	8.8 S	< 0.02 S	12 S	870 S	3 S
	05-09-2022		614 S	37 S	9.3 S	8.4 S	979 S	11.0 S	4.7 S	0.03 nS	50 S	> 2,400 S	3.4 S
	06-06-2022		624 S	93 S	7.1 S	8.3 S	899 S	21.8 S	7.5 S	< 0.02 S	17 S	> 2,400 S	2.8 S
	07-12-2022		629 S	54 S	7.5 S	8.6 S	946 S	27.7 S	2.6 S	0.03 nS	10 S	1,900 S	TBR
	08-09-2022		630 S	126 S	6.1 S	8.1 S	780 S	27.7 S	35 S	0.08 S	250 S	> 24,000 S	2.2 S
	09-13-2022		627 S	92 S	7.8 S	8.1 S	889 S	16.0 S	6.4 S	< 0.02 S	110 S	2,400 S	3.3 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

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4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #8 FOUNTAIN CREEK NEAR PINON, CO USGS Site # 07106300	10-01-2021		637 S	94 S	8.3 S	8.2 S	1,000 S	16.8 S	69 S	0.05 S	290 S	> 2,400 S	2.9 S
	11-08-2021		637 S	106 S	9.4 S	8.2 S	943 S	10.6 S	41 S	< 0.02 S	55 S	> 2,400 S	3.2 S
	12-01-2021		637 S	87 S	10.2 S	8.2 S	951 S	7.6 S	28 S	< 0.02 S	20 S	1,000 S	3.3 S
	01-05-2022		626 S	98 S	10.5 S	8.2 S	1,040 S	5.3 S	43 S	0.04 nS	34 S	2,400 S	3.9 S
	02-10-2022		636 S	83 S	9.6 S	8.2 S	1,120 S	9.2 S	33 S	< 0.02 S	16 S	1,200 S	3.8 S
	03-01-2022		636 S	80 S	8.5 S	8.3 S	1,120 S	15.2 S	26 S	< 0.02 S	< 10 S	360 S	4.7 S
	04-14-2022		631 S	47 S	9.1 S	8.3 S	1,050 S	11.7 S	16 S	< 0.02 S	4 S	120 S	4.1 S
	05-05-2022		633 S	63 S	7.4 S	8.5 S	1,080 S	23.4 S	56 S	0.02 nS	410 S	2,400 S	TBR
	06-09-2022		633 S	85 S	7.4 S	8.4 S	965 S	21.0 S	52 S	< 0.02 S	220 S	12,000 S	2.5 S
	07-07-2022		636 S	84 S	6.5 S	8.3 S	892 S	27.6 S	96 S	0.03 nS	910 S	24,000 S	TBR
	08-04-2022		637 S	65 S	7.0 S	8.2 S	1,020 S	23.6 S	25 S	< 0.02 S	450 S	24,000 S	2.9 S
	09-16-2022		633 S	10 S	7.0 S	8.2 S	1,110 S	23.9 S	14 S	0.03 nS	180 S	> 2,400 S	3.5 S
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

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Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
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sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #9 FOUNTAIN CR ABV 40TH ST AT PUEBLO, CO USGS Site # 381840104361001	10-07-2021		643	68	8.9	8.4	1,090	13	25	< 0.02	160	> 2,400	5.2
	11-08-2021		642	108	9.2	8.3	1,030	12.4	47	< 0.02	93	> 2,400	3.8 d
	12-01-2021		642	101	9.8	8.3	1,030	9.9	29	< 0.02	10	1,800	4.4
	01-05-2022		631 S	111 S	10.4 S	8.3 S	1,100 S	6.1 S	46 S	< 0.02 S	31 S	1,900 S	3.4 dS
	02-03-2022		644 S	73 S	11.8 S	8.2 S	1,060 S	0.1 S	19 S	0.05 S	2 S	150 S	5.3 S
	03-08-2022		640 S	74 S	9.4 S	8.5 S	1,170 S	11.1 S	15 S	< 0.02 S	2 S	200 S	6.1 S
	04-14-2022		637 S	58 S	8.9 S	8.5 S	1,130 S	15.3 S	11 S	< 0.02 S	2 S	160 S	5.7 S
	05-11-2022		638 S	45 S	8.2 S	8.5 S	1,210 S	20.3 S	7.2 S	0.02 nS	20 S	730 S	7.1 S
	06-09-2022		639 S	108 S	7.4 S	8.5 S	1,040 S	21.2 S	54 S	< 0.02 S	160 S	8,700 S	4.2 S
	07-07-2022		646 S	109 S	6.3 S	8.4 S	1,040 S	29.6 S	340 S	0.57 S	2,000 S	77,000 S	4.3 S
	08-04-2022		642 S	82 S	6.7 S	8.4 S	1,120 S	26.8 S	20 S	< 0.02 S	63 S	13,000 S	4.5 S
	09-16-2022		638 S	15 S	7.2 S	8.3 S	1,460 S	26.2 S	3.2 S	0.02 nS	12 S	> 2,400 S	12.5 dS
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		4.6 (chronic)

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Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #10 FOUNTAIN CREEK AT PUEBLO, CO. USGS Site # 07106500	10-07-2021		643 S	97 S	8.8 S	8.3 S	1,140 S	15.8 S	28 S	< 0.02 S	86 S	960 S	8.1 S
	11-09-2021		646 S	105 S	10.4 S	8.3 S	1,060 S	6.5 S	32 S	< 0.02 S	58 S	2,000 S	5.9 rdcS
	12-08-2021		633 S	145 S	10.2 S	8.3 S	1,050 S	6.8 S	33 S	< 0.02 S	11 S	2,400 S	6.8 S
	01-12-2022		646 S	90 S	10.7 S	8.3 S	1,130 S	5.9 S	17 S	< 0.02 S	4 S	440 S	8.3 dS
	02-03-2022		645 S	98 S	12 S	8.2 S	1,150 S	1.1 S	26 S	< 0.02 S	< 1 S	260 S	8.5 S
	03-08-2022		640 S	76 S	9.1 S	8.5 S	1,220 S	12.1 S	16 S	< 0.02 S	5 S	230 S	9.7 dS
	04-12-2022		628 S	88 S	8.6 S	8.5 S	1,170 S	14.8 S	23 S	< 0.02 S	8 S	270 S	8.6 S
	05-09-2022		630 S	42 S	8.8 S	8.5 S	1,330 S	14.2 S	6.7 S	< 0.02 S	--	1,000 S	13.5 dS
	06-14-2022		638 S	45 S	7.8 S	8.5 S	1,260 S	20.7 S	7.8 S	< 0.02 S	86 S	1,100 S	10.1 dS
	06-21-2022		605 S	43 S	8.0 S	8.4 S	1,310 S	17.5 S	6 S	--	52 S	2,200 S	--
	07-12-2022		643 S	42 S	6.5 S	8.5 S	1,370 S	30.5 S	13 S	0.02 nS	310 S	3,600 S	TBR
	08-10-2022		648 S	98 S	6.9 S	8.3 S	1,070 S	24.6 S	72 S	TBR	170 S	> 2,400 S	5.8 S
	09-15-2022		641 S	30 S	8.0 S	8.5 S	1,500 S	19.1 S	4.5 S	0.02 nS	28 S	2,400 S	18.5 dS
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		28.1 (chronic)

Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.
4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #11 FOUNTAIN CR AT EAST RIVER ST AT PUEBLO, CO USGS Site # 381601104355801	10-07-2021		643	77	8.2	8.4	1,150	18.7	29	< 0.02	120	2,400	8.4
	11-09-2021		646	111	10.0	8.3	1,080	8	35	< 0.02	53	> 2,400	5.5 d
	12-06-2021		644	124	11.2	8.3	1,100	4.3	30	< 0.02	15	> 2,400	6.2 d
	01-12-2022		648 S	83 S	11.3 S	8.3 S	1,150 S	3.5 S	15 S	< 0.02 S	4 S	410 S	7.6 dS
	02-03-2022		646 S	93 S	11.8 S	8.3 S	1,160 S	2 S	27 S	0.08 S	7 S	210 S	8.6 S
	03-08-2022		640 S	91 S	9.1 S	8.5 S	1,240 S	10.8 S	16 S	< 0.02 S	29 S	290 S	9.7 dS
	04-11-2022		636 S	87 S	9.2 S	8.5 S	1,190 S	12.8 S	20 S	< 0.02 S	4 S	280 S	9.9 S
	05-11-2022		640 S	52 S	8.6 S	8.3 S	1,340 S	16.2 S	8.8 S	0.03 nS	35 S	2,000 S	14.1 dS
	06-14-2022		639 S	52 S	7.8 S	8.4 S	1,290 S	17.3 S	9.1 S	< 0.02 S	110 S	8,200 S	11.4 dS
	07-11-2022		646 S	50 S	6.8 S	8.4 S	1,340 S	27.3 S	23 S	0.03 nS	290 S	7,700 S	12.6 dS
	08-10-2022		649 S	116 S	7.2 S	8.3 S	1,070 S	21.4 S	81 S	< 0.02 S	330 S	> 2,400 S	6.1 S
	09-15-2022		642 S	26 S	8.0 S	8.4 S	1,540 S	17 S	5 S	0.02 nS	28 S	> 2,400 S	18.5 dS
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		28.1 (chronic)

Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.
4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #12 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO USGS Site # 07099971	10-06-2021		644	124	9.7	8.6	549	18.1	2.5	0.02 n	13	> 2,400	14.3 d
	11-08-2021		645	139	10.1	8.6	590	12.2	3.9	0.02 n	26	1,300	13.5 d
	12-06-2021		643	105	11.6	8.5	629	6.2	3	< 0.02	27	410	19 d
	01-12-2022		647 S	80 S	11.7 S	8.5 S	726 S	5.1 S	2.3 S	< 0.02 S	13 S	310 S	22.9 dS
	02-08-2022		647 S	119 S	11.7 S	8.4 S	655 S	5.4 S	2 S	0.03 nS	16 S	250 S	20.3 dS
	03-01-2022		643 S	70 S	11.2 S	8.6 S	731 S	8.3 S	1.2 S	< 0.02 S	23 S	650 S	23.3 dS
	04-11-2022		636 S	192 S	11.7 S	8.9 S	520 S	9.8 S	1.8 S	< 0.02 S	5 S	340 S	12.1 dS
	05-09-2022		632 S	325 S	10.7 S	8.8 S	543 S	11.5 S	3.1 S	0.02 nS	14 S	2,000 S	10.7 dS
	06-14-2022		637 S	1,620 S	9.5 S	8.9 S	431 S	15.7 S	3.7 S	< 0.02 S	10 S	400 S	6.5 S
	07-11-2022		646 S	711 S	9.5 S	8.7 S	468 S	18.9 S	2.9 S	< 0.02 S	44 S	> 2,400 S	6.6 S
	08-10-2022		648 S	304 S	9.1 S	8.8 S	493 S	20.2 S	4.8 S	TBR	220 S	> 2,400 S	10.4 dS
	09-13-2022		643 S	154 S	9.2 S	8.4 S	533 S	17.6 S	1.1 S	0.02 nS	140 S	> 2,400 S	12 dS
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		Mar.-Nov.=28.6 Dec.-Feb.=25.2		See note 1	126		17.1 (chronic)

- Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.
4. Bi-Weekly E.Coli samples ceased in 2021

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Location	Date	Sample Note	Barometric pressure (mmHg)	Flow (cfs)	Dissolved oxygen (mg/L)	pH	Specific conductance (µS/cm at 25°C)	Temperature (°C)	Turbidity (FNU)	Total Ammonia (mg/L as N)	Escherichia coli (#/100 mL)	Total coliform (#/100 mL)	Selenium (µg/L)
SP #13 ARKANSAS RIVER NEAR AVONDALE, CO. USGS Site # 7109500	10-06-2021		644	281	8.1	8.3	813	20.7	17	< 0.02	68	2,400	11 d
	11-08-2021		649	364	9.5	8.2	817	10.7	18	0.02 n	80	> 2,400	10.1 d
	12-06-2021		645	300	11.2	8.3	924	5.6	12	0.04 n	12	920	12.7 d
	01-12-2022		650 S	272 S	11.1 S	8.3 S	956 S	5.7 S	10 S	0.1 S	8 S	340 S	13.3 dS
	02-08-2022		650 S	315 S	10.9 S	8.3 S	978 S	6.2 S	18 S	0.09 S	7 S	730 S	13.8 dS
	03-08-2022		646 S	300 S	10.8 S	8.2 S	967 S	4.9 S	16 S	0.06 S	20 S	650 S	14.1 dS
	04-11-2022		633 S	508 S	9.3 S	8.6 S	748 S	15.7 S	15 S	0.04 S	10 S	520 S	11.5 dS
	05-11-2022		642 S	537 S	8.5 S	8.4 S	695 S	18.4 S	14 S	0.03 nS	22 S	1,700 S	9.5 dS
	06-14-2022		642 S	2,220 S	8.1 S	8.3 S	483 S	16.1 S	23 S	< 0.02 S	32 S	2,400 S	6 S
	07-11-2022		649 S	957 S	7.5 S	8.3 S	536 S	22.6 S	19 S	< 0.02 S	140 S	4,600 S	7.4 S
	08-10-2022		651 S	600 S	7.0 S	8.3 S	687 S	24.4 S	48 S	TBR	210 S	> 2,400 S	9.6 dS
	09-15-2022		645 S	188 S	8.3 S	8.5 S	783 S	21.4 S	6.4 S	< 0.02 S	23 S	> 2,400 S	11.4 dS
Standards from WQCC Regulation No. 32, Appendix 32-1 (if applicable)		See note 2			5.0 (minimum)	6.5-9.0		See note 5		See note 1	126		14.1 (chronic)

- Notes: 1. Standards for ammonia include calculations to be performed monthly and are not included as the small amount of data would yield inaccurate standards.
2. Samples with a note of J are storm event samples, and are provided as additional data for informational purposes.
3. Data in the above table were queried from the USGS National Water Information System database (<https://waterdata.usgs.gov/nwis>) on January 25, 2023.
4. Bi-Weekly E.Coli samples ceased in 2021
5. Temperature DM standard is Jan.-Feb.=25.2, Mar.-Nov.=28.6, Dec=21.5.

Legend	
Description	Qualfier
no data for that parameter for that sample event	--
less than	<
greater than	>
estimated	E
holding time exceeded	@
see USGS result comment in NWIS	c
sample was diluted	d
below the reporting level but at or above the detection level	n
value verified by rerun, same method	r
value will likely be estimated when record is approved	#
improper preservation	+
Sample collected, result not yet released by USGS	TBR
data is preliminary and subject to change based on USGS QA/QC	S

Complaint Log

Complaint logs are only recorded during construction, so no attachment is included. This activity will resume during Phase II construction.

Emergency Response Log

Emergency response logs are only recorded during construction, so no attachment is included. This activity will resume during Phase II construction.

Log of Work Occurring During Non-Typical Work Hours

Non-typical work hours are only recorded during construction, so no attachment is included. This activity will resume during Phase II construction.

Expenditures for Wastewater System Improvements

Pueblo County 1041 Permit

Expenditures for Wastewater System Improvements

Annual Progress Report

January 20, 2023

Reporting for the period between January 1, 2022 and December 31, 2022

Table of Contents

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Project Descriptions.....	2
Local Collectors Evaluation and Rehabilitation Project (LCERP).....	2
Collection System Rehabilitation and Replacement Project (Collection R&R).....	3
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APPENDIX A – 2022 LCERP ACTIVITY TABLE

Introduction

On March 18, 2009 the Pueblo Board of County Commissioners passed Resolution No. P&D 09-22, approving 1041 Permit No. 2008-002 with terms and conditions for construction of the Southern Delivery System (SDS) water project within Pueblo County, Colorado.

1041 Permit Condition No.7 requires that Colorado Springs Utilities provide an annual report to the Pueblo County Board of Commissioners on or before January 31 of each year reporting the Wastewater System Improvement expenditures from January 1 through December 31 of the prior year. Condition No.7 of the permit states:

Expenditures for Wastewater System Improvements

In order to continue its efforts to protect against future spills to Fountain Creek, to increase its opportunities for reuse, and to mitigate possible water quality impacts by the SDS Project to Fountain Creek, Colorado Springs Utilities shall commit to invest an additional seventy-five million dollars (\$75,000,000) in its wastewater system. Expenditures will be made as part of the wastewater collection system rehabilitation programs or wastewater reuse systems between January 1, 2009 and December 31, 2024 as required. These expenditures shall be for projects not currently required by other regulatory permits, agency enforcement or court orders, consent agreements, or governmental regulations existing as of January 30, 2009. These expenditures will include the Local Collector Evaluation and Rehabilitation Program (LCERP) for the improvement and fortification of wastewater lines which could adversely affect Fountain Creek or its tributaries. These expenditures are subject to annual appropriation by the Colorado Springs City Council. Beginning in 2010, by January 31 of each year, Colorado Springs Utilities shall provide an annual report to Pueblo County describing such expenditures for the prior year.

In 2020 the projects that met the terms of Condition No. 7 included projects specifically performed under the 1) Local Collectors Evaluation and Rehabilitation Program (LCERP), which consists of the evaluation and rehabilitation of sanitary sewer collection pipes less than 10-inches in diameter, and 2) the Collection System Rehabilitation and Replacement Program (Collection R&R), which consists of the systematic evaluation and rehabilitation of sanitary sewer collection pipes 10-inches in diameter and greater. These projects are independent of Colorado Springs Utilities' normal operation and maintenance programs.

Project Descriptions

Local Collectors Evaluation and Rehabilitation Program (LCERP)

LCERP consists of the systematic evaluation and rehabilitation of sanitary sewer collection pipes less than 10-inches in diameter.

LCERP:

- Determines the condition of all the sanitary sewer pipe segments less than 10-inches in diameter and places them by priority on a schedule to be re-inspected, rehabilitated, repaired and/or replaced.
- Reduces the risk of Sanitary Sewer Overflows (SSOs)
- Is part of the overall long-term investments in our wastewater system.

In 2022, LCERP repaired or rehabilitated approximately 15,979 feet (or 3.03 miles) of less than 10-inch sewer pipe, representing approximately 49 line segments, at a cost of \$694,282.

Collection System Rehabilitation and Replacement Program (Collection R&R)

The Sanitary Sewer Evaluation and Rehabilitation Program (SSERP) was completed on December 31, 2012, meeting all the requirements of the CDPHE Compliance Order on Consent (COC). Closure of the COC was requested on January 29, 2013 and granted by CDPHE on March 8, 2013. The successor Collection System Replacement and Rehabilitation Program (Collection R&R) contracts were also put into place in 2009 to continue the rehabilitation and replacement of the pipes identified and is described below.

The Collection R&R program rehabilitates or replaces large diameter (10-inch and greater) sanitary sewer pipe that were installed after January 1, 1994.

R&R:

- Is designed to facilitate operations, increase capacity, and upgrade the system
- Focuses on the reduction of sanitary sewer overflows and stoppages
- Reduces the risk of spills and protects the public health and environment.

In 2022, Colorado Springs Utilities commenced an approximately 2,000-foot rehabilitation project of a 36-inch diameter sanitary line that continued into and will be completed in 2023. A total of \$476,000 was expended by the Collection R&R program on this project in 2022.

Manhole Evaluation and Rehabilitation Project (MHERP)

MHERP has been developed as a comprehensive program to provide the rehabilitation of sanitary sewer manholes throughout the Springs Utilities wastewater collection system

MHERP:

- Is designed to reducing the risk of spills, stoppages, and SSOs
- Reduces infiltration and inflow at manholes throughout collection system.

In 2022, all manhole related projects were conducted under normal operation and maintenance operations.

Wastewater Reuse System

The Colorado Springs Utilities Wastewater Reuse System consists of several pumping stations, storage reservoirs, holding ponds, transmission mains, and a tertiary treatment facility.

Wastewater Reuse Systems:

- Deliver tertiary-treated wastewater to parks, cemeteries, golf courses, and commercial properties for landscape irrigation
- Include supplies from raw surface water, groundwater, and reclaimed water.

Only normal operation and maintenance of the reuse system was conducted in 2022. Design of the Las Vegas Street Wastewater Resource Recovery Facility (LVSWRRF) east non-potable water reservoir basin rehabilitation work to repair spalling and cracking of the concrete lining surface commenced in 2022 and is expected to be completed in 2023. A total of \$90,025 was expended on the design in 2022. The project, which supports Colorado Springs Utilities wastewater reuse system, is expected to be constructed between 2023 and 2025 to replace the concrete liner.

Summary

During the reporting period of January 1, 2022 through December 31, 2022 costs expended for the LCERP and Collection R&R programs included in this period totaled \$1,170,282. Work performed under other programs previously reported were either performed under normal operation and maintenance operations or reported under other agreement related expenditure reporting. The total Wastewater Expenditures reported since 2009 associated with the \$75,000,000 commitment included in the SDS 1041 Permit Condition 7 is **\$78,314,056**.

Pueblo County 1041 Permit Annual Progress Report

Activity #	Actuals													2022	Totals
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
495121 LCERP	\$ 7,733,603	\$ 8,408,146	\$ 4,561,653	\$ 2,055,737	\$ 3,889,389	\$ 4,242,628	\$ 4,152,408	\$ 1,957,137	\$ 3,106,415	\$ 2,232,073	\$ 2,638,579	\$ 2,004,614	\$ 2,574,603	\$ 694,282	\$ 50,251,267
495123 SSCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,303,553	\$ 3,306,495	\$ -	\$ -	\$ -	\$ -	\$ 2,939,364	\$ -	\$ 476,000	\$ 10,025,412
495122 MIHERP	\$ 413,643	\$ 943,909	\$ 776,836	\$ 755,602	\$ 369,336	\$ 205,348	\$ 130,210	\$ -	\$ 7,841	\$ -	\$ 37,590	\$ 1,105	\$ -	\$ -	\$ 3,641,420
495126 Coll R&R	\$ 776,481	\$ 201,008	\$ -	\$ -	\$ -	\$ -	\$ 1,152,151	\$ 871,895	\$ 3,191,192	\$ 3,664,480	\$ 3,021,310	\$ 1,378,280	\$ -	\$ -	\$ 14,256,797
Reuse System	\$ -	\$ 49,135	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90,025	\$ 139,160
Total	\$ 8,923,727	\$ 9,602,198	\$ 5,338,489	\$ 2,811,339	\$ 4,258,725	\$ 7,751,529	\$ 8,741,264	\$ 2,829,032	\$ 6,305,448	\$ 5,896,553	\$ 5,697,479	\$ 6,323,363	\$ 2,574,603	\$ 1,260,307	\$ 78,314,056

Appendix A

2022 LCERP ACTIVITY TABLE

Pipe LID	Work Order #	DIAMETER (inches)	LENGTH (feet)	Assesment Description	Collection Basin Name	Date Complete
WW.151709	3825689	6	167	CIPP	SHOOKS RUN	02/08/22
WW.179167	3825675	8	96	CIPP	SHOOKS RUN	02/09/22
WW.151605	3825688	8	267	CIPP	SHOOKS RUN	02/15/22
WW.149596	3825676	8	502	CIPP	SHOOKS RUN	02/16/22
WW.157710	3825685	8	500	CIPP	SHOOKS RUN	02/24/22
WW.157708	3825681	8	507	CIPP	SHOOKS RUN	03/23/22
WW.139365	3831760	8	326	CIPP	SHOOKS RUN	03/29/22
WW.145618	3831770	8	209	CIPP	SHOOKS RUN	03/30/22
WW.160299	3825310	8	186	CIPP	SHOOKS RUN	03/31/22
WW.139517	3825296	8	182	CIPP	GARDEN OF THE GODS	04/01/22
WW.147591	3825686	8	501	CIPP	SHOOKS RUN	04/05/22
WW.159815	3825693	8	433	CIPP	SHOOKS RUN	04/06/22
WW.137242	3825687	8	502	CIPP	SHOOKS RUN	04/11/22
WW.153631	3825692	8	225	CIPP	SHOOKS RUN	04/12/22
WW.159875	3825303	8	485	CIPP	SHOOKS RUN	04/13/22
WW.137350	3825300	8	238	CIPP	SHOOKS RUN	04/26/22
WW.137279	3825684	8	295	CIPP	SHOOKS RUN	04/27/22
WW.179165	3825683	6	87	CIPP	SHOOKS RUN	04/28/22
WW.179156	3825674	8	177	CIPP	SHOOKS RUN	05/03/22
WW.164223	3825295	8	283	CIPP	GARDEN OF THE GODS	05/05/22
WW.145480	3825637	8	101	CIPP	PATTY JEWETT	05/17/22
WW.157679	3825639	8	184	CIPP	PATTY JEWETT	05/18/22
WW.137204	3825345	8	531	CIPP	PATTY JEWETT	05/19/22
WW.145478	3825636	8	341	CIPP	PATTY JEWETT	06/08/22
WW.149571	3825652	8	597	CIPP	PATTY JEWETT	06/08/22
WW.137163	3825333	8	350	CIPP	PATTY JEWETT	06/09/22
WW.151559	3825645	8	325	CIPP	PATTY JEWETT	06/09/22
WW.149574	3825666	8	386	CIPP	PATTY JEWETT	06/15/22
WW.163773	3825336	8	467	CIPP	PATTY JEWETT	06/16/22
WW.149573	3825662	8	500	CIPP	PATTY JEWETT	06/17/22
WW.159707	3825322	8	398	CIPP	PATTY JEWETT	06/20/22
WW.157685	3825664	8	482	CIPP	PATTY JEWETT	06/22/22
WW.139858	3825672	8	413	CIPP	PATTY JEWETT	06/23/22
WW.139225	3825644	8	230	CIPP	PATTY JEWETT	06/30/22
WW.163801	3825622	8	389	CIPP	PATTY JEWETT	10/12/22
WW.156192	3825631	8	340	CIPP	PATTY JEWETT	10/13/22
WW.139224	3825670	8	299	CIPP	PATTY JEWETT	10/18/22
WW.147560	3825671	8	384	CIPP	PATTY JEWETT	10/19/22
WW.154127	3825668	8	163	CIPP	PATTY JEWETT	10/20/22
WW.163771	3825326	8	370	CIPP	PATTY JEWETT	10/25/22
WW.158316	3825338	8	132	CIPP	PATTY JEWETT	10/26/22
WW.155550	3825319	8	380	CIPP	PATTY JEWETT	10/27/22
WW.161728	3825320	8	370	CIPP	PATTY JEWETT	10/28/22
WW.143416	3825682	8	214	CIPP	SHOOKS RUN	12/14/22
WW.161755	3825649	8	46	CIPP	PATTY JEWETT	12/15/22
WW.153547	3825633	8	159	CIPP	PATTY JEWETT	12/19/22
WW.141316	3825660	8	501	CIPP	PATTY JEWETT	12/20/22
WW.134474	3825342	8	441	CIPP	PATTY JEWETT	12/21/22
WW.139434	3825695	8	318	CIPP	LOWER SAND CREEK	12/22/22
Totals	49		15,979			

Summary of Storage, Diversion, Delivery of Water in Pueblo County related to the SDS Project

Data will be reported in 12-month increments, from October of the previous year to September of the current year.

ATTACHMENT 8**Summary of Storage, Diversion, Delivery of Water in Pueblo County**

Storage & Diversion

Colorado Springs Utilities

	Pueblo Reservoir EOM Storage (acre-feet)		Total Diversion	Total Delivery
	<i>Long Term Excess Capacity Acct</i>	<i>Fry-Ark Carry Over Account</i>	acre-feet	acre-feet
Oct 2021	16,466.09	49,576.85	0.00	427.68
Nov	18,021.87	49,425.87	0.00	423.71
Dec	20,183.41	49,332.94	0.00	439.53
Jan 2022	19,927.12	49,251.66	0.00	452.44
Feb	18,250.49	49,146.89	0.00	398.99
Mar	18,203.36	48,952.00	0.00	438.38
Apr	17,773.21	48,573.69	0.00	402.10
May	14,838.66	50,492.62	0.00	385.20
Jun	14,569.41	49,942.86	0.00	391.13
Jul	15,424.32	49,414.80	0.00	389.30
Aug	12,338.25	48,878.13	0.00	418.45
Sep	12,616.09	48,415.85	0.00	403.95

Annual Total: 4970.85

City of Fountain

	Pueblo EOM Storage (acre-feet)		Total Diversion	Total Delivery
	<i>Fry-Ark Carryover Account</i>	<i>SDS Long-Term Excess Capacity Account</i>	acre-feet	acre-feet
Oct 2021	5,591.38	1,472.21	0.00	75.94
Nov	5,452.61	1,528.47	0.00	115.03
Dec	5,313.28	1,586.71	0.00	127.26
Jan 2022	5,151.53	1,643.36	0.00	144.68
Feb	4,986.24	1,639.86	0.00	145.15
Mar	4,889.56	1,628.29	0.00	153.87
Apr	4,815.75	1,773.42	0.00	94.44
May	5,396.68	1,754.94	0.00	248.58
Jun	5,264.29	1,658.29	0.00	174.01
Jul	4,890.64	1,687.03	0.00	301.61
Aug	4,837.47	1,389.83	0.00	129.63
Sep	4,791.73	1,236.76	0.00	140.51

Annual Total: 0.00 1850.71

Pueblo West Metropolitan District

	Pueblo Reservoir EOM Storage (acre-feet)	Total Diversion	Total Delivery
	<i>Pueblo West</i>	acre-feet	acre-feet
Oct 2021	6,884.33	0.00	0.00
Nov	7,701.96	0.00	0.00
Dec	7,447.49	0.00	0.00
Jan 2022	8,330.67	0.00	0.00
Feb	8,091.04	0.00	0.00
Mar	7,797.13	0.00	0.00
Apr	8,058.47	6.36	6.36
May	7,490.10	15.26	15.26
Jun	7,916.00	0.00	0.00
Jul	7,998.69	5.29	5.29
Aug	7,763.74	15.26	15.26
Sep	7,075.64	0.73	0.73

Annual Total: 42.90 42.90

Notes: Only used North Outlet Works in Apr, May, Jul, Aug, and Sep; remainder of deliveries from South Outlet Works.

Security Water District

	Pueblo EOM Storage (acre-feet)		Total Diversion	Total Delivery
	<i>Fry-Ark Carryover Account</i>	<i>SDS Long-Term Excess Capacity Account</i>	acre-feet	acre-feet
Oct 2021	4,169.54	670.16	0.00	30.05
Nov	4,112.38	688.24	0.00	18.76
Dec	4,072.67	739.70	0.00	21.53
Jan 2022	4,021.47	758.47	0.00	12.27
Feb	3,971.21	746.33	0.00	11.44
Mar	3,912.65	727.52	0.00	16.01
Apr	3,863.82	725.67	0.00	46.83
May	4,420.28	618.26	0.00	85.37
Jun	4,314.89	629.62	0.00	66.91
Jul	4,200.58	687.72	0.00	70.84
Aug	4,110.88	680.27	0.00	44.76
Sep	4,029.49	673.83	0.00	43.06

Annual Total: 0.00 467.83

Summary of Participants' SDS Return Flows to Fountain Creek Including Storage and Releases of Such Return Flows

Data will be reported in 12-month increments, from October of the previous year to September of the current year.

ATTACHMENT 9
Summary of Participants' Return Flows to Fountain Creek
Including Storage and Releases of Such Return Flows
 Return Flow Summary
Colorado Springs Utilities

 SDS Return Flow Summary

	Total SDS RFs to Fountain Creek	Avg Flow	Max Daily Flow	RFs to Fountain Creek Storage	RFs released from Ftn Ck Storage
	acre-feet	cfs	cfs	acre-feet	acre-feet
Oct 2021	195.41	3.18	6.29	0.00	0.00
Nov	257.91	4.33	5.28	0.00	0.00
Dec	287.01	4.67	5.62	0.00	0.00
Jan 2022	311.02	5.06	6.39	0.00	0.00
Feb	285.08	5.13	6.17	0.00	0.00
Mar	284.45	4.63	6.39	0.00	0.00
Apr	209.92	3.53	5.72	0.00	0.00
May	121.16	1.97	4.22	0.00	0.00
Jun	99.41	1.67	2.82	0.00	0.00
Jul	104.33	1.70	2.36	0.00	0.00
Aug	117.24	1.91	3.10	0.00	0.00
Sep	112.34	1.89	4.20	0.00	0.00
	2385.28			0.00	0.00

City of Fountain

	Total SDS RFs to Fountain Creek	Avg Flow	Max Daily Flow	RFs to Ftn Ck Storage	RFs released from Ftn Ck Storage
	acre-feet	cfs	cfs	acre-feet	acre-feet
Oct 2021	43.36	0.71	2.01	0.00	0.00
Nov	0.09	0.00	0.05	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00
Jan 2022	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00
Mar	71.76	1.17	2.59	0.00	0.00
Apr	42.85	0.72	2.36	0.00	0.00
May	0.00	0.00	0.00	0.00	0.00
Jun	69.02	1.16	2.16	0.00	0.00
Jul	0.00	0.00	0.00	0.00	0.00
Aug	73.69	1.20	2.15	0.00	0.00
Sep	68.64	1.15	1.43	0.00	0.00
	369.41			0.00	0.00

Pueblo West Metropolitan District

Return Flow Summary

Pueblo West does not discharge return flows to Fountain Creek.

	Total SDS RFs to Fountain Creek	Avg Flow	Max Daily Flow	RFs to Ftn Ck Storage	RFs released from Ftn Ck Storage
	acre-feet	cfs	cfs	acre-feet	acre-feet
Oct 2021	n/a	0.00	0.00	0.00	0.00
Nov		0.00	0.00	0.00	0.00
Dec		0.00	0.00	0.00	0.00
Jan 2022		0.00	0.00	0.00	0.00
Feb		0.00	0.00	0.00	0.00
Mar		0.00	0.00	0.00	0.00
Apr		0.00	0.00	0.00	0.00
May		0.00	0.00	0.00	0.00
Jun		0.00	0.00	0.00	0.00
Jul		0.00	0.00	0.00	0.00
Aug		0.00	0.00	0.00	0.00
Sep		0.00	0.00	0.00	0.00
	0.00			0.00	0.00

Security Water District

	Total SDS RFs to Fountain Creek	Avg Flow	Max Daily Flow	RFs to Ftn Ck Storage	RFs released from Ftn Ck Storage
	acre-feet	cfs	cfs	acre-feet	acre-feet
Oct 2021	18.91	0.31	0.43	0.00	0.00
Nov	17.40	0.29	0.49	0.00	0.00
Dec	19.58	0.32	0.65	0.00	0.00
Jan 2022	11.37	0.18	0.34	0.00	0.00
Feb	11.88	0.21	0.40	0.00	0.00
Mar	14.79	0.24	0.45	0.00	0.00
Apr	24.36	0.41	0.63	0.00	0.00
May	32.34	0.53	0.76	0.00	0.00
Jun	21.18	0.36	0.66	0.00	0.00
Jul	25.08	0.41	0.72	0.00	0.00
Aug	18.14	0.30	0.56	0.00	0.00
Sep	15.65	0.26	0.40	0.00	0.00
	230.68			0.00	0.00

Summaries of SDS Exchanges by Participants between Pueblo Reservoir and the Fountain Creek Confluence

Data will be reported in 12-month increments, from October of the previous year to September of the current year.

ATTACHMENT 10

Summaries of Exchanges by Participants between Pueblo Reservoir and the Fountain Creek Confluence

Colorado Springs Utilities

SDS Exchange Summary

	Total Exchange	Avg Flow
	acre-feet	cfs
Oct 2021	95.95	1.56
Nov	261.50	4.39
Dec	329.21	5.35
Jan 2022	34.74	0.57
Feb	0.00	0.00
Mar	98.85	1.61
Apr	82.36	1.38
May	122.23	1.99
Jun	109.37	1.84
Jul	95.00	1.54
Aug	112.91	1.84
Sep	57.62	0.97
	1399.73	

City of Fountain

SDS Exchange Summary

	Total Exchange	Avg Flow
	acre-feet	cfs
Oct 2021	0.00	0.00
Nov	0.00	0.00
Dec	0.00	0.00
Jan 2022	0.00	0.00
Feb	0.00	0.00
Mar	0.00	0.00
Apr	0.00	0.00
May	0.00	0.00
Jun	0.00	0.00
Jul	0.00	0.00
Aug	0.00	0.00
Sep	0.00	0.00

0.00

Pueblo West Metropolitan District

SDS Exchange Summary

	Total Exchange	Avg Flow
	acre-feet	cfs
Oct 2021	0.00	0.00
Nov	0.00	0.00
Dec	0.00	0.00
Jan 2022	0.00	0.00
Feb	0.00	0.00
Mar	0.00	0.00
Apr	0.00	0.00
May	0.00	0.00
Jun	0.00	0.00
Jul	0.00	0.00
Aug	0.00	0.00
Sep	0.00	0.00

0.00

Security Water District

SDS Exchange Summary

	Total Exchange	Avg Flow
	acre-feet	cfs
Oct 2021	0.00	0.00
Nov	0.00	0.00
Dec	0.00	0.00
Jan 2022	0.00	0.00
Feb	0.00	0.00
Mar	0.00	0.00
Apr	0.00	0.00
May	0.00	0.00
Jun	0.00	0.00
Jul	0.00	0.00
Aug	0.00	0.00
Sep	0.00	0.00

0.00

Pueblo Flow Management Program

Data will be reported in 12-month increments, from October of the previous year to September of the current year.

ATTACHMENT 11
Pueblo Flow Management Program

Southern Delivery System
 1041 Permit Reporting
 Water Year 2022

Entity: Colorado Springs Utilities

Pueblo Flow Management Program Summary

			Amount	Rate	<i>Run to Colo Canal</i>	<i>86CW117 aug</i>	<i>Colo Canal aug</i>	<i>Leased</i>
Date Curtailed	Start Time	End Time	acre-feet	cfs	acre-feet	acre-feet	acre-feet	acre-feet
October 1, 2021	0:00	23:59	89.77	45.26	69.42	3.87	0.00	16.48
October 2, 2021	0:00	23:59	87.68	44.20	69.42	0.00	0.00	18.25
October 3, 2021	0:00	9:00	31.22	41.97	26.03	0.00	0.00	5.19
October 8, 2021	7:00	23:59	59.15	42.10	49.17	0.00	0.00	9.97
October 9, 2021	0:00	23:59	77.88	39.27	69.42	0.00	0.00	8.46
October 10, 2021	0:00	23:59	83.98	42.34	69.42	0.00	0.00	14.55
October 11, 2021	0:00	23:59	87.78	44.25	69.42	0.00	0.00	18.36
October 12, 2021	0:00	23:59	88.68	44.71	69.42	0.00	0.00	19.26
October 13, 2021	0:00	9:00	31.98	42.99	26.03	0.00	0.00	5.95
October 15, 2021	7:00	23:59	66.61	47.41	60.41	0.00	0.00	6.20
October 16, 2021	0:00	23:59	96.07	48.43	85.29	0.00	0.00	10.78
October 17, 2021	0:00	23:59	92.96	46.87	85.29	0.00	0.00	7.67
October 18, 2021	0:00	19:00	73.01	46.50	60.41	0.00	0.00	12.60
October 22, 2021	7:00	23:59	60.41	45.51	60.41	0.00	0.00	0.00
October 23, 2021	0:00	23:59	88.45	44.59	85.29	0.00	0.00	3.15
October 24, 2021	0:00	23:59	84.58	42.64	84.58	0.00	0.00	0.00
October 25, 2021	0:00	19:00	67.52	43.34	67.52	0.00	0.00	0.00
October 29, 2021	7:00	23:59	68.99	49.10	63.22	0.00	0.00	5.76
October 30, 2021	0:00	23:59	92.98	46.88	89.26	0.00	0.00	3.72
October 31, 2021	0:00	23:59	89.78	45.26	89.26	0.00	0.00	0.52
November 12, 2021	0:00	23:59	57.06	43.15	57.06	0.00	0.00	0.00
November 13, 2021	0:00	23:59	86.32	43.52	86.32	0.00	0.00	0.00
November 14, 2021	0:00	23:59	87.14	43.93	87.14	0.00	0.00	0.00
March 17, 2022	0:00	9:00	36.71	49.36	33.47	0.00	3.24	0.00

March 19, 2022	8:00	23:59	64.68	48.92	64.68	0.00	0.00	0.00
March 20, 2022	0:00	23:59	93.08	46.93	93.08	0.00	0.00	0.00
March 21, 2022	0:00	19:00	71.94	45.81	71.94	0.00	0.00	0.00
March 25, 2022	7:00	19:00	62.09	44.19	62.09	0.00	0.00	0.00
March 26, 2022	0:00	23:59	82.91	41.80	82.91	0.00	0.00	0.00
March 27, 2022	0:00	23:59	82.97	41.83	82.97	0.00	0.00	0.00
April 1, 2022	9:00	23:59	54.43	43.91	54.43	0.00	0.00	0.00
April 2, 2022	0:00	23:60	87.54	44.14	87.54	0.00	0.00	0.00
April 3, 2022	0:00	23:61	88.19	44.46	88.19	0.00	0.00	0.00
April 4, 2022	0:00	9:00	34.33	46.15	34.33	0.00	0.00	0.00
April 8, 2022	7:00	23:59	63.00	44.84	63.00	0.00	0.00	0.00
April 9, 2022	0:00	23:59	88.19	44.46	88.19	0.00	0.00	0.00
April 10, 2022	0:00	23:59	87.04	43.88	87.04	0.00	0.00	0.00
April 11, 2022	0:00	23:59	87.40	44.07	87.40	0.00	0.00	0.00
April 12, 2022	0:00	23:59	87.46	44.09	87.46	0.00	0.00	0.00
April 13, 2022	0:00	23:59	84.37	42.54	84.37	0.00	0.00	0.00
April 14, 2022	0:00	23:59	78.93	39.79	78.93	0.00	0.00	0.00
April 15, 2022	0:00	23:59	76.75	38.69	76.75	0.00	0.00	0.00
April 16, 2022	0:00	23:59	74.70	37.66	74.70	0.00	0.00	0.00
April 17, 2022	0:00	23:59	74.36	37.49	74.36	0.00	0.00	0.00
April 18, 2022	0:00	23:59	73.27	36.94	73.27	0.00	0.00	0.00
April 19, 2022	0:00	23:59	73.04	36.82	73.04	0.00	0.00	0.00
April 20, 2022	0:00	23:59	73.69	37.15	73.69	0.00	0.00	0.00
April 21, 2022	0:00	23:59	62.66	31.59	62.66	0.00	0.00	0.00
April 22, 2022	0:00	23:59	58.62	29.55	58.62	0.00	0.00	0.00
April 23, 2022	0:00	7:00	15.85	27.40	15.85	0.00	0.00	0.00
May 1, 2022	0:00	8:00	19.48	29.46	19.48	0.00	0.00	0.00
May 6, 2022	7:00	23:59	53.84	38.32	51.98	1.86	0.00	0.00
May 7, 2022	0:00	23:59	66.98	33.77	66.98	0.00	0.00	0.00
May 8, 2022	0:00	23:59	61.52	31.02	40.37	0.00	21.15	0.00
May 9, 2022	0:00	9:00	23.24	31.25	23.24	0.00	0.00	0.00
July 29, 2022	7:00	23:59	62.29	44.34	0.00	62.29	0.00	0.00
July 30, 2022	0:00	23:59	89.08	44.91	0.00	89.08	0.00	0.00
July 31, 2022	0:00	23:59	82.71	41.70	0.00	82.71	0.00	0.00
August 22, 2022	9:00	19:00	25.95	31.40	0.00	25.95	0.00	0.00
September 2, 2022	7:00	23:59	27.78	19.77	0.00	27.78	0.00	0.00
September 3, 2022	0:00	19:00	48.50	24.45	0.00	48.50	0.00	0.00
September 4, 2022	0:00	23:59	62.02	31.27	0.00	62.02	0.00	0.00
September 5, 2022	0:00	19:00	40.81	25.99	0.00	40.81	0.00	0.00

September 9, 2022	7:00	23:59	24.93	17.74	0.00	24.93	0.00	0.00
September 10, 2022	0:00	23:59	32.52	16.40	0.00	32.52	0.00	0.00
September 11, 2022	0:00	23:59	54.96	27.71	0.00	54.96	0.00	0.00
September 12, 2022	0:00	11:00	29.67	32.63	0.00	29.67	0.00	0.00
September 14, 2022	8:00	23:59	33.23	25.13	33.23	0.00	0.00	0.00
September 15, 2022	0:00	23:59	45.02	22.70	45.02	0.00	0.00	0.00
September 16, 2022	0:00	23:59	36.87	18.59	36.87	0.00	0.00	0.00
September 17, 2022	0:00	23:59	38.66	19.49	38.66	0.00	0.00	0.00
September 18, 2022	0:00	23:59	44.99	22.68	44.99	0.00	0.00	0.00
September 19, 2022	0:00	19:00	33.11	21.08	33.11	0.00	0.00	0.00

Low Flow Program Summary (Colorado Springs and BWWP only)

			Amount	Rate	Use 1	Use 2	Use 3
Date	Start Time	End Time	acre-feet	cfs	acre-feet	acre-feet	acre-feet
no releases in 2022							

Entity: City of Fountain

Pueblo Flow Management Program Summary

			Amount	Rate	Use 1	Use 2	Use 3
Date Curtailed	Start Time	End Time	acre-feet	cfs	acre-feet	acre-feet	acre-feet
n/a							

Entity: Pueblo West Metropolitan District

Pueblo Flow Management Program Summary

			Amount	Rate	Spill	<i>Use 2</i>	<i>Use 3</i>
Date Curtailed	Start Time	End Time	acre-feet	cfs	acre-feet	acre-feet	acre-feet
n/a							

Entity: Security Water District

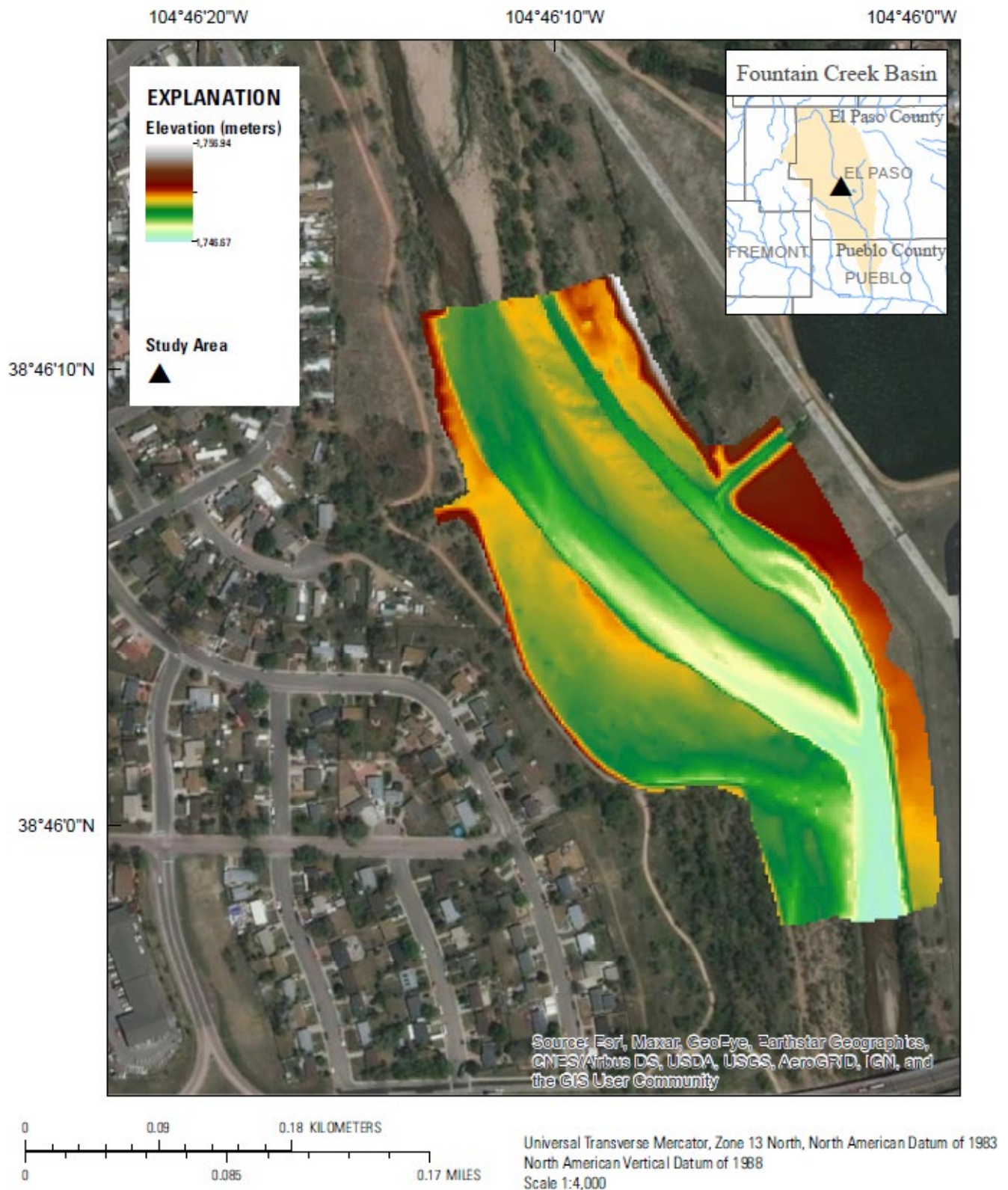
Pueblo Flow Management Program Summary

			Amount	Rate	<i>Use 1</i>	<i>Use 2</i>	<i>Use 3</i>
Date Curtailed	Start Time	End Time	acre-feet	cfs	acre-feet	acre-feet	acre-feet
n/a							

Geomorphology Monitoring

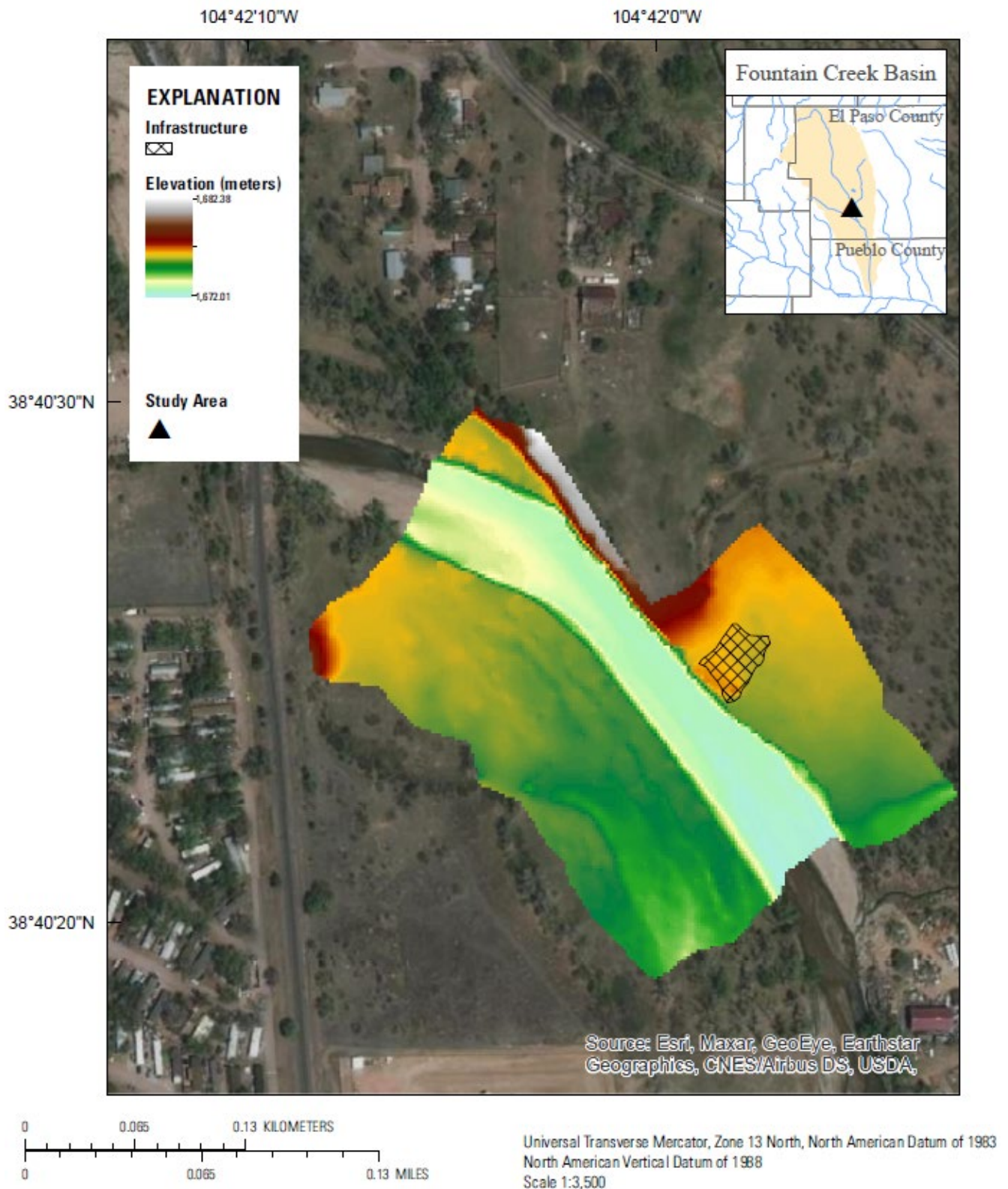
Geomorphic monitoring data are collected under an existing program led by the USGS in partnership with Colorado Springs Utilities and the City of Colorado Springs Engineering Department. Ten cross sections established at designated points along Fountain Creek are monitored for degradation, aggradation, and other changes to the geomorphic surface. Each cross section is surveyed once per year during low stream flow; preferably in the winter when leaves and other organic material on the ground is at a minimum. Survey data from 2015 are provided as pre-SDS operations baseline conditions along with survey data from the reporting period (2022) for comparative purposes. These data present topographic survey data, Light Detection and Ranging (LiDAR) survey data, and elevation rasters, collected or generated during 2022 as part of that monitoring effort. Topographic survey points were collected using real-time kinematic Global Navigation Satellite Systems (RTK-GNSS). These point data, along with LiDAR point clouds, were used to generate digital elevation maps (2022). These survey data and maps provide an annual assessment of the geomorphic changes at each study area.

Elevation Map (2015)- Study Area 01



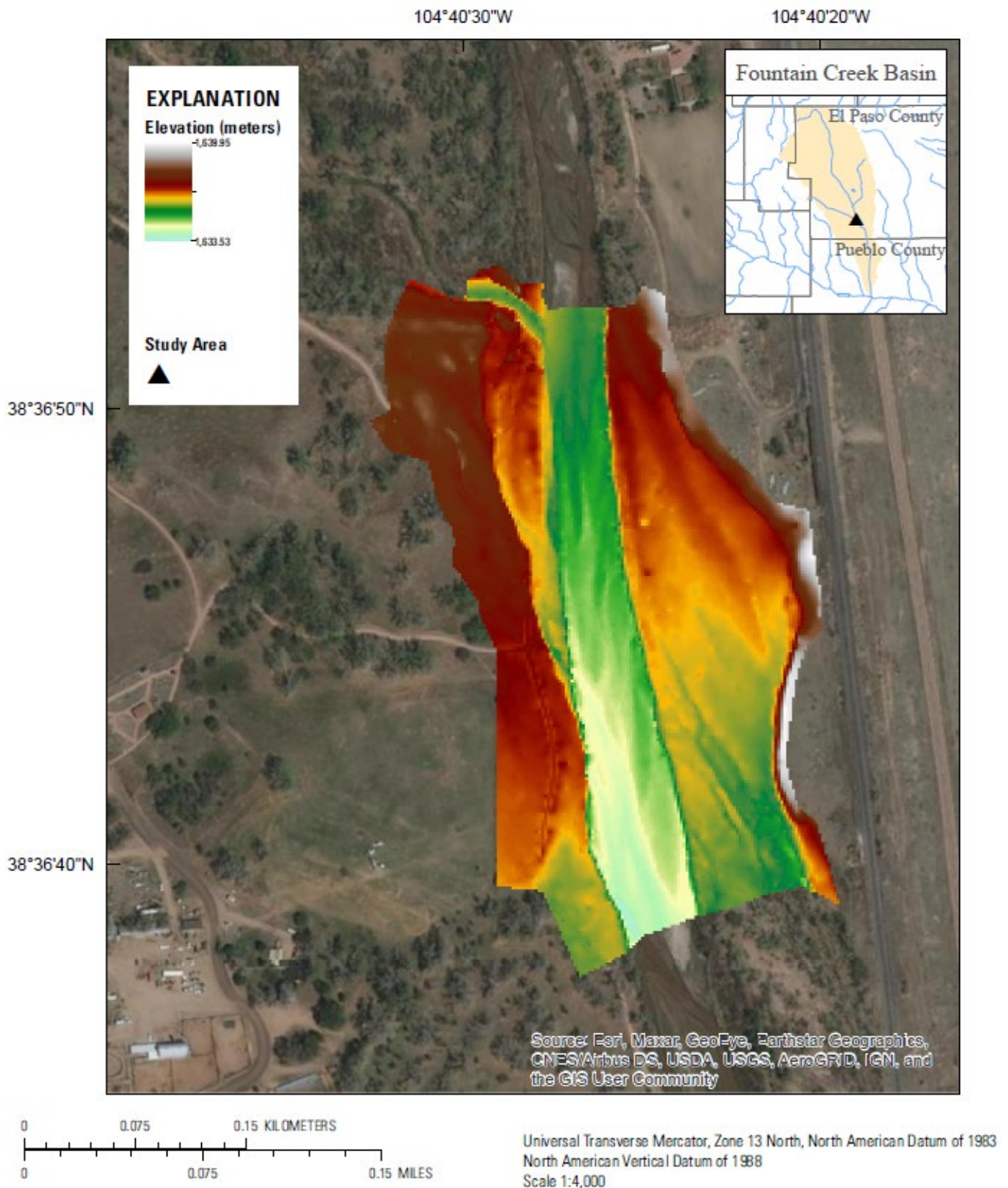
Elevation map of Fountain Creek study area 01 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 02



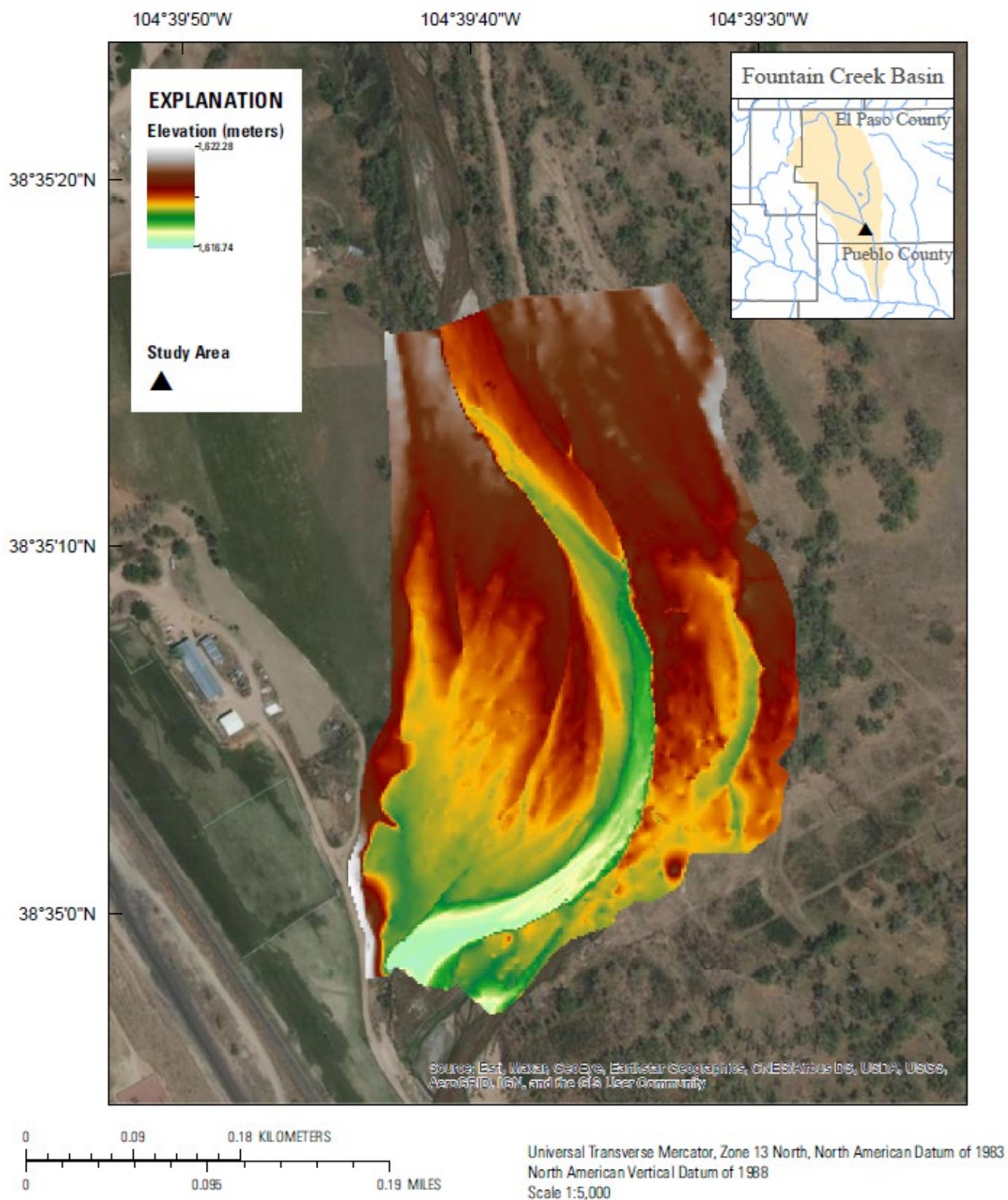
Elevation map of Fountain Creek study area 02 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 03



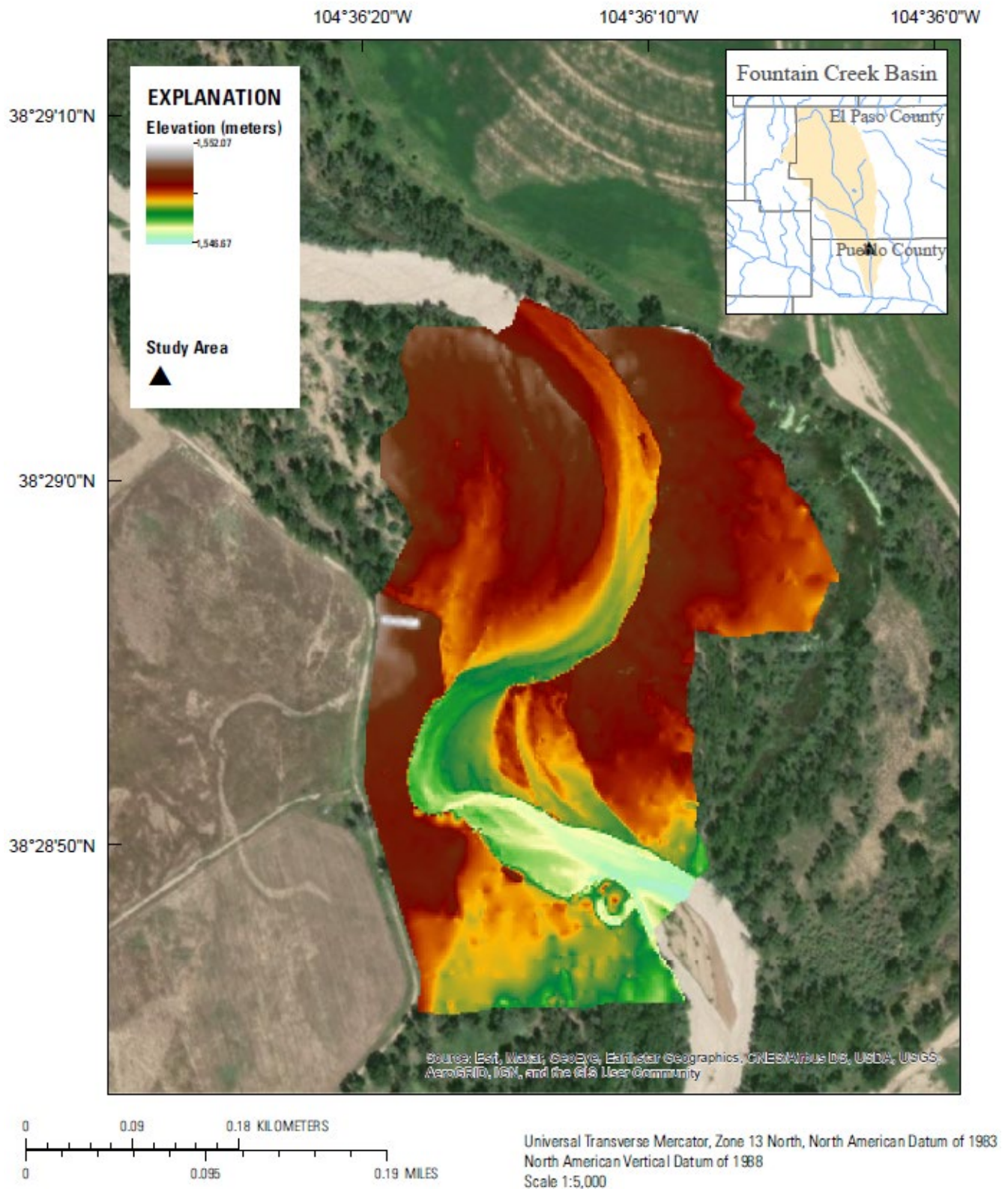
Elevation map of Fountain Creek study area 03 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 04



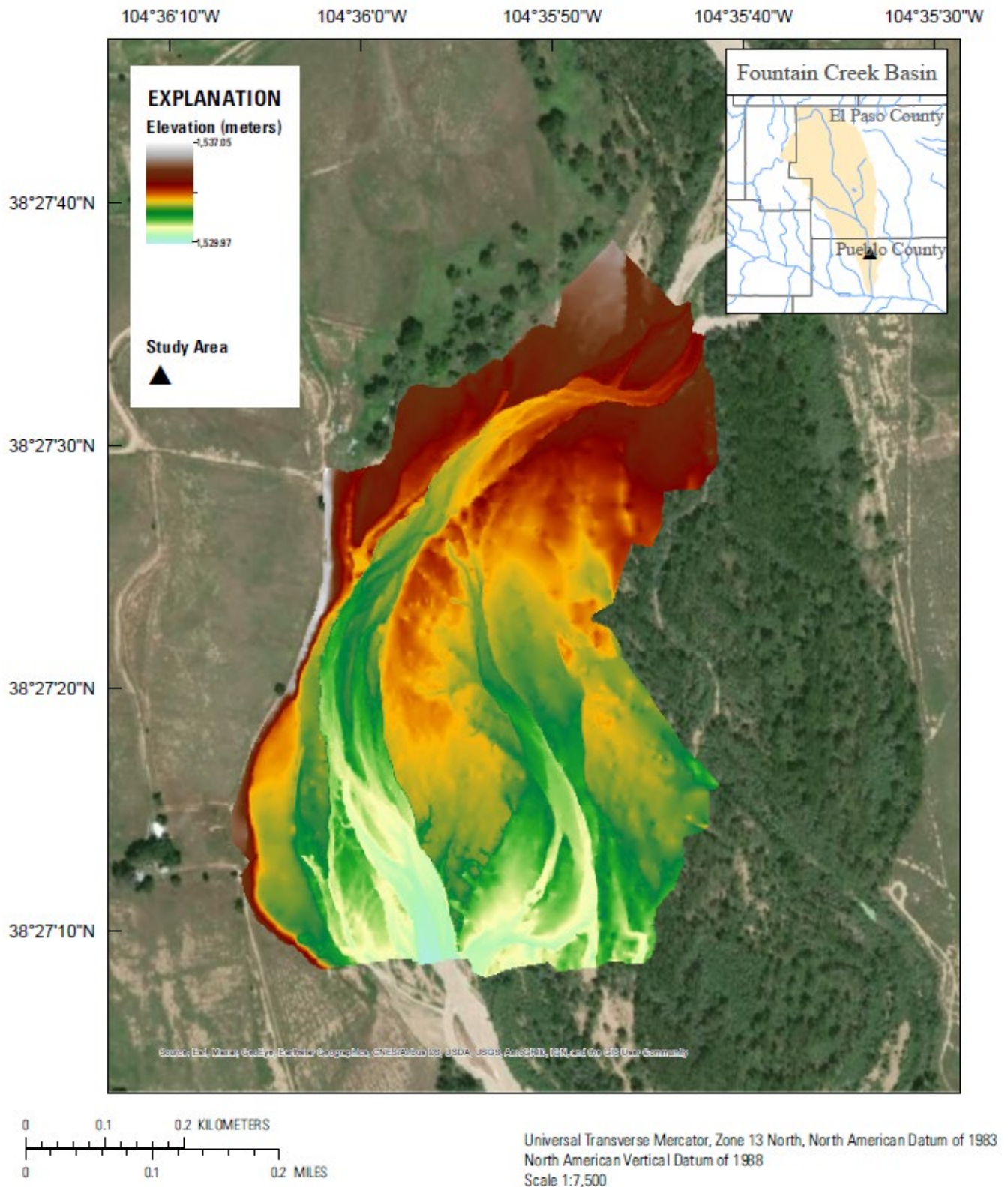
Elevation map of Fountain Creek study area 04 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 05



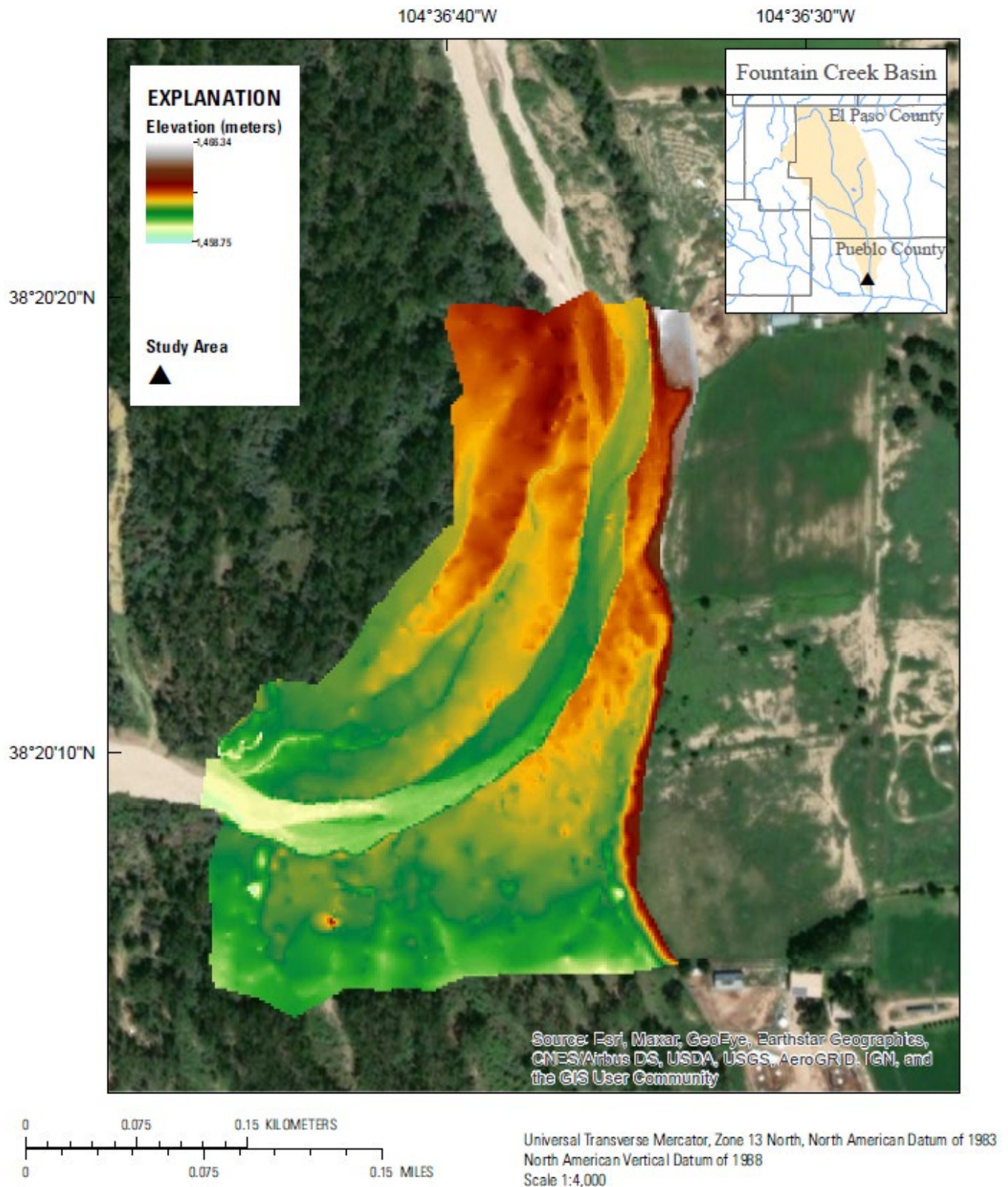
Elevation map of Fountain Creek study area 05 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 06



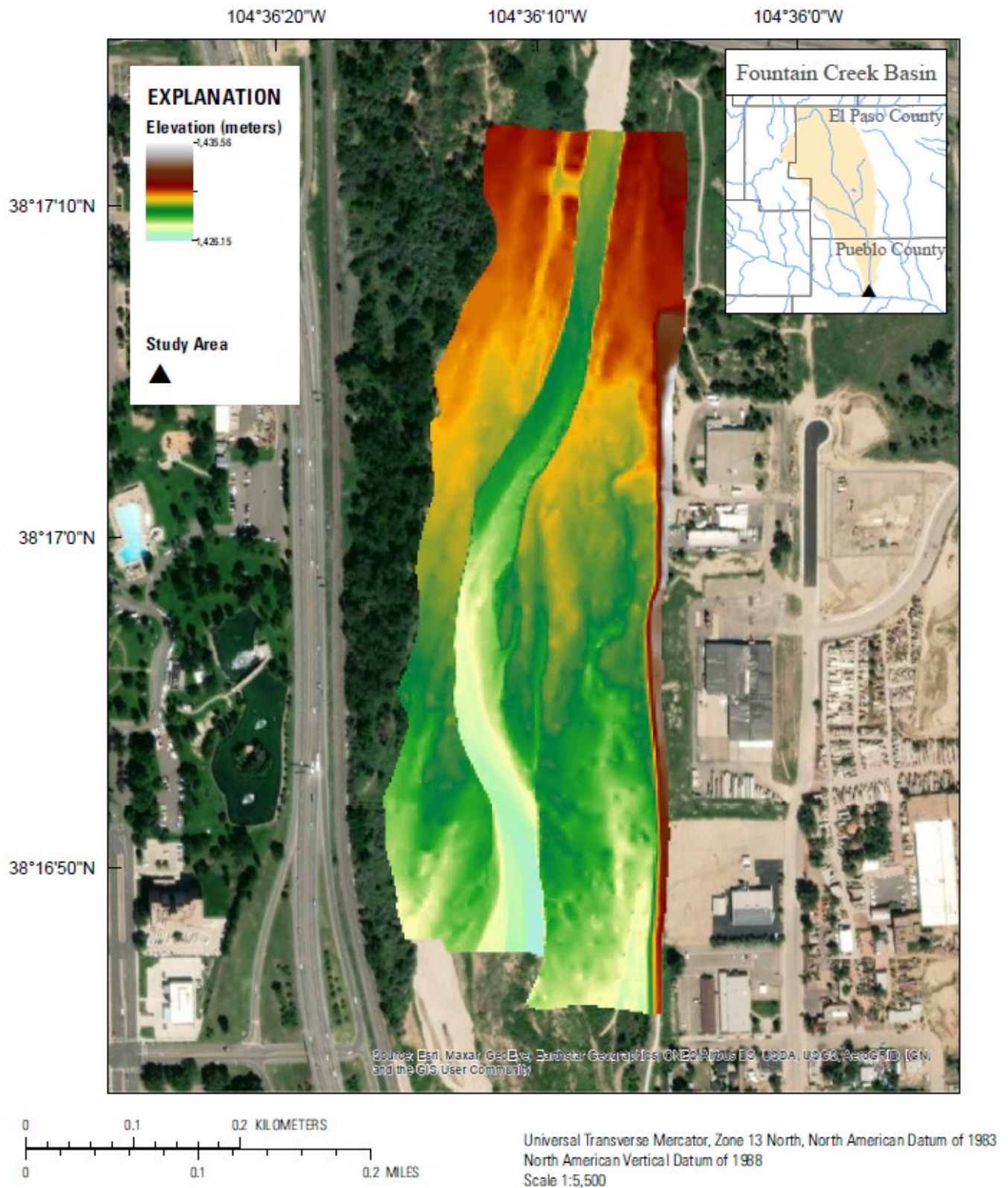
Elevation map of Fountain Creek study area 06 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 07



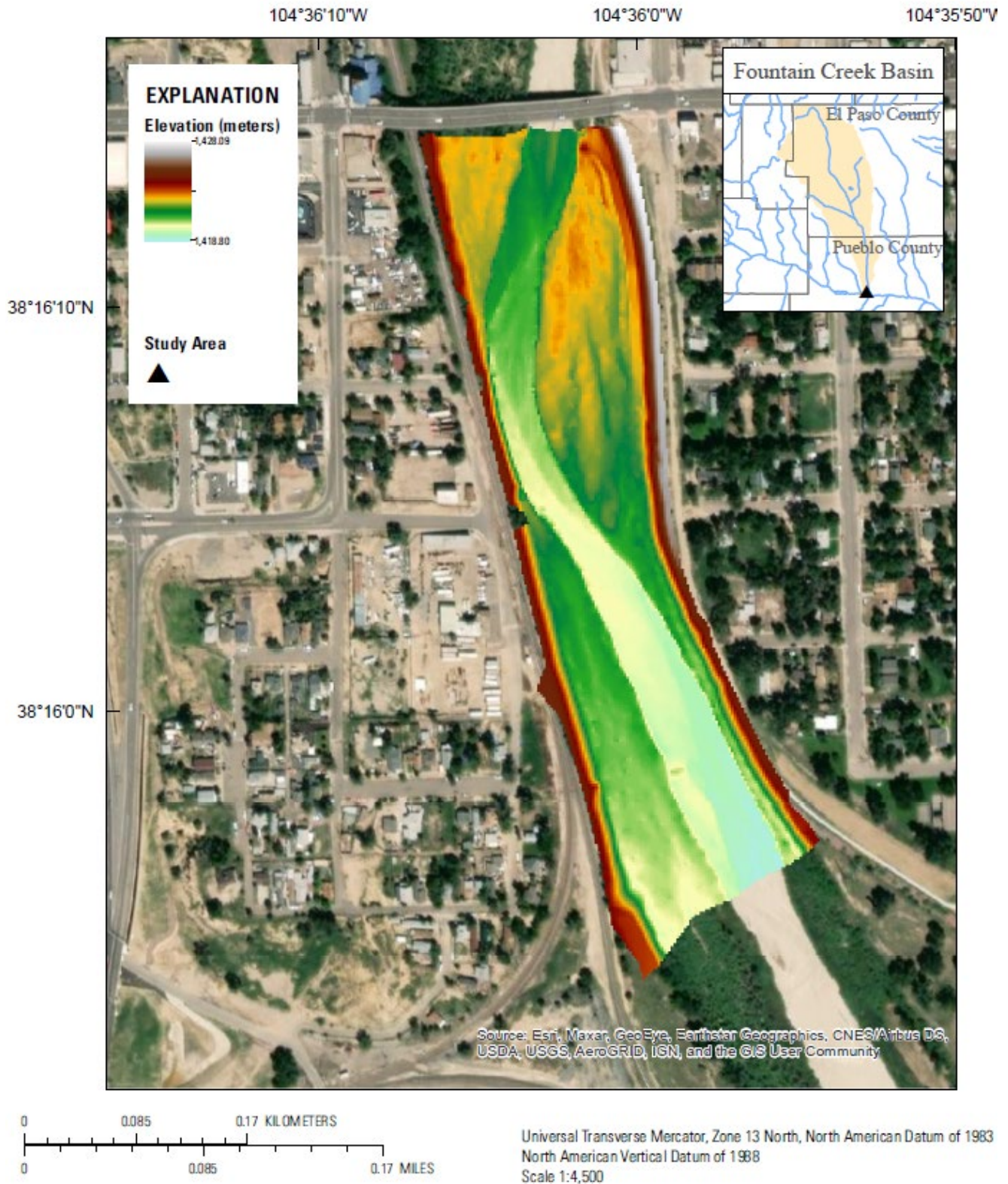
Elevation map of Fountain Creek study area 07 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 08



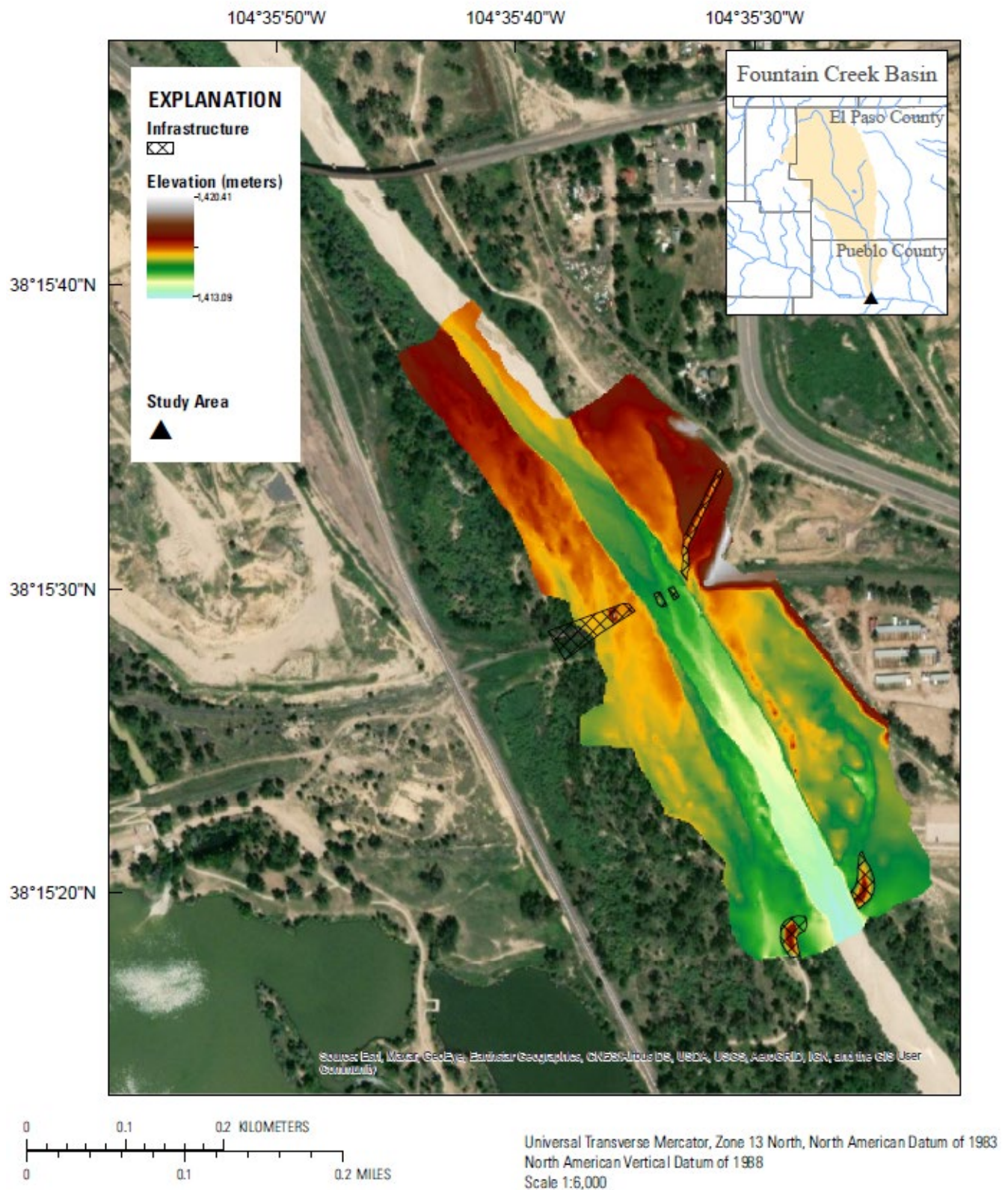
Elevation map of Fountain Creek study area 08 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 09



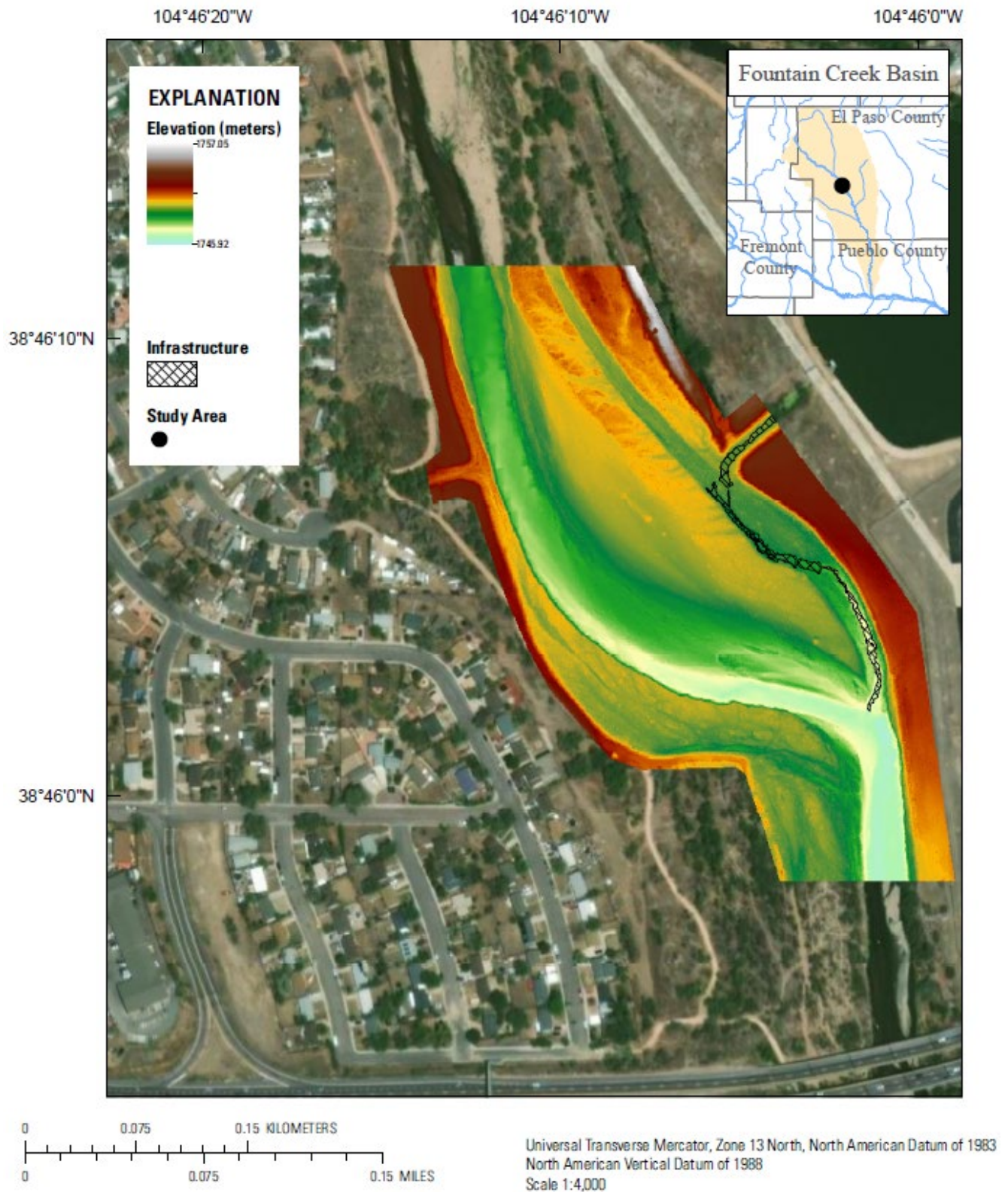
Elevation map of Fountain Creek study area 09 with an aerial background image, 2015.

Elevation Map (2015)- Study Area 10



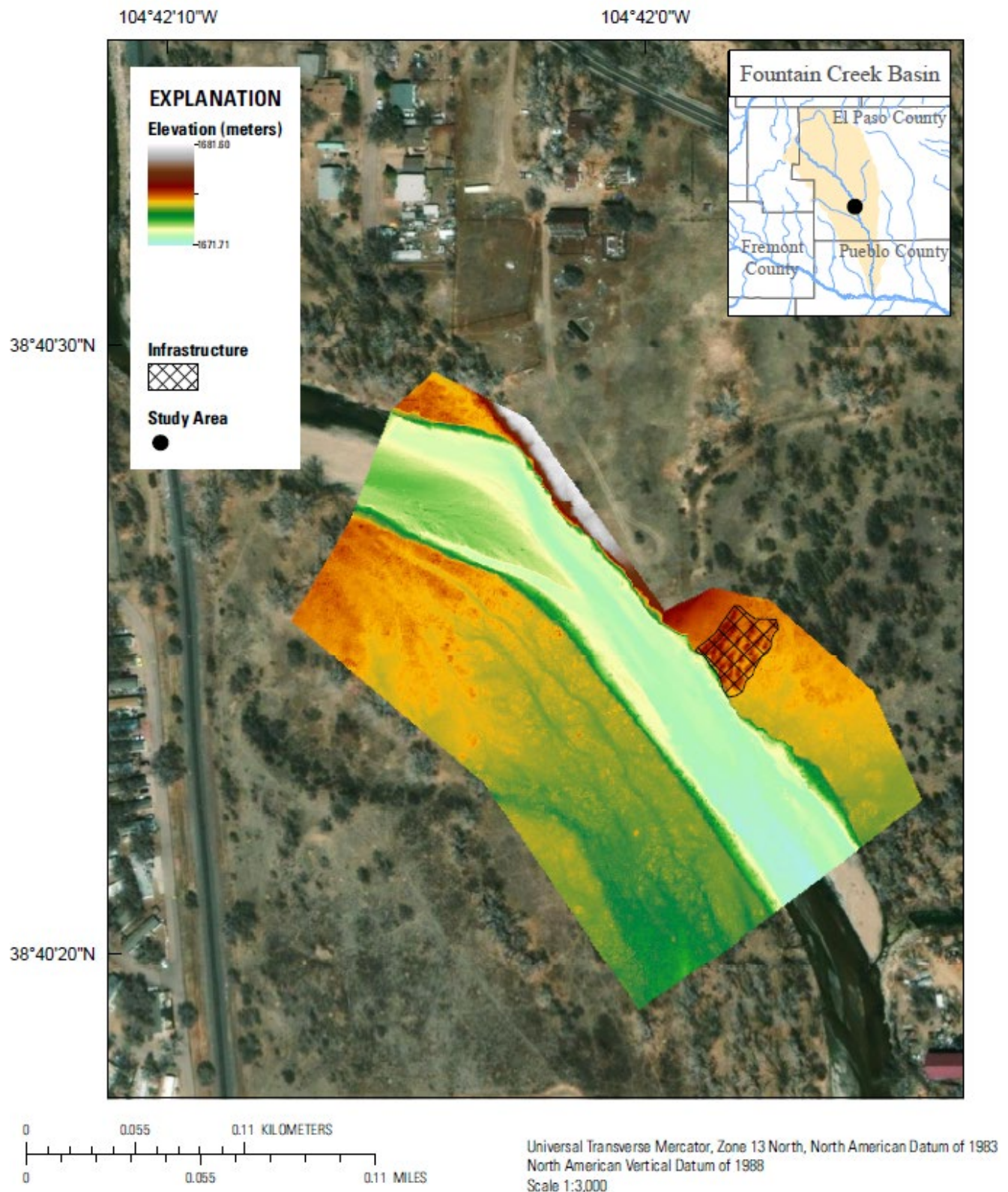
Elevation map of Fountain Creek study area 10 with an aerial background image, 2015.

Elevation Map (2022) - Study Area 01



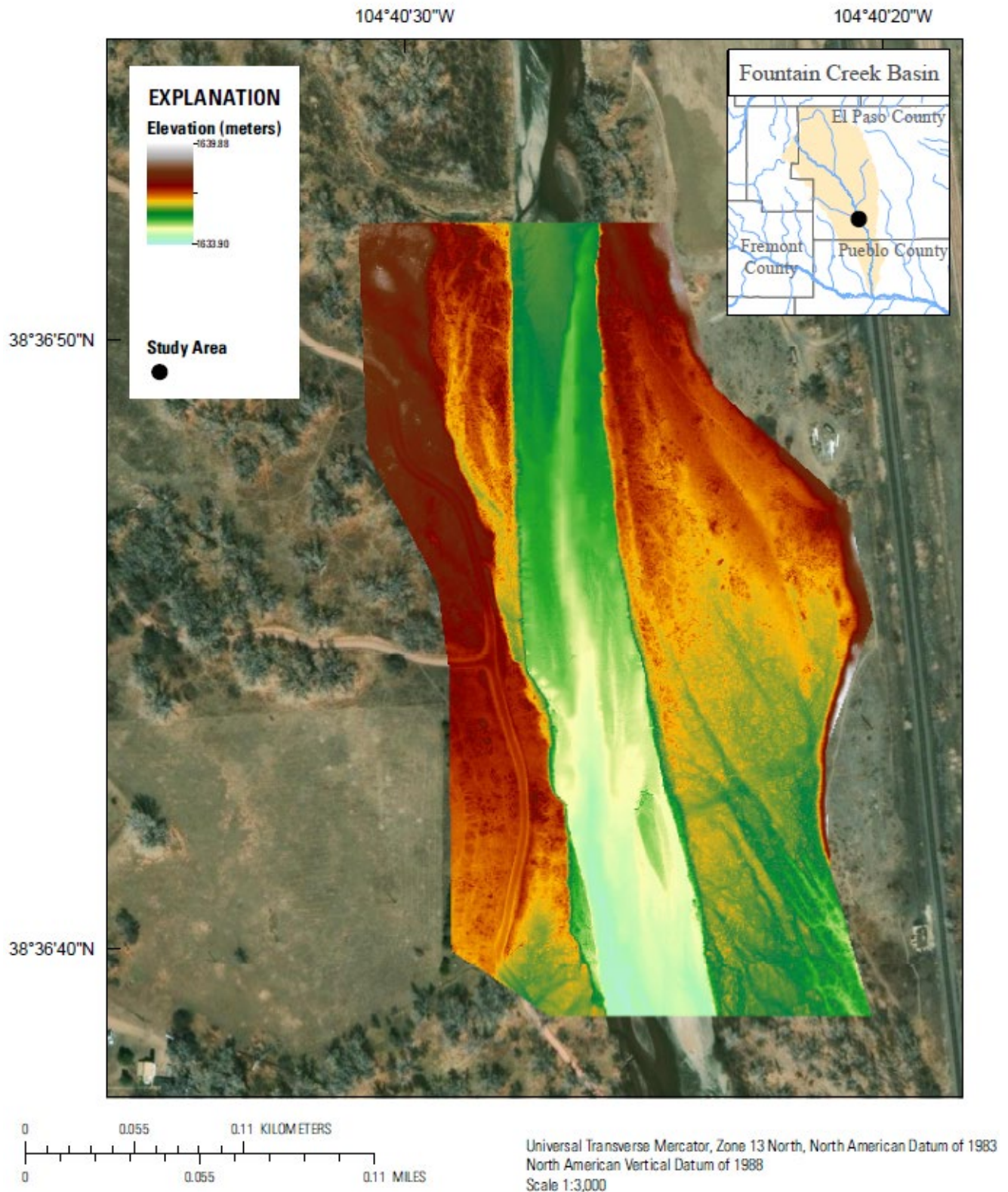
Elevation map of Fountain Creek study area 01 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 02



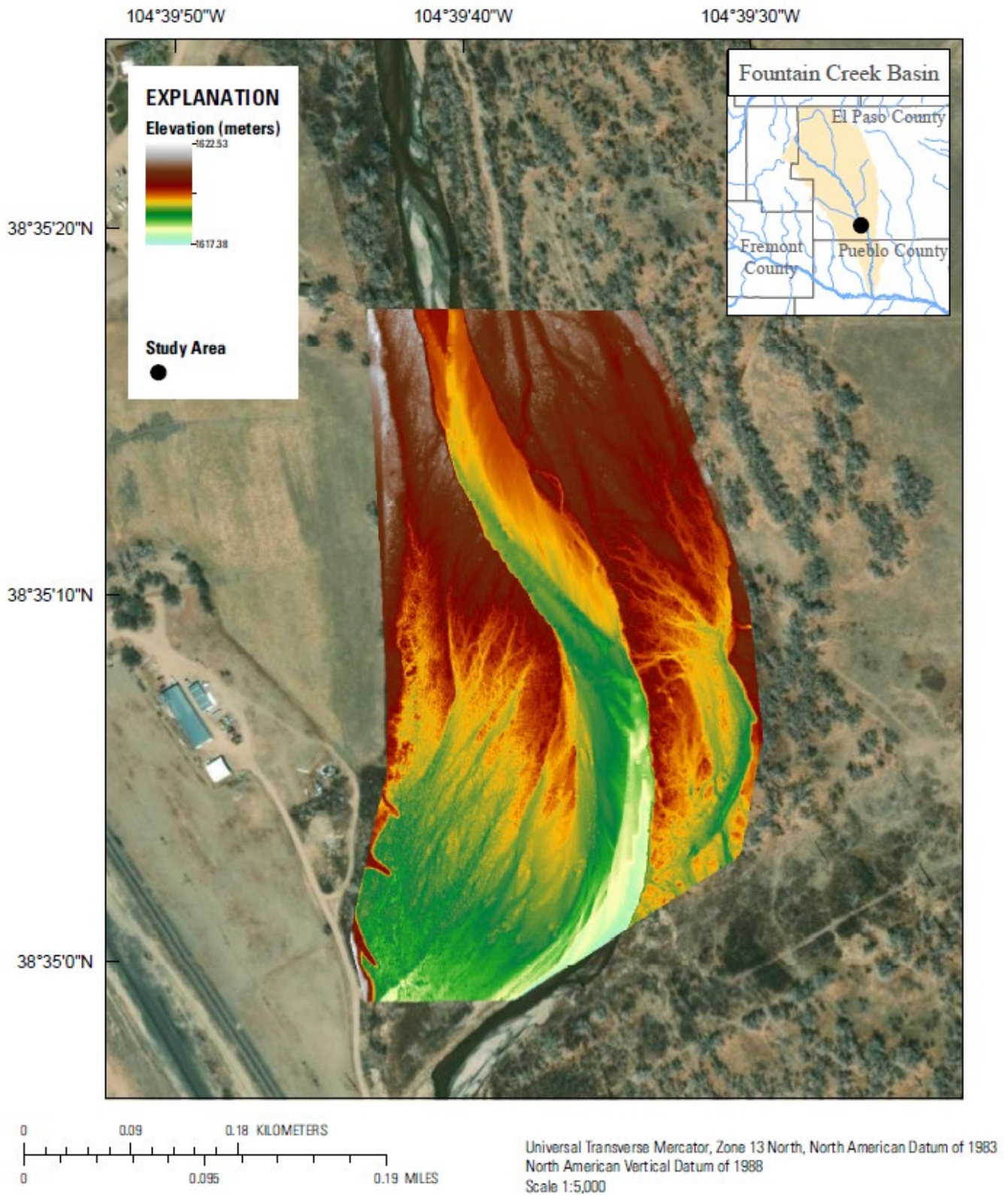
Elevation map of Fountain Creek study area 02 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 03



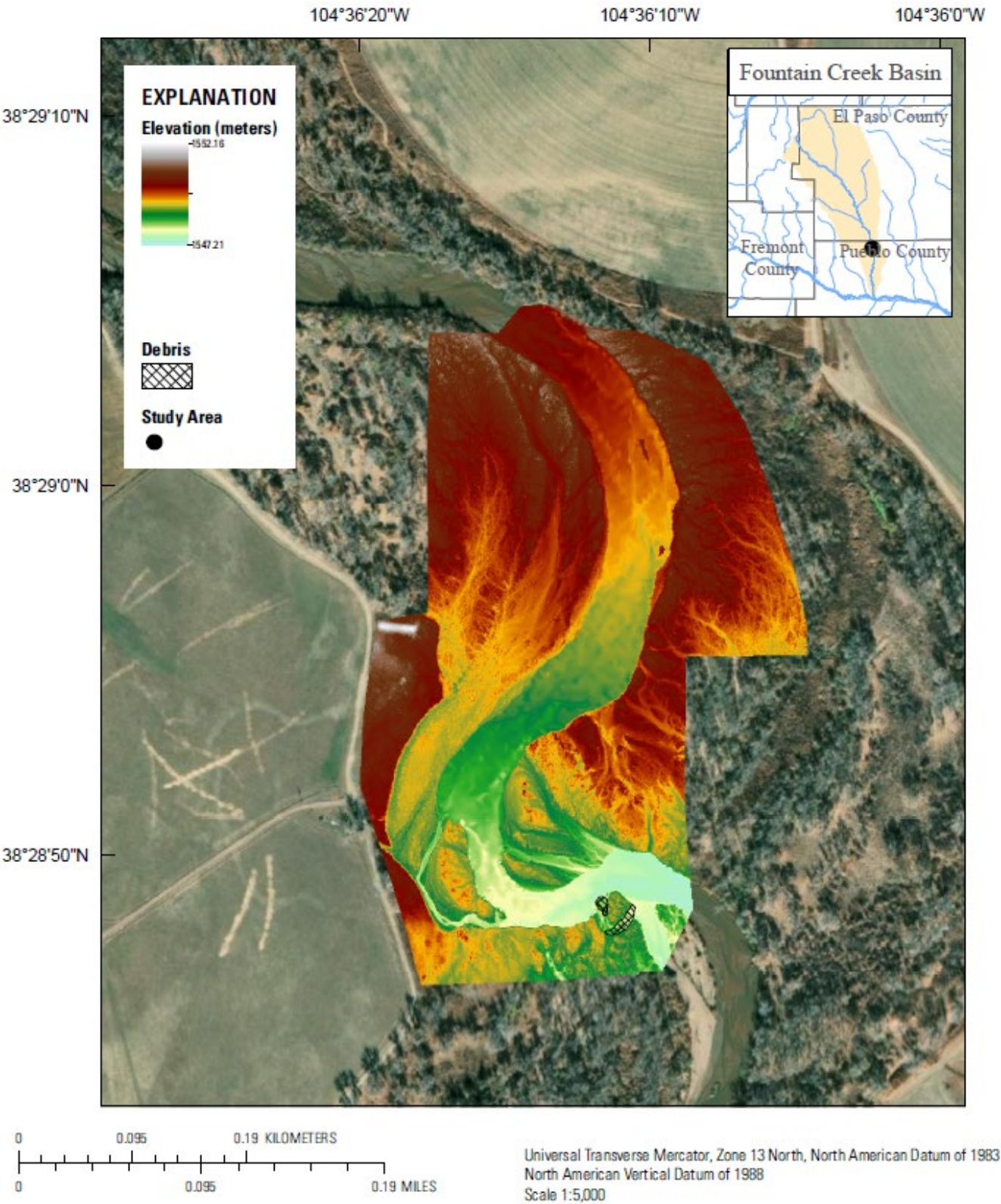
Elevation map of Fountain Creek study area 03 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 04



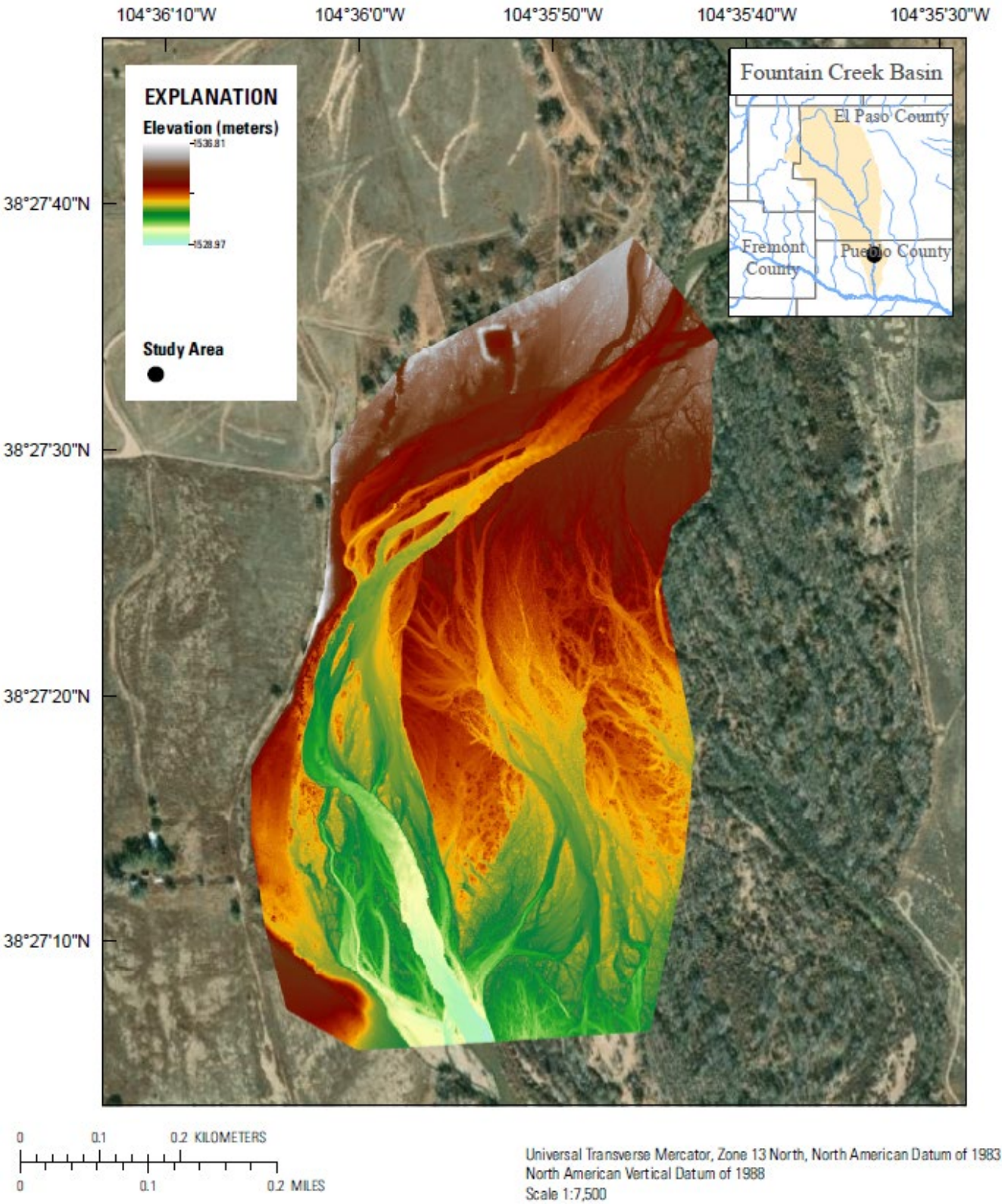
Elevation map of Fountain Creek study area 04 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 05



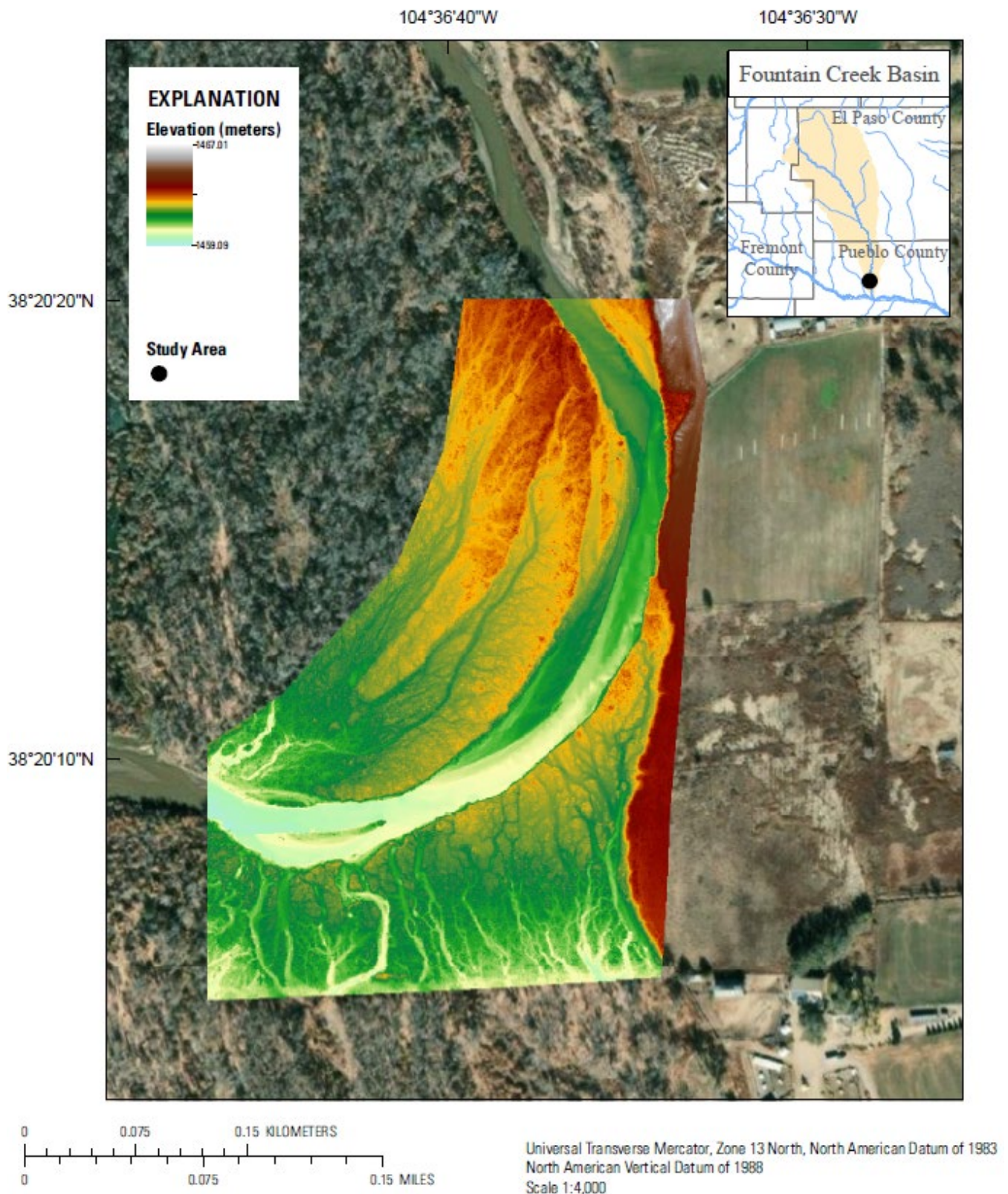
Elevation map of Fountain Creek study area 05 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 06



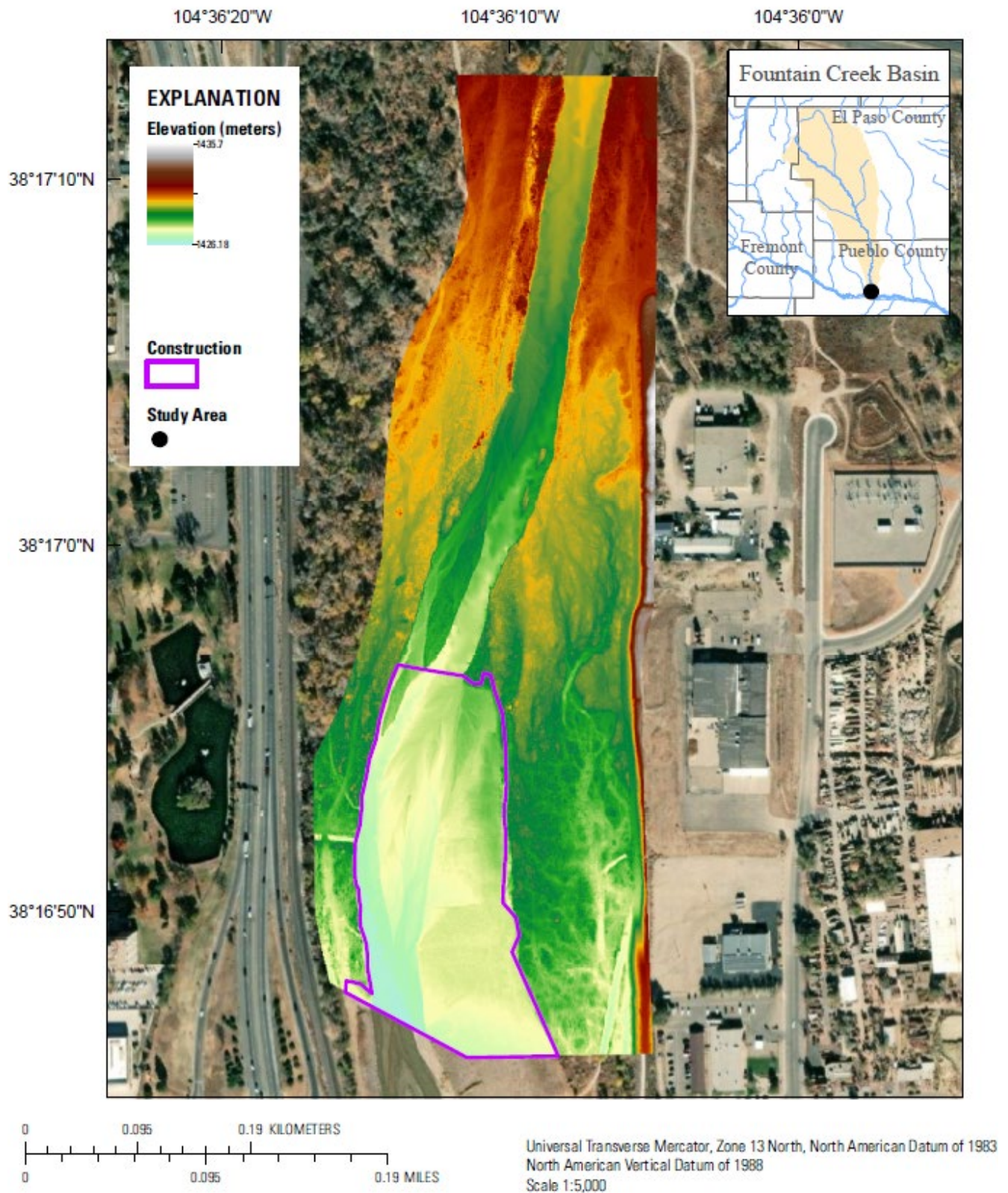
Elevation map of Fountain Creek study area 06 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 07



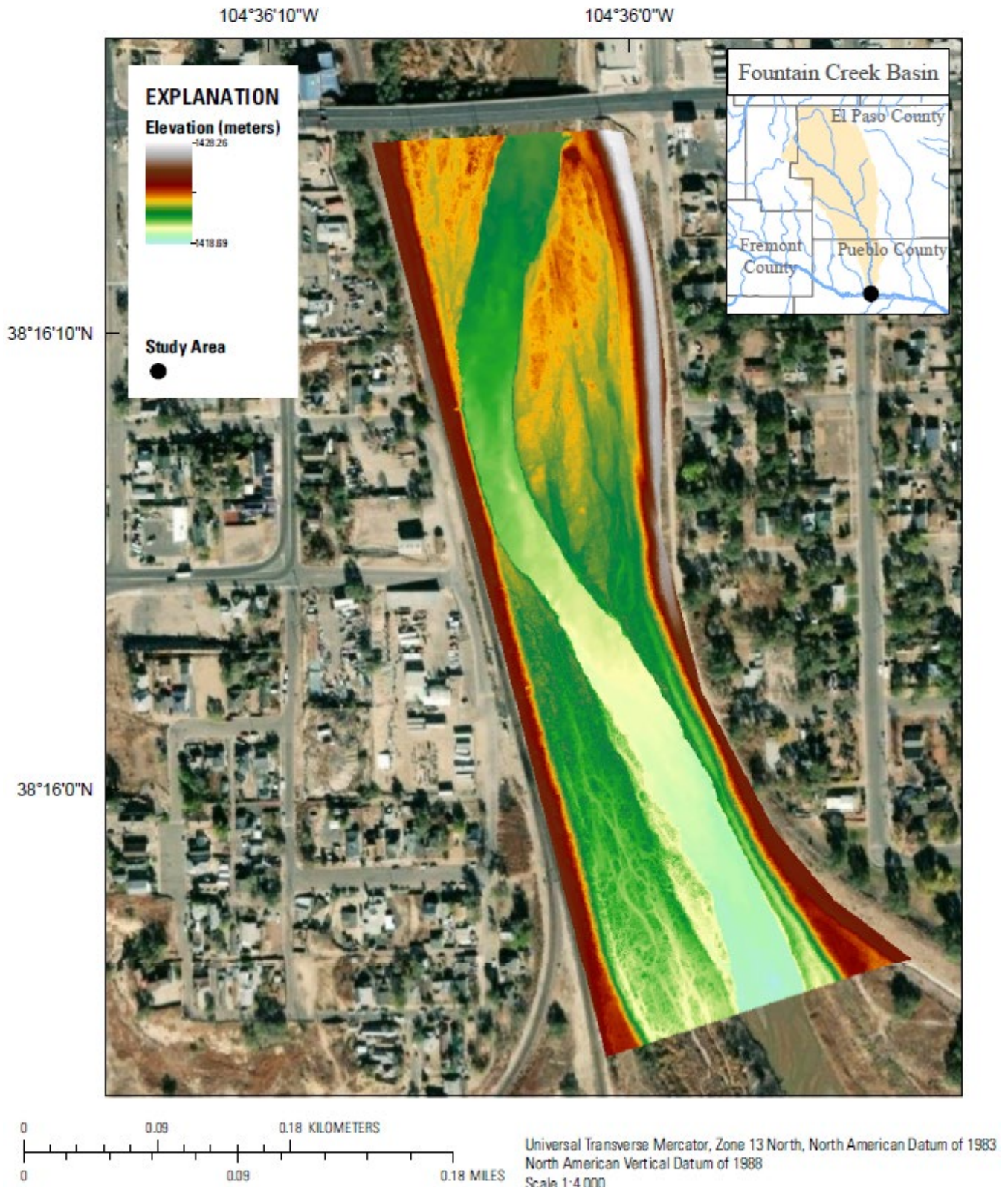
Elevation map of Fountain Creek study area 07 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 08



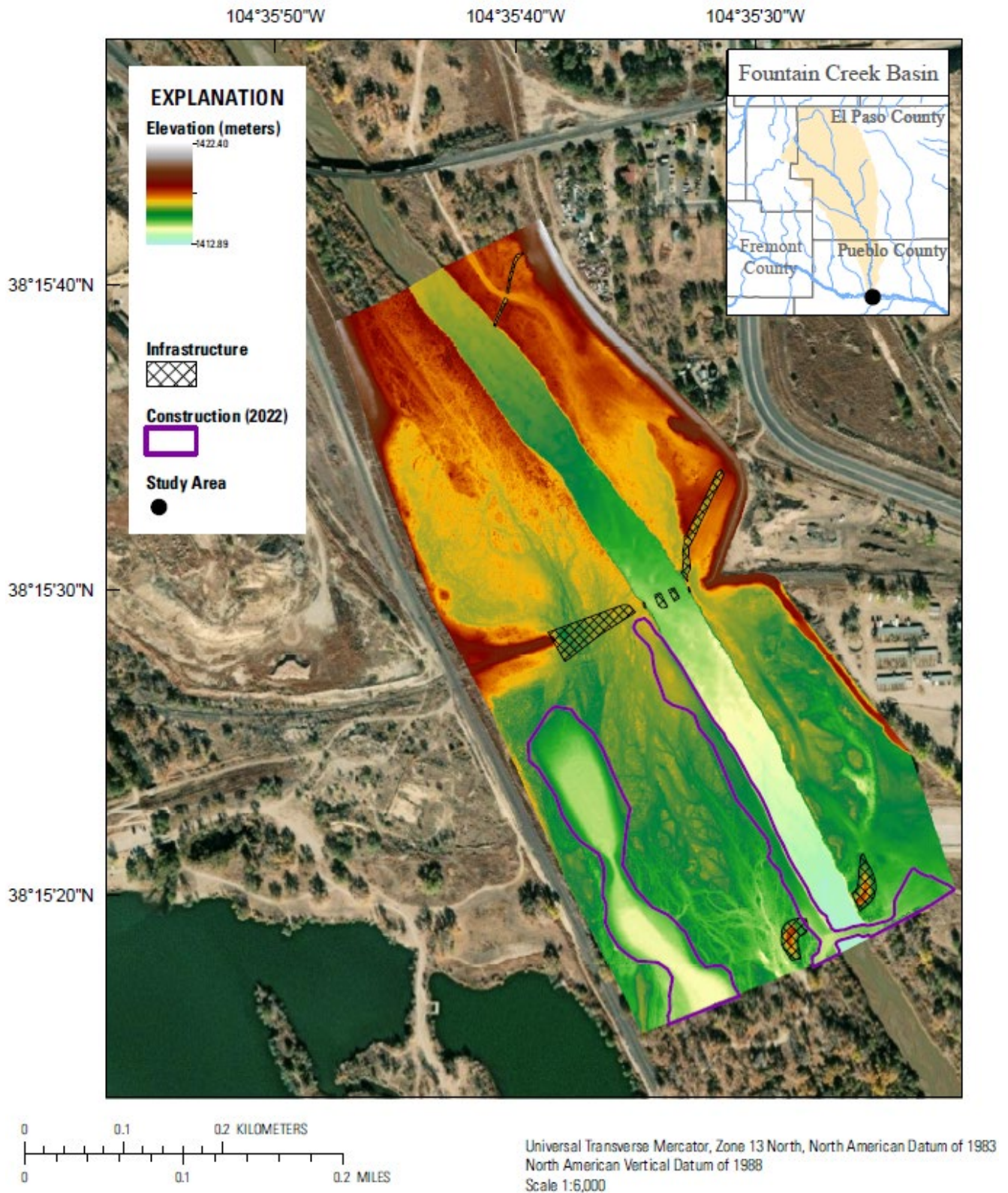
Elevation map of Fountain Creek study area 08 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 09



Elevation map of Fountain Creek study area 09 with an aerial background image, 2022.

Elevation Map (2022)- Study Area 10



Elevation map of Fountain Creek study area 10 with an aerial background image, 2022.