



**Joyful View**  
**Stormwater Management Plan (SWMP)**  
**For El Paso County Improvements**

May 2026

HR Green Project No: 2202179

**Prepared For (Applicant):**

OGC RE2, LLC

PO BOX 1385

Colorado Springs, CO 80901

**Prepared By:**

HR Green Development, LLC

Contact: Colleen Monahan, PE, LEED AP

[cmonahan@hrgreen.com](mailto:cmonahan@hrgreen.com)

(719)-394-2433

**Designated Stormwater Manager:**

TBD

**GEC Administrator:**

TBD

EPC'S EDARP File #: SF2231



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▷ **PREPARING ENGINEER:**

Name: Colleen Monahan, PE, LEED AP

Company: HR Green Development, LLC

Title: Regional Director, Colorado

Phone Number: (719)-394-2433

Address: 1975 Research Pkwy, Suite 160 Colorado Springs 80920

▷ **PERMITEE:**

Name: Kevin O'Neil

Company: OGC RE2, LLC

Title: Owner/Developer

Phone Number: (719) 445-5050

Address: PO BOX 1385 Colorado Springs, CO 80901

▷ **DESIGNATOR STORMWATER MANAGER**

Contact: TBD

Company: TBD

Title: TBD

Phone Number: TBD

Address: TBD

▷ **GEC ADMINISTRATOR:**

Contact: TBD

Company: TBD

Title: TBD

Phone Number: TBD

Address: TBD

## Engineer's Statement

The Stormwater Management Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County and State for Stormwater Management Plans.

Colleen Monahan

Engineer of Record

6/16/2026

Date



## I. Site Location & Description

Joyful View, referred to as ‘the site’ herein, is in a portion of section 33, township 13 south, range 63 west of the 6<sup>th</sup> P.M., County of El Paso, Colorado. The site is bound by North Peyton Highway to the west, and undeveloped land to the north, south, and east. Surrounding platted areas include single-family rural homes to the south and east, un-platted land to the west, and undeveloped land to the north. A vicinity map is presented in Appendix A.

The site is approximately 70.18 acres of undeveloped land with existing vegetation consisting of 90% native grasses, determined through field observation. Once developed, the site will include 9 single-family lots. The site will be platted as a single lot. In general, the site slopes east towards Haegler Creek. No streams cross the project area. There is no anticipated allowable non-stormwater discharge. Onsite elevations range from 6270’ - 6238’ with slopes ranging 2-4%. Per a NRCS soil survey, the site is made up of Type A Blakeland Loamy sand and Type B Blendon Sandy Loam. The NRCS soil survey is presented in Appendix A. The erosion factor “K” for the soil is rated at 0.10. A K factor of 0.1 indicates a relatively low potential of sheet and rill erodibility by water. The values of “K” range from 0.02 – 0.69, the higher the value the more susceptible the soil is to sheet and rill erosion by water. The NRCS soil survey with the soil erosion factor is included in Appendix A. Impacts from erosive soils will be minimized through the use of BMP’s on-site and good housekeeping practices.

The site contains a portion of a zone AE 100-year floodplain (FEMA FIRM #08041C0805G). Onsite, existing utilities include overhead electric lines.

Name(s) of ultimate receiving waters; size, type and location of stormwater outfall or storm sewer system discharge: Proposed grass swales to Haegler Creek.

## II. Construction Phasing

The construction activity associated with this CSWMP is the construction of a gravel roadway and drainage swales. The anticipated total disturbance area is approximately 9.5 acres. There are no control measures located outside the construction limits. The proposed sequence of major construction activities and Construction Control Measures for the project as are follows:

1. Install VTC, SSA (Winter 2023)
2. Clear, grub and grade site for improvements. Install inlet/outlet protection and rock check dams per GEC plans. (Winter 2023)
3. Landscaping, restoration and final stabilization. Ensure final stabilization achieved prior to site closure. (Spring 2023)

## III. Self-Inspections

The SWMP should be viewed as a “living document” that is continuously being reviewed and modified as a part of the overall process of evaluating and managing SW quality issues at the site. The QSM shall amend the SWMP when there is a change in design, construction, O&M of the site which would require the implementation of new or revised BMPs or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in SW discharges associated with construction activity or when BMPs are no longer necessary and are removed.

Self-inspections of the Construction Control Measures must be completed by the certified GEC Administrator. The below provides the minimum to satisfy the El Paso County self-inspection requirements. A more frequent

self-inspection schedule may be required to ensure Control Measures are operating in compliance with the approved GEC plan.

1. Inspection Schedules:

- a. The SWMP Administrator shall make a thorough inspection of the Control Measures:
  - i. At least once every fourteen (14) calendar days.
  - ii. Within 24 hours following any precipitation event (i.e. rain, snow, hail etc.) that causes surface erosion.
    - Alternatively, the SWMP Administrator can perform a thorough inspection of the Control Measures once every seven (7) days and forego post-precipitation inspections.
- b. For sites where construction activities have completed and final stabilization measures installed but final stabilization has not yet been achieved, the SWMP Administrator shall make a thorough inspection of the Control Measures:
  - i. At least once every month
  - ii. Within 72 hours following any precipitation event that causes surface erosion

2. Inspection Procedures:

- a. Site Inspection & Observation Items:
  - i. Limits of disturbance perimeter and stormwater discharge points
  - ii. All disturbed areas to ensure necessary Construction Control Measures are in place to control potential stormwater runoff
  - iii. Areas used for material/waste storage
  - iv. Any areas having a signification potential for storm water pollution (i.e site entrances, concrete washout areas etc.)
  - v. All Construction Control Measures identified on the GEC plans.
- b. Inspection Requirements:
  - i. Determine any locations, or potential locations, where pollutants and stormwater may be exiting the site/entering the receiving waters
  - ii. Evaluate Construction Control measures and determine if they are constructed in accordance with the latest revision of the approved GEC plan and operating effectively
  - iii. Provide recommendations for the need of additional Construction Control measures and the maintenance of existing measures in disrepair to ensure complication with the El Paso County Stormwater Construction Manual.
- c. Construction Control Measure Maintenance/Replacement:
  - i. The SWMP Administrator shall ensure sediment has been removed from perimeter controls and relocated to an area without the potential for sediment to discharge from the site
  - ii. The SWMP Administrator shall ensure diversion ditches and temporary sediment ponds have not accumulated excess sediment that impedes their functionality.
  - iii. The SWMP Administrator shall ensure that failed Control Measures are repaired/reinstalled within three (3) calendar days, according to the Stormwater Control Measure details, to ensure pollutants and/or sediment do not discharge from the site. GEC details are provided in Appendix B.
- d. Documentation:
  - i. Update the GEC plan to document the installation/revision of Control Measures

- ii. Identify Control Measure deficiencies and that noncompliance is resolved within three (3) calendar days.
- iii. Identify Self-Inspection schedule in most recent inspection form
- iv. Complete and submit Self-Inspection forms to the El Paso County within five (5) business days of the completed inspection
- v. Ensure Self-Inspections are available, either physically or electronically, throughout the duration of the project
- vi. Self-Inspection Report shall contain at least the following:
  - Inspection Date
  - Name and title of the SWMP Administrator performing inspection
  - Location(s) of illicit discharges of stormwater, sediment, or pollutants from the site
  - Location(s) of Construction Control Measures in need of maintenance/repair
  - Location(s) of Construction Control Measures that failed to operate as designed or proved inadequate
  - Location(s) of additional Construction Control Measures not shown on the latest, approved revision of the GEC plan
  - Any deviations from the minimum inspection schedule

## IV. Materials Handling

1. General Materials Handling Practices:
  - a. Potential pollutants shall be stored and used in a manner consistent with the manufacturer's instructions in a secure location. To the extent practical, material storage areas should be located away from storm drain inlets and should be equipped with covers, roofs or secondary containment as required to prevent stormwater from contacting stored materials. Chemicals that are not compatible shall be stored in segregated areas so that spill materials cannot combine and react.
  - b. Disposal of materials shall be in accordance with the manufacturer's instructions and applicable local, state, and federal regulations.
  - c. Materials no longer required for construction shall be removed from the site as soon as possible.
  - d. Adequate garbage, construction waste, and sanitary waste handling and disposal facilities shall be provided as necessary to keep the site clear of obstruction and Control Measures clear and functional.
  - e. Trash receptacles should be visually inspected daily for leaks and fill level. The receptacles will be emptied prior to becoming 90% full or if debris control becomes an issue.
  - f. Portable toilets will be located a minimum of 10ft from stormwater inlets and 50ft from state waters. They will be secured at all four corners to prevent overturning and cleaned on a weekly basis. They will be inspected daily for spills.
2. Specific Materials Handling Practices:
  - a. All pollutants, including waste materials and demolition debris, that occur onsite during construction shall be handled in a way that does not contaminate stormwater.
  - b. All chemicals including liquid products, petroleum products, water treatment chemicals, and wastes stored onsite shall be covered and protected from vandalism.
  - c. Maintenance, fueling, and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, degreasing operation, fuel tank drain down and removal, and other activities

- which may result in the accidental release of contaminants, shall be conducted under cover during wet weather and on an impervious surface to prevent release of contaminants onto the ground. Materials spilled during maintenance operations shall be cleaned up immediately and properly disposed of.
- d. Wheel wash water shall be settled and discharged onsite by infiltration.
  - e. Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturer's recommendations for application rates and procedures.
  - f. pH-modifying sources shall be managed to prevent contamination of runoff and stormwater collected onsite. The most common sources of pH-modifying materials are bulk cement, cement kiln dust (CKD), fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, and concrete pumping and mixer washout waters.

## V. Spill Prevention & Response Plan

1. The primary objective in responding to a spill is to quickly contain the material and prevent or minimize their mitigation into stormwater runoff and conveyance systems. If the release has impacted onsite stormwater, it is critical to contain the released materials onsite and prevent their release into receiving waters.
2. Spill Response Procedures:
  - a. Notify site superintendent immediately when a spill, or the threat of a spill, is observed. The superintendent shall assess the situation and determine the appropriate response
  - b. If spills represent an imminent threat of escaping onsite facilities and entering the receiving waters, site personnel shall respond immediately to contain the release and notify the superintendent once the situation has stabilized.
  - c. The site superintendent shall be responsible for completing a spill reporting form and for reporting the spill to the appropriate agency.
  - d. Spill response equipment shall be inspected and maintained as necessary to replace any materials used in spill response activities.
3. Spill kits shall be on-hand at all fueling sites. Spill kit locations shall be reported to the SWMP Administrator.
4. Absorbent materials shall be on-hand at all fueling areas for use in containing advertent spills. Containers shall be on-hand at all fueling sites for disposal of used absorbents.
5. Recommended components of spill kits include the following:
  - a. Oil absorbent pads
  - b. Oil absorbent booms
  - c. 55-gallon drums
  - d. 9-mil plastic bags
  - e. Personal protective equipment including gloves and goggles
6. Concrete wash water: unless confined in a pre-defined, bermed containment area, the cleaning of concrete truck delivery chutes is prohibited at the job site.
7. Notification procedures:
  - a. In the event of an accident or spill, the SWMP Administrator shall be notified.

- b. Depending on the nature of the spill and material involved, the Colorado Department of Public Health and Environment, downstream water users, or other agencies may also need to be notified.
- c. Any spill of oil which 1) violates water quality standards, 2) produces a “sheen” on a surface water, or 3) causes a sludge or emulsion, or any hazardous substance release, or hazardous waste release which exceeds the reportable quantity, must be reported immediately by telephone to the National Response Center Hotline at (800) 424-8802.

## VI. Potential Sources of Pollution

1. Potential sources of pollution from construction activities include
  - a. Disturbed or stored soils
  - b. Management of contaminated soils
  - c. Vehicle tracking of sediment
  - d. Loading & unloading operations
  - e. Outdoor Storage activities
  - f. Vehicle and Equipment Maintenance/Fueling
  - g. Dust or Particulate Generating Processes
  - h. Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents etc.
  - i. On-site waste management (waste piles, liquid wastes, dumpsters)
  - j. Concrete truck/equipment washing (washing truck chute and associated fixtures) (Not anticipated)
  - k. Dedicated asphalt, concrete batch plants and masonry mixing stations (Not anticipated)
  - l. Non-industrial waste (worker trash and portable toilets)

## VII. Implementation of Control Measures

Stormwater control measures must be installed according to BMP Details & Specification, presented in Appendix C, and the approved Grading and Erosion Control plan this report supports. Within the context of this CSWMP’s construction activities the following control measures, at a minimum, are required:

- Vehicle Tracking Control
- Stabilized Staging Area
- Inlet/outlet Protection
- Rock check dams
- Seeding & Mulching

Additional control measures may be required at the discretion of the County Stormwater Inspector.

This project does not rely on control measures owned or operated by another entity.

## VIII. Final Stabilization & Long-Term Stormwater Management Plan

1. Temporary seeding and mulching will be installed to provide interim stabilization prior to final landscaping installation. See approved landscaping plans for final stabilization details. Final stabilization is met when 70% of pre disturbance levels, not including noxious weeds, are stabilized. Final stabilization must be achieved prior to removal of temporary stormwater control measures. Anticipated date of final stabilization is Fall 2023; however, this is subject to change. Long term stormwater management will be provided

through runoff reduction methods, where impervious areas constructed will drain to appropriate pervious areas to provide water quality treatment. Additionally, a private extended detention basin will treat and detain flows to release runoff at a rate no more than historic values. See below for seeding and mulching details:

- a. Prior to seeding, fill any eroded rills and gullies with topsoil.
- b. Ensure all areas are seeded and mulched per the City Stormwater Construction Manual.
- c. Continue monthly self-inspections of final stabilization methods and the stormwater management system to ensure proper function. If repairs are needed, reseed and re-mulch as needed.
- d. Control noxious weeds in a manner acceptable to the GEC inspector.
- e. Seed Mix: See Appendix C for approved seed mixes.
- f. Seeding Requirements:
  - i. Drill seed whenever possible, seed depth must be 1/3 to 1/2 inch when drill-seeding. Cross drilling should be used whenever possible with the seed divided between the two operations. The second drilling should be perpendicular to the first.
  - ii. When drill seeding is not possible or on slopes greater than 3:1, hydro-seeding with tackifier may be substituted at the discretion of the GEC inspector. Hydro-seeding must be lightly raked into soil. Seeding rates are presented in Appendix C.
  - iii. All seeded areas must be mulched.
- g. Mulching Requirements:
  - i. Mulching shall be completed as soon as practical after seeding but no more than fourteen (14) days after planting. Erosion control blanket can be used in place of the below mulching methods.
  - ii. Hay or straw mulch:
    1. Only certified weed-free and certified-seed free mulch may be used. Must be applied at 2 tons/acre and adequately secured.
    2. Crimping shall not be used on slopes greater than 3:1, tackifier must be used in place.
  - iii. Hydraulic mulching:
    1. Allowable on steep slopes or areas with limited access
    2. If hydro-seeding is used, mulching must be applied secondly.
    3. Wood cellulose fibers mixed with water must be applied at a rate of 2,000-2,500 lbs/acre, and tackifier applied at a rate of 100 lbs/acre.

## IX. Inspection and Record Keeping

1. The project is subject to inspections by the Colorado Division of Public Health and Environment (CDPHE), the Environmental Protection Agency (EPA), and El Paso County at any time. Inspection of the stormwater management system shall be performed, by the SWMP Administrator, at least every 14 calendar days and after the occurrence of precipitation or snow melt event that may cause noticeable erosion or run-off. Time span greater than 14 calendar days is a violation of the CDPS permit. Inspection logs will be signed by the QSM.
2. SWMP Location:

A copy of the current revision of the SWMP will be kept on-site. Required inspection records must also be kept and available to provide to a regulatory inspector upon request.

3. SWMP ADMINISTRATOR: The individual(s), position, or title responsible for developing, implementing, maintaining, and revising the SWMP is to be determined upon award of the project. The individual(s) will be sufficiently qualified for the required duties per the El Paso County ECM Appendix I.5. The individual listed as the Erosion Control Supervisor shall fill out the information below and place in the on-site copy before beginning installation of the BMPs for this site and notify the County of the appropriate contact information.

SWMP Administrator Name: To be determined

## X. References

Engineering Criteria Manual (ECM), County of EL PASO, COLORADO

The City of Colorado Springs/El Paso County Drainage Criteria Manual

City of Colorado Springs – Stormwater Construction Manual, December 2020



## **APPENDIX A – VICINITY MAP & NRCS SOIL SURVEY**

Jones Rd

Jones Rd

YEGUADA BETO DOMÍNGUEZ

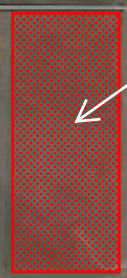


Chufo's Drywall



N Peyton Hwy

SITE



Peyton Hwy



**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 13. The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the **North American Vertical Datum of 1988 (NAVD88)**. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NUNGS12  
National Geodetic Survey  
SSMC-3, #9202  
1315 East-West Highway  
Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242 or visit its website at <http://www.ngs.noaa.gov/>.

**Base Map** information shown on this FIRM was provided in digital format by El Paso County, Colorado Springs Utilities, and Anderson Consulting Engineers, Inc. These data are current as of 2008.

This map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map. The profile baselines depicted on this map represent the hydraulic modeling baselines that match the flood profiles and Floodway Data Tables if applicable, in the FIS report. As a result, the profile baselines may deviate significantly from the new base map channel representation and may appear outside of the floodplain.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact **FEMA Map Service Center (MSC)** via the FEMA Map Information eXchange (FIMX) 1-877-336-2627 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. The MSC may also be reached by Fax at 1-800-358-9620 and its website at <http://www.msc.fema.gov/>.

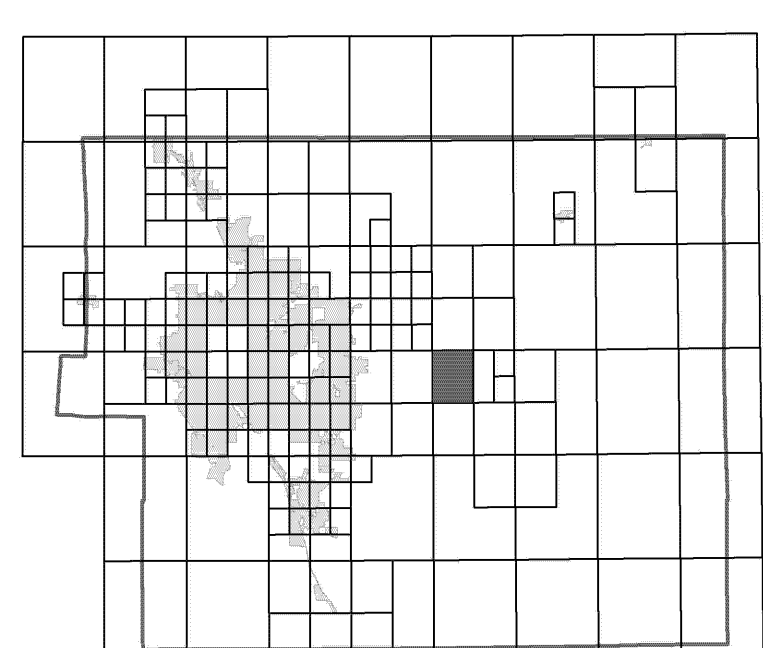
If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP (1-877-336-2627)** or visit the FEMA website at <http://www.fema.gov/business/nfp>.

**El Paso County Vertical Datum Offset Table**

| Flooding Source | Vertical Datum Offset (ft) |
|-----------------|----------------------------|
|                 |                            |

REFER TO SECTION 3.3 OF THE EL PASO COUNTY FLOOD INSURANCE STUDY FOR STREAM BY STREAM VERTICAL DATUM CONVERSION INFORMATION

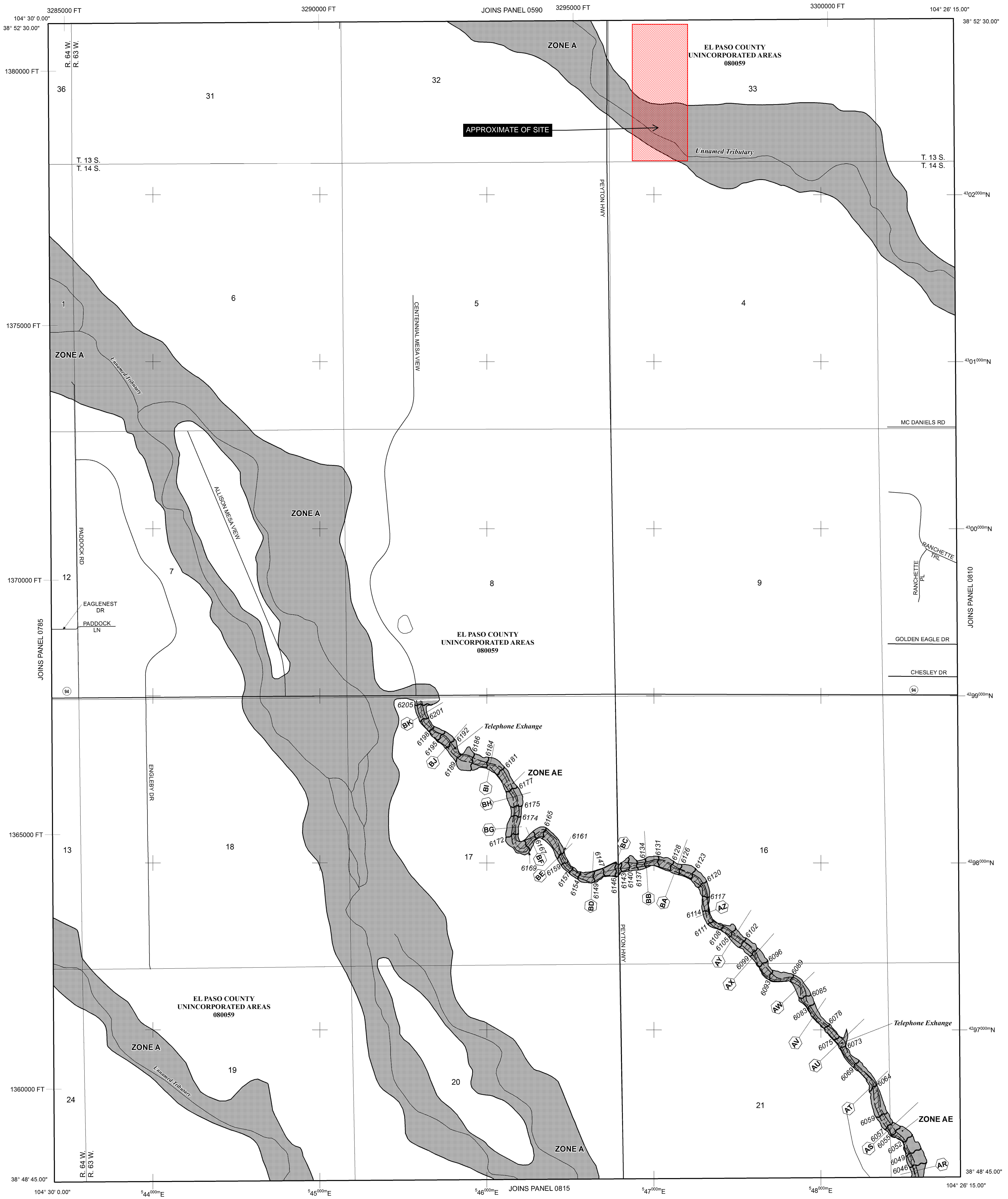
**Panel Location Map**



This Digital Flood Insurance Rate Map (DFIRM) was produced through a Cooperating Technical Partner (CTP) agreement between the State of Colorado Water Conservation Board (CWCB) and the Federal Emergency Management Agency (FEMA).



Additional Flood Hazard information and resources are available from local communities and the Colorado Water Conservation Board.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAS) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject, to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

**ZONE A** No Base Flood Elevations determined.

**ZONE AE** Base Flood Elevations determined.

**ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

**ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

**ZONE AR** Special Flood Hazard Area Formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

**ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

**ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

**ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

— Floodplain boundary  
— Floodway boundary  
— Zone D Boundary  
— CBRS and OPA boundary

— Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

— 513 — Base Flood Elevation line and value; elevation in feet\* (EL 987)  
— Base Flood Elevation value where uniform within zone; elevation in feet\*

\* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

— A — A — Cross section line  
— 23 — 23 — Transsect line

57° 07' 30.00" 32° 22' 30.00" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)

4750000N 1000-meter Universal Transverse Mercator grid ticks, zone 13

6000000 FT 5000-foot grid ticks: Colorado State Plane coordinate system, central zone (FIPSZONE 0502), Lambert Conformal Conic Projection

DX5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)

M1.5 River Mile

MAP REPOSITORIES Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP MARCH 17, 1997

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL DECEMBER 7, 2018 to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision

For community map revision history prior to countywide mapping, refer to the Community Map History Table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

**NFIP** **PANEL 0805G**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**EL PASO COUNTY, COLORADO AND INCORPORATED AREAS**

**PANEL 805 OF 1300**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:  
COMMUNITY NUMBER PANEL SUFFIX  
EL PASO COUNTY 08059 0805 G

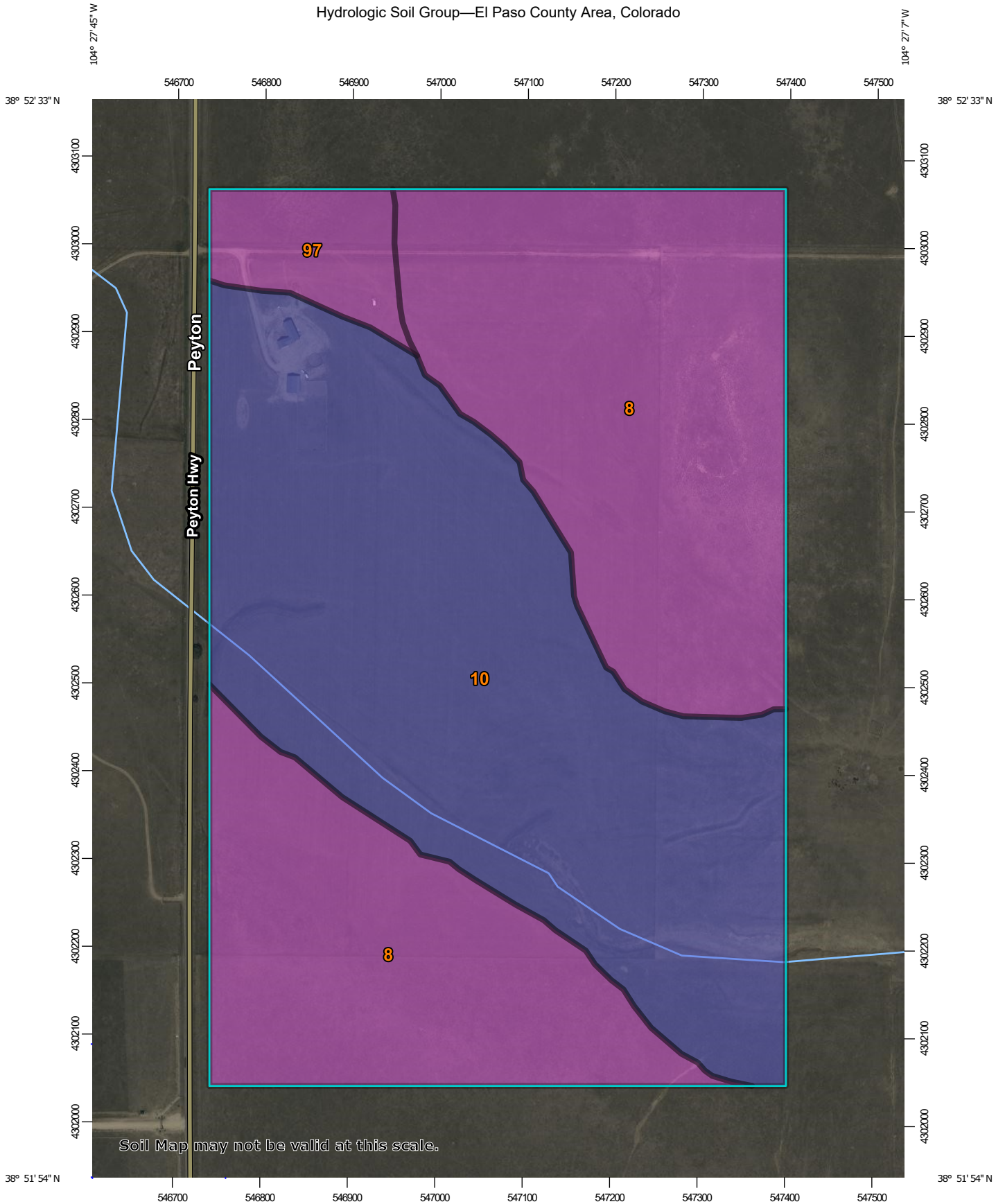
Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER 08041C0805G**

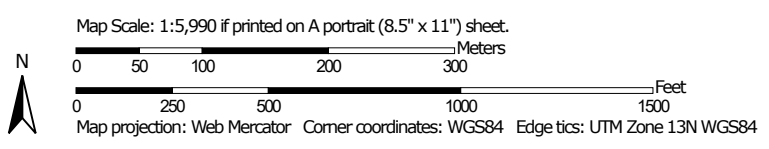
**MAP REVISED DECEMBER 7, 2018**

Federal Emergency Management Agency

Hydrologic Soil Group—El Paso County Area, Colorado




Soil Map may not be valid at this scale.



### MAP LEGEND

**Area of Interest (AOI)**









 Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**





-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

**Soil Rating Lines**

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

**Soil Rating Points**





-  A
-  A/D
-  B
-  B/D

-  C
-  C/D
-  D
-  Not rated or not available

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado  
 Survey Area Data: Version 20, Sep 2, 2022

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

Date(s) aerial images were photographed: Sep 11, 2018—Oct 20, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydrologic Soil Group

| Map unit symbol                    | Map unit name                               | Rating | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------|--------------|----------------|
| 8                                  | Blakeland loamy sand, 1 to 9 percent slopes | A      | 83.1         | 49.7%          |
| 10                                 | Blendon sandy loam, 0 to 3 percent slopes   | B      | 76.9         | 46.0%          |
| 97                                 | Truckton sandy loam, 3 to 9 percent slopes  | A      | 7.1          | 4.2%           |
| <b>Totals for Area of Interest</b> |   |        | <b>167.1</b> | <b>100.0%</b>  |

### Description

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

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

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

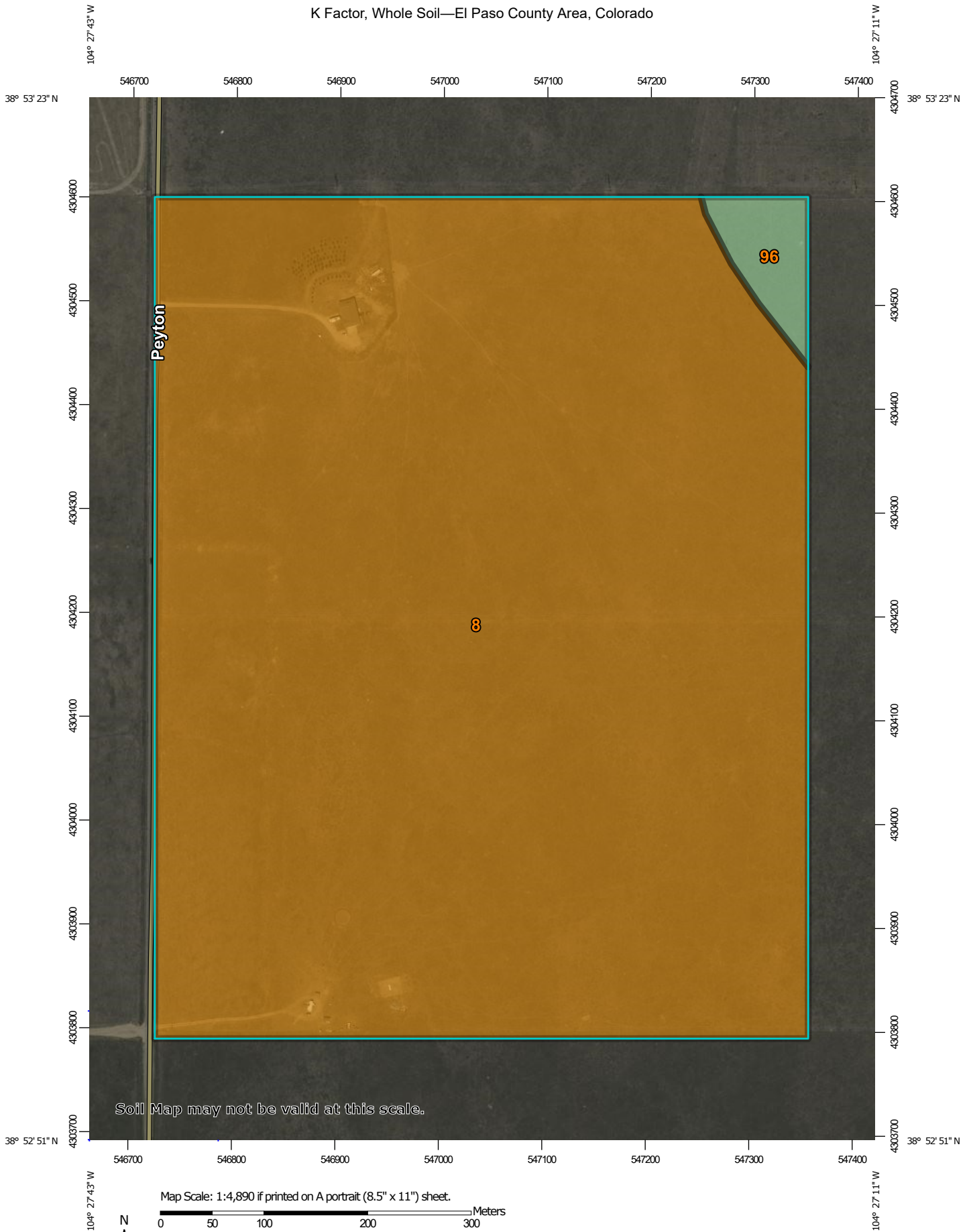
**Group B.** Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

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

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


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

K Factor, Whole Soil—El Paso County Area, Colorado


















### MAP LEGEND

**Area of Interest (AOI)**







 Area of Interest (AOI)










**Soils**

**Soil Rating Polygons**
















-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

**Soil Rating Lines**








-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

**Soil Rating Points**

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

**Water Features**

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

### MAP INFORMATION

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## K Factor, Whole Soil

| Map unit symbol                    | Map unit name                               | Rating | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------|--------------|----------------|
| 8                                  | Blakeland loamy sand, 1 to 9 percent slopes | .10    | 124.6        | 98.1%          |
| 96                                 | Truckton sandy loam, 0 to 3 percent slopes  | .28    | 2.4          | 1.9%           |
| <b>Totals for Area of Interest</b> |   |        | <b>127.0</b> | <b>100.0%</b>  |

### Description

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

### Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

*Layer Options (Horizon Aggregation Method):* Surface Layer (Not applicable)



## **APPENDIX B – GEC PLANS**

*-Approved set to be added prior to start of construction*



## **APPENDIX C – SELF-INSPECTION FORM**



## **APPENDIX D – Erosion and Stormwater Quality Control Permit (ESQCP)**

*-Approved ESQCP to be added prior to start of construction*