

Rule 411

Operator Training

3/9/2021



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

Greg Deranleau
Environmental Manager

Overview

- Rule Reminders
- Map Layers
- PWS Contacts
- Type III/GUDI PWS Wells
- Feedback and Questions



Rule Reminders

- Rule 411.a very similar to 317B
 - Rule 411.a.(4) applies to new and existing wells within ½ mile of surface water upstream from a PWS surface water intake
- Rule 411.b protections for PWS groundwater intakes
 - Does not apply to existing operations
 - Buffer zone protections
 - Consultation with PWS during permitting
- Spill and release notifications – new and existing
 - Within buffer zones
 - At locations upstream from PWS surface water intake



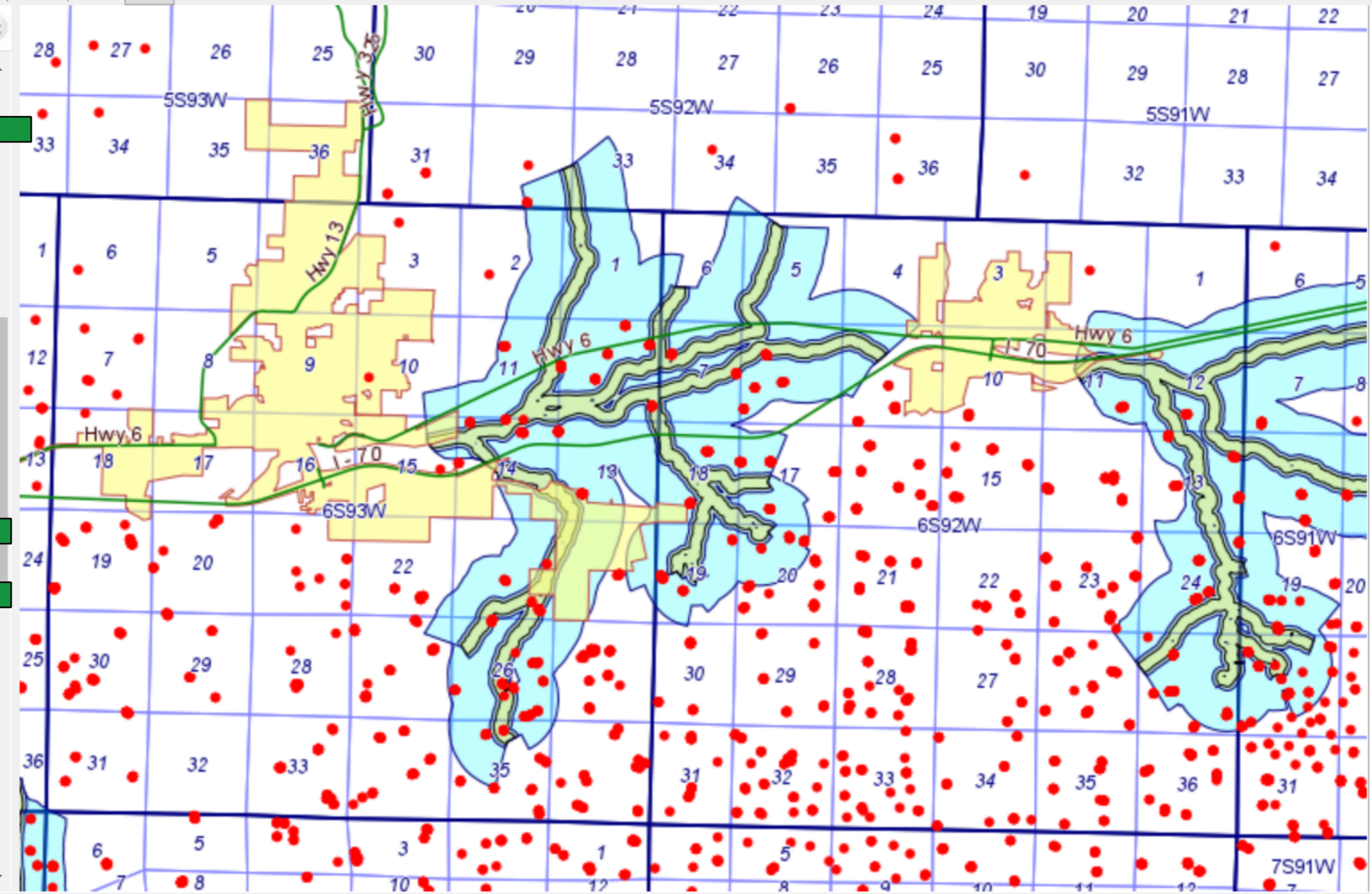
Map Layers

COGCC GISOnline

Address Search Zoom Selection Results Intersect Add Point Redline Copy Lat/Long Print Help



- Layers
- Historic Wells
 - Roads & Railroads (CDOT)
 - Water Resources (DWR & CDPHE)
 - Designated Groundwater Management Area
 - Designated Basin
 - Planned Reservoir
 - Lake
 - River/Stream
 - Specified Area (CDPHE Regulation 42)
 - Domestic Use
 - Limited Use & Quality
 - Potential Useable Quality
 - Surface Water Quality Protection
 - Public Water System (PWS) Protection
 - Contacts
 - Brighton 1-189
 - Brighton 1-189 PWS Area
 - 317B
 - 317B Internal Buffer
 - 317B Intermediate Buffer
 - 317B External Buffer
 - Draft SB 19_181 Rule 411
 - Generalized GUDI Source Locations
 - Generalized Type III Well Locations
 - Floodplains (FEMA)
 - Environmental Sites
 - Air Quality (CDPHE)



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

MAPGUIDE HELP

- [Disclaimer](#)
- [Map Layer Info](#)
- [Map User Guide](#)
- [Other Browsers](#)
- [FAQ's](#)
- [Flowlines](#)

This screen space is used for various map functions, such as redlining and measuring distances, and will change depending on the function being used.

Need help? Map not working?

X: 256464, Y: 4381262 (METER)

0 features selected

1: 107707

13.35 x 8.78 (mi)

Powered by Infrastructure Map Server

Map Layers

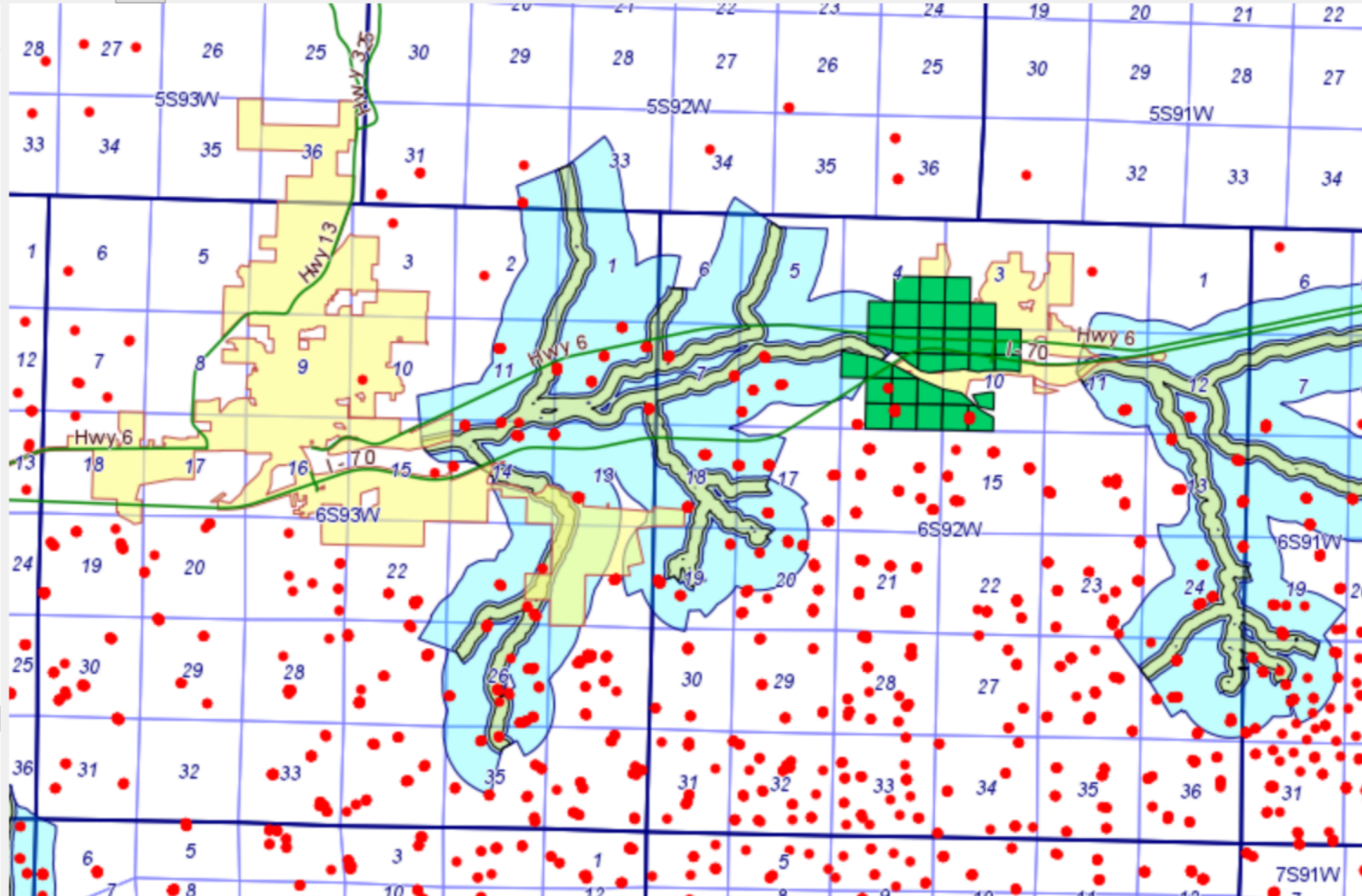
COGCC GISOnline

Address Search Zoom Selection Results Intersect Add Point Redline Copy Lat/Long Print Help



Layers

- Historic Wells
- Roads & Railroads (CDOT)
- Water Resources (DWR & CDPHE)
 - Designated Groundwater Management Area
 - Designated Basin
 - Planned Reservoir
 - Lake
 - River/Stream
 - Specified Area (CDPHE Regulation 42)
 - Domestic Use
 - Limited Use & Quality
 - Potential Useable Quality
 - Surface Water Quality Protection
 - Public Water System (PWS) Protection
 - Contacts
 - Brighton 1-189
 - Brighton 1-189 PWS Area
 - 317B
 - 317B Internal Buffer
 - 317B Intermediate Buffer
 - 317B External Buffer
 - Draft SB 19_181 Rule 411
 - Generalized GUDI Source Locations
 - Generalized Type III Well Locations
- Floodplains (FEMA)
- Environmental Sites
- Air Quality (CDPHE)



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

MAPGUIDE HELP

- [Disclaimer](#)
- [Map Layer Info](#)
- [Map User Guide](#)
- [Other Browsers](#)
- [FAQ's](#)
- [Flowlines](#)

This screen space is used for various map functions, such as redlining and measuring distances, and will change depending on the function being used.

Need help? Map not working?

X: 256464, Y: 4385708 (METER)

0 features selected

1: 107707

13.35 x 8.78 (mi)

Powered by Infrastructure Map Server

Map Layers

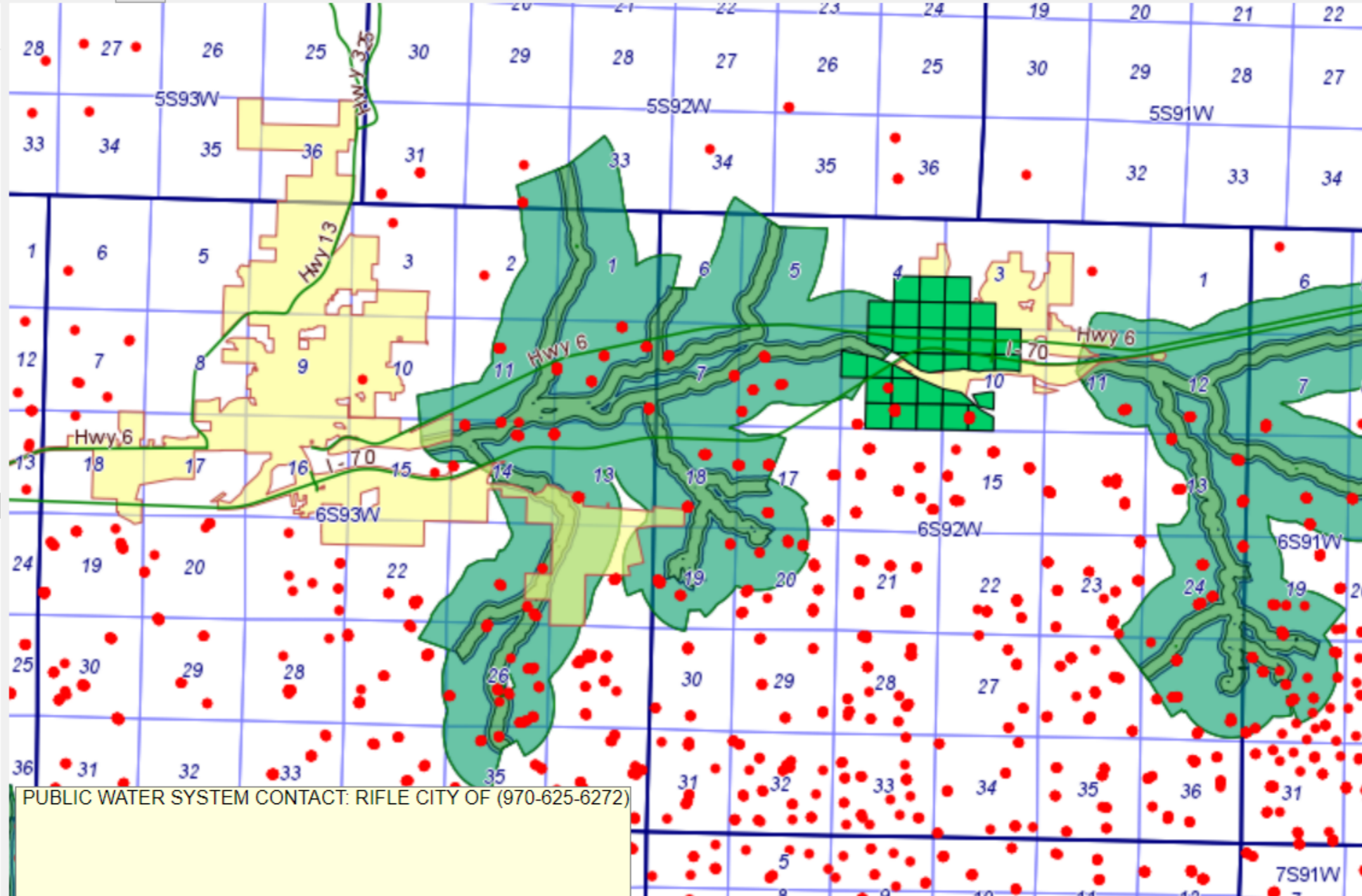
COGCC GISOnline

Address Search Zoom Selection Results Intersect Add Point Redline Copy Lat/Long Print Help



Layers

- Historic Wells
- Roads & Railroads (CDOT)
- Water Resources (DWR & CDPHE)
 - Designated Groundwater Management Area
 - Designated Basin
 - Planned Reservoir
 - Lake
 - River/Stream
 - Specified Area (CDPHE Regulation 42)
 - Domestic Use
 - Limited Use & Quality
 - Potential Useable Quality
 - Surface Water Quality Protection
 - Public Water System (PWS) Protection
 - Contacts
 - Brighton 1-189
 - Brighton 1-189 PWS Area
 - 317B
 - 317B Internal Buffer
 - 317B Intermediate Buffer
 - 317B External Buffer
 - Draft SB 19_181 Rule 411
 - Generalized GUDI Source Locations
 - Generalized Type III Well Locations
 - Floodplains (FEMA)
 - Environmental Sites
 - Air Quality (CDPHE)



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

MAPGUIDE HELP

- [Disclaimer](#)
- [Map Layer Info](#)
- [Map User Guide](#)
- [Other Browsers](#)
- [FAQ's](#)
- [Flowlines](#)

This screen space is used for various map functions, such as redlining and measuring distances, and will change depending on the function being used.

Need help? Map not working?

X: 256550, Y: 4372286 (METER)

0 features selected

1: 107707

13.35 x 8.78 (mi)

Powered by Infrastructure Map Server

Map Layers

- No actual PWS intakes are identified
- 317B Surface Classified Water Segments are accurate, but not complete
 - 317B External Buffer is the same
 - Field verify Internal and Intermediate Buffers
 - There may be new PWS Surface Water Intakes not included in current map layers
- Draft SB 19-181 Rule 411 Layer is usable
 - Current conversations between COGCC, CDPHE, DWR to update



PWS Contacts

- COGCC GIS Online Interactive Map for PWS surface water intakes
- For PWS Contact info: <https://cdphe.colorado.gov/dwinfo>

Learn about your public water system

- **Contact the water system directly**

- Contact information can be found on your water bill or using the system search below. If your water is included in dues, then ask your property manager for the system's name or contact information.

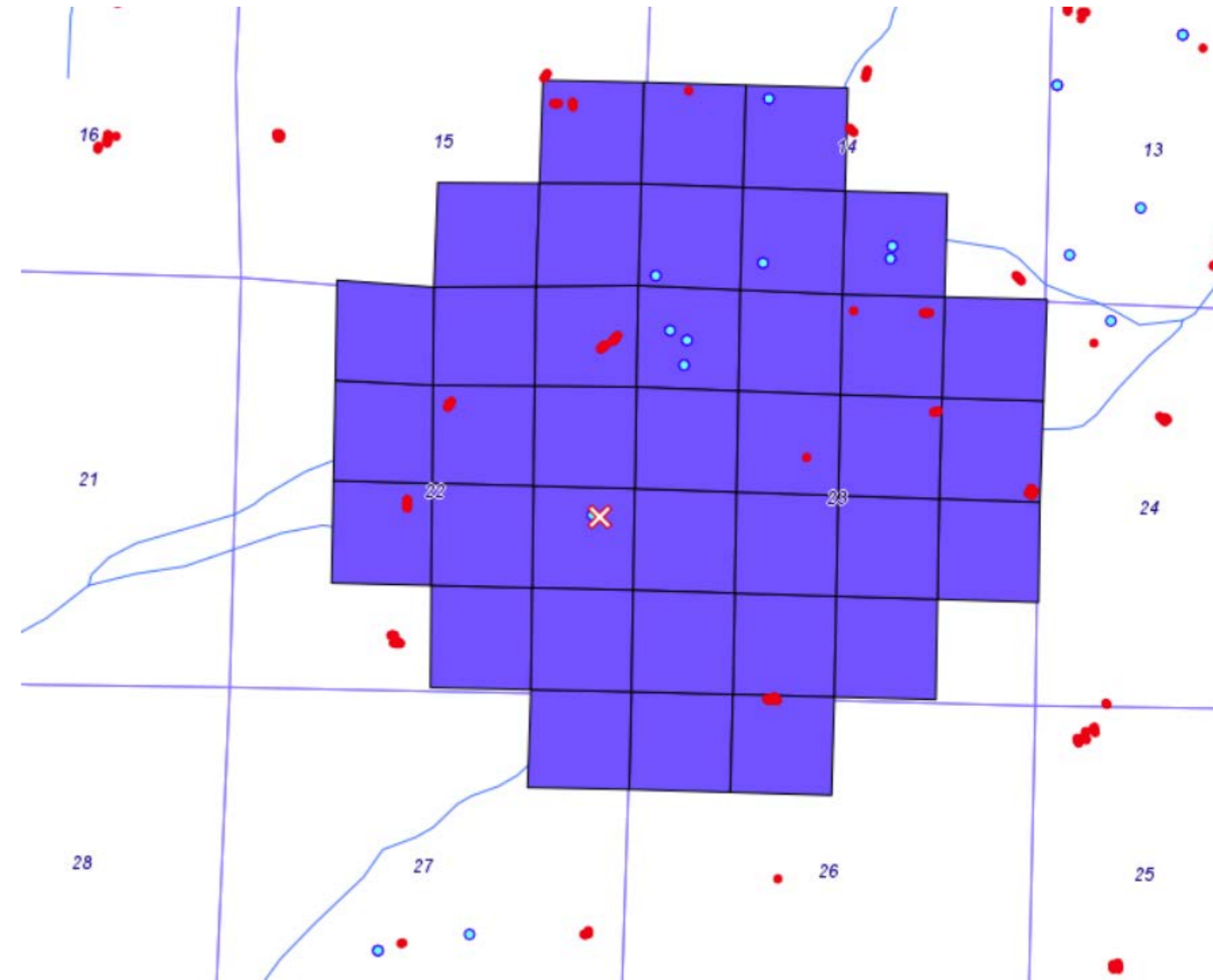
- **Online Information (Acronym List)**

- [Water system search \(general info, sample results, violations, and online records\)](#) 



Type III and GUDI PWS Wells

- Operator proposed location in NESE Section 22
- Well in Section 22 is private and belongs to Surface Owner
- Several wells in Section 23 near center of polygon
- Wells in NWNW Section 23 belong to TeePee Bible Camp
 - Presumably, these are the PWS wells



Type III and GUDI Wells

- Verify well status
- Measured location is 2200' from nearest PWS well
 - Pitless drilling (411.b.(3).C)
 - Formal Consultation with PWS
 - ◆ BMPs
 - ◆ Groundwater Monitoring
 - ◆ Recharge Areas
 - Spill/Release Notification & Emergency Response Planning (411.b.(5))
 - ◆ Emergency Response Plan
 - ◆ Spill Notification



Visit Us On the Web

colorado.gov/cogcc



COLORADO
Oil & Gas Conservation
Commission

Department of Natural Resources