

Rule 317B.

Public Water System Protection

317B. - Public Water System Protection

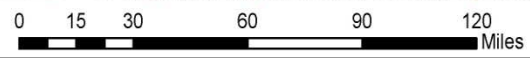
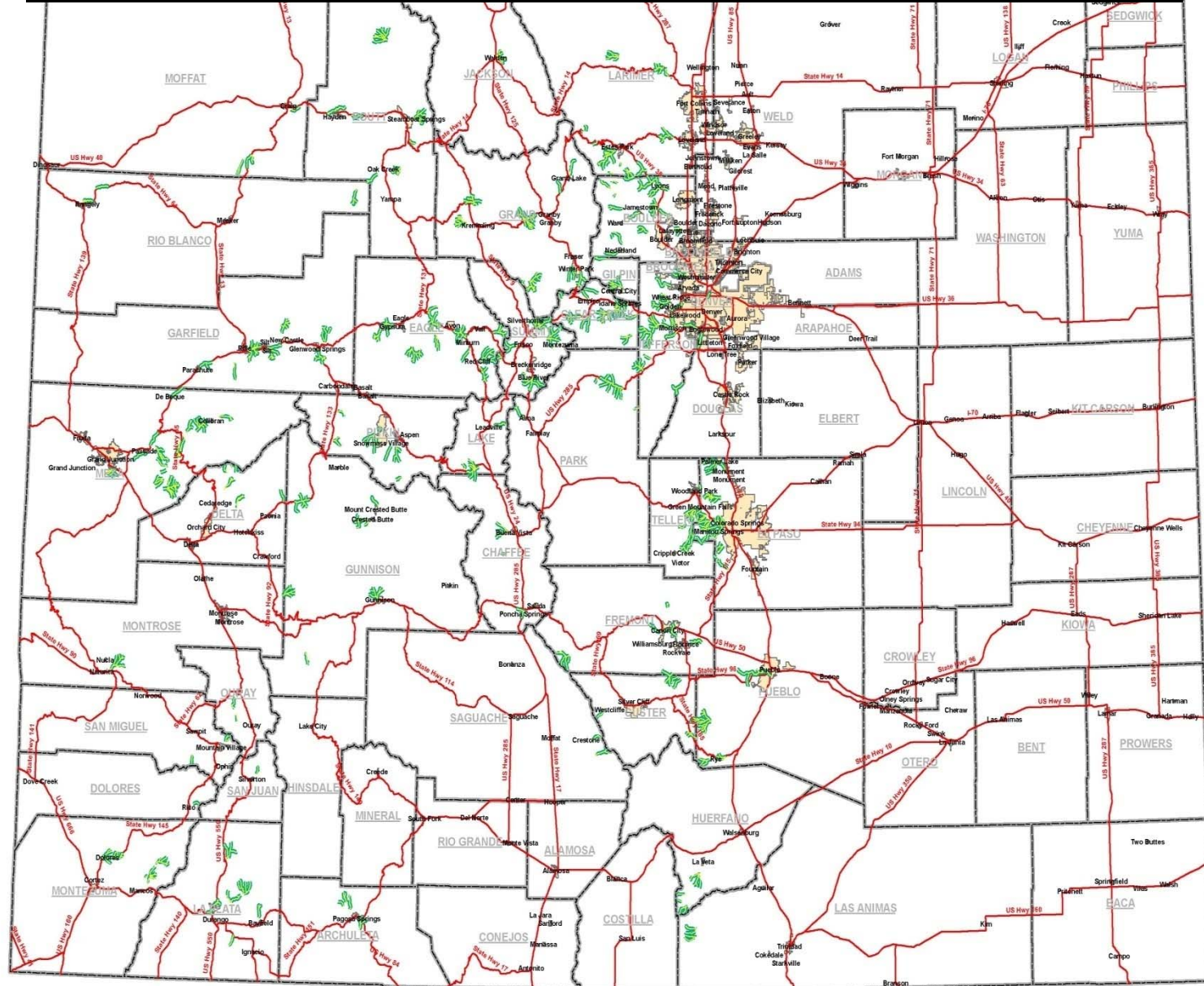
- Rule 317B., Public Water System Protections
 - Purpose
 - Definitions
 - Applicability
 - Requirements
- Proposed Amendments to Appendix VI

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(Cont'd)

- Purpose:
Minimize potential for contamination of public drinking water supplies by oil & gas operations by protecting the surface water source.
- Procedure:
 - Creation of three protection zones (buffer zones)
 - Application of performance requirements

Public Water Systems Subject to Protections of Rule 317B



Legend

- 300ft buffer
- 500ft buffer
- 1/2 mile buffer
- Roads
- Cities
- County Lines



317B. - Definitions

- Drilling, Completion, Production & Storage (DCPS) Operations:
 - Operations at well sites for drilling, completion, recompletion, workover, or stimulation of wells or chemical and production fluid storage.
 - Any other oil and gas location at which production facilities are operated.
 - **EXCLUDED:** Roads, gathering lines, pipelines, and routine operations and maintenance.

317B. – Definitions (Cont'd)

- Existing Oil and Gas Location
 - An oil and gas location, **excluding roads, pipelines, and gathering lines**, permitted or constructed prior to May 1, 2009 on federal land or April 1, 2009 on all other land that are subject to this rule by virtue of its proximity to a Classified Water Supply Segment.
- New Oil and Gas Location
 - An oil and gas location, **excluding roads, pipelines, and gathering lines**, that is not an existing location.

317B. – Definitions (Cont'd)

- New Surface Disturbance
 - Surface disturbance that expands the area covered by an oil and gas location beyond that initially disturbed.
- Non-Exempt Linear Feature
 - Road, gathering line, or pipeline that is **not necessary to cross a stream or connect or access a well or gathering line.**

317B. – Statement of Basis & Purpose

- “With respect to roads, gathering lines, and pipelines, the intent of Rule 317B is to exempt them from the rule, **except for most of those w/in the Internal Buffer Zone.**”
- “Specifically, the rule allows those roads, gathering lines or pipelines that are necessary to cross a stream or connect or access a well or gathering line to be located within the Internal Buffer Zone.”
- ...rule apply only to roads, gathering lines, or pipelines that did not exist on 5/1/09 for fed lands & 4/1/09 for other.

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- Rule 317B.b. Applicability Determination
 - Rule 317B.b.(1) - DCPS Operations subject to Rule 317B
 - Review the Public Water Systems Subject to Protections of Rule 317B Map (COGCC website and Appendix VI), or
 - Enter location into the “Oil & Gas Activity Notification Tool” in COGCC website HELP (called “Public Water System Surface Supply Area Applicability Tool” in the rule)
 - Rule 317B.b.(2) - Public Water Systems subject to the protections of Rule 317B.
 - Review list in Appendix VI.
 - Changes to list or map shall be by COGCC rulemaking.

Oil & Gas Activity Notification Tool

Colorado Oil and Gas Conservation Commission Home Page - Windows Internet Explorer

http://cogcc.state.co.us/

HOME Colorado Oil and Gas Conservation Commission

A division of the Colorado Department of Natural Resources

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Oil and Gas Activity Notification Tool

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This tool identifies QQ Sections with Notification Requirements as defined by COGCC Rules

Directions:
Input Location information to return notification report.

Format: SESW 23 4S 78W

Location: Qtrqtr 23 * Sec 4S * Twp 78W * Range *Required Field

Your search area has returned the following notification requirements. Please refer to the GIS Online Map for more details.

qtrqtr	sec	twp	range	meridian	Sensitive Wildlife Habitat	Restricted Surface Occupancy Area	Rule 317B Internal Buffer Zone	Rule 317B Intermediate Buffer Zone	Rule 317B External Buffer Zone	Perennial 300-Foot Buffer
SENE	23	4S	78W	6	Y				Y	
SWNE	23	4S	78W	6	Y				Y	
NENE	23	4S	78W	6	Y					
NWNE	23	4S	78W	6	Y				Y	
NENW	23	4S	78W	6					Y	
NENW	23	4S	78W	6		Y	Y	Y	Y	Y

CLICK ON
HELP

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(Cont'd)

- Rule 317B.b.(3) (Requirements)
 - DCPS operations at **New Oil & Gas Locations** w/in a surface water supply area will be subject to Rule 317B.c. (Internal Buffer), 317B.d. (Intermediate Buffer), or 317B.e (External Buffer) requirements depending upon in which buffer zone they are located.
 - DCPS operations at **Existing Oil & Gas Locations** w/in surface water supply area at which **no new surface disturbance has occurred** will be subject to Rule 317B.f.(1) requirements depending upon in which buffer zone they are located.

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(Cont'd)

- Rule 317B.b.(3) (Requirements (cont'd))
 - DCPS operations at **Existing Oil & Gas Locations** w/in surface water supply area at which **new surface disturbance has occurred** will be subject to Rule 317B.f.(2) requirements.

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- Rule 317B.b.(4) (Buffer Zone Determination)
 - For classified water supply segments that are perennial or intermittent streams, buffer zones will be measured from the ordinary high water line of each bank to the near edge of the disturbed area at the location.
 - Buffer zones extend upstream 5 miles from intake.

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- Rule 317B.b.(5)
 - Buffer zones apply only to DCPS Operations located at the ground surface.
 - Buffer zones **do not apply** to operations in areas that do not drain to Rule 317B protected surface water.

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(Cont'd)

Table 1 – Buffer Zones Associated with DCPS Operations
(aka “Protection Zones”)

Zone	Distance from Ordinary High Water Mark
Internal Buffer	0 to 300 feet
Intermediate Buffer	301 to 500 feet
External Buffer	501 to 2,640 feet

NOTE:

Buffer zones are measured from ordinary high water mark & extend upstream 5 miles from water supply intake.

317B. – View Buffer Zones

COGCC onLine - Windows Internet Explorer

http://cogcc.state.co.us/infosys/Maps/LoadMap.cfm

COGCC GIS OnLine

- Local Roads
- Railroads
- WATER RESOURCES
 - Water Wells
 - Lakes
 - Major Rivers
 - Streams
 - Specified H2O Class
- CGS COAL MINES
- SAMPLES IN COGCC -DB
 - Water Feature Samples
 - Oil-Gas Well Samples
- Division of Wildlife Contacts
- DOW Energy Liaisons
- RULE 317B BUFFER ZONES
- 1200-SERIES WILDLIFE AREAS
 - RSD Areas
 - SWH Areas
- 300-FOOT STREAM BUFFERS
- State Wildlife Areas
- DOE NOTICE AREA
- COGCC POLICIES/RULES
 - GWA H2O Samples
 - GWA Infill 318Ae
 - GWA Rule 318A
 - GWA FoxHills 317A
 - YumaWLR 318B

INTERNAL BUFFER (0-300 feet)
Rule 317B Classified Surface Water Supply Area Buffers
Data Source: CDPHE-December 2008

Click On Rule 317B Buffer Zones Layer

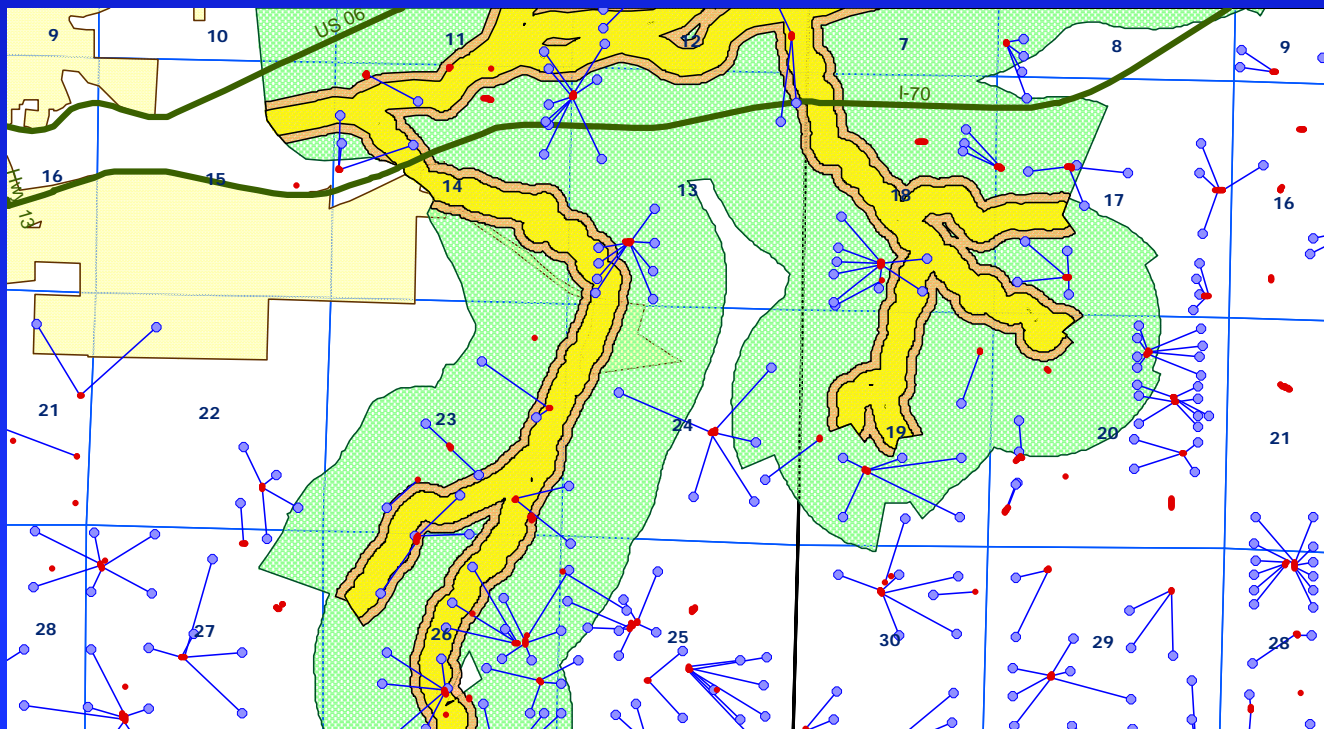
Lat: 39.529026, Lon: -107.711942 Internal Buffer : INTERNAL BUFFER (0-300 feet)-Rule 317B Classified Surface Water Supply Ar 1 : 77,279 12.8 x 5.98 (mi)

Select by Radius Selection Results Create Redline Edit Redline Delete Redline

Internet 100%

317B.

Buffer Zones Only Apply to DCPS Operations at the Ground Surface



317B. - Public Water System Protection (Cont'd)

- Rule 317B.c. Requirements for DCPS Operations & Non-Exempt Linear Features at New Oil & Gas Locations
Internal Buffer Zone
 - Not allowed unless:
 - Rule 502.b. variance is granted; and Rule 306.d. consultation with CDPHE occurs; and Form 2A or Form 2 with COAs (similar to Rule 317B.d. Intermediate Buffer Zone requirements) has been approved; or
 - Rule 216 CDP covering the operation is approved.

317B. - Public Water System Protection

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- Rule 317B.c.(1) - INTERNAL BUFFER ZONE Variance
 - Proposed operations and applicable BMPs and operating procedures will result in substantially equivalent protection; and either
 - Conducting the DCPS Operation outside the Internal Buffer Zone would pose a greater risk to public health, safety, or welfare, including the environment and wildlife resources; or
 - Conducting DCPS Operations beyond the Internal Buffer Zone is not technically feasible.

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- Rule 317B.d. - Requirements for DCPS Operations & Non-Exempt Linear Features at New Oil & Gas Locations **Intermediate Buffer Zone**
 - Pitless drilling systems;
 - Flowback and stimulation fluids contained within tanks placed on a well pad or in an area with down gradient perimeter berming;
 - Berms or other containment devices constructed in compliance with Rule 603.e.(12) around crude oil, condensate, and produced water storage tanks.

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- Rule 317B.e. Requirements for DCPS Operations & Non-Exempt Linear Features at New Oil & Gas Locations

External Buffer Zone

- Pitless drilling systems; or
- Containment of all drilling, flowback, and stimulation fluids per Rule 904 (pit lining requirements).

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(Cont'd)

- Rule 317B.d. - INTERMEDIATE & Rule 317B.e. - EXTERNAL BUFFER ZONE
New O&G Location Requirements (cont'd):
 - Baseline surface-water sample collected immediately down-gradient of the location and;
 - Follow-up surface water sample collected from the same location 3 months after the conclusion of any drilling or completion activities.

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- Rule 317B.d. - INTERMEDIATE BUFFER ZONE & Rule 317B.e. - EXTERNAL BUFFER ZONE
New O&G Location Requirements (cont'd):
 - Analytical parameters:
 - pH
 - Alkalinity
 - Specific Conductance
 - Major cations/anions
 - Total dissolved solids
 - BTEX/GRO/DRO
 - TPH
 - PAHs
 - Metals

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- Rule 317B.d. - INTERMEDIATE BUFFER ZONE & Rule 317B.e. - EXTERNAL BUFFER ZONE
New O&G Location Requirements (cont'd):
 - Use accredited labs and current EPA-approved analytical methods for drinking water.
 - Provide analytical data and sample location in EDD format to COGCC and the Public Water System within 3 months of collecting the samples.

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- **Rule 317B.d. - INTERMEDIATE BUFFER ZONE & Rule 317B.e. - EXTERNAL BUFFER ZONE**
New O&G Location Requirements (cont'd):
 - Notify Public Water Systems within 15 stream miles downstream of the DCPS Operation prior to commencement of new surface disturbing activities.
 - Implement an emergency spill response program:
 - Employee training
 - Safety and maintenance provisions
 - Maintaining contact information for Public Water Systems
 - Process for notifying Public Water Systems

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- **Rule 317B.d. - INTERMEDIATE BUFFER ZONE & Rule 317B.e. - EXTERNAL BUFFER ZONE**
New O&G Location Requirements (cont'd):

- If a spill or release impacts or threatens to impact a Public Water System - NOTIFICATION:
 - Affected or potentially affected system IMMEDIATELY following discovery of the release; and
 - COGCC per Rule 906.b.(3); and
 - Environmental Release/Incident Report Hotline (877-518-5608) per Rule 906.b.(4).

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- Rule 317B.f.(1) Existing DCPS Operations within a Surface Water Supply Area and within a specified buffer zone, **WHERE NO NEW SURFACE DISTURBANCE** occurs.
 - Requirements for **all buffer zones**:
 - Collect down gradient surface water sample by June 1, 2009, or 6 months after date Rule 317B applies, or when water exists.
 - Analytical parameters are the same (Rules 317B.d. & 317B.e.)
 - Emergency response program & notifications are the same (Rules 317B.d. & 317B.e.).
 - Employ BMPs.

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- Rule 317B.f.(2) Existing DCPS Operations within a Surface Water Supply Area, and within a specified buffer zone, and **WHERE NEW SURFACE DISTURBANCE OCCURS** are subject to Rule 317.B.f.(3) (instead of Rules 317B.c., d., or e.) when:
 - Covered by an approved Rule 216 CDP; or
 - Existing disturbed area is not increased, prior to reclamation, by more than 100% up to 3 acres, and
 - New disturbance occurs in a direction away from the stream or no closer if moving away would result in more damage.

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- Rule 317B.f.(3) Existing DCPS Operations within a Surface Water Supply Area, & within a specified buffer zone, & where NEW SURFACE DISTURBANCE OCCURS:
 - A. All buffer zones, Rule 317B.f.(1) requirements:
 - Surface water sampling requirements apply and sampling shall occur within 6 months.
 - Emergency spill response program.
 - BMPs necessary to comply with rule

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- Rule 317B.f.(3) Existing DCPS Operations within a Surface Water Supply Area, & within a specified buffer zone, & where NEW SURFACE DISTURBANCE OCCURS:
 - B. Requirements For External and Intermediate Zones:
 - Pitless drilling systems, or
 - Lined pits (per Rule 904) or tanks for drilling, flowback, and stimulation fluids.

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(Cont'd)

- Rule 317B.f.(3) Existing DCPS Operations within a Surface Water Supply Area, & within a specified buffer zone, & where NEW SURFACE DISTURBANCE OCCURS
 - C. Requirements For Internal Buffer Zones;
 - Pitless drilling systems;
 - Flowback and stimulation fluids contained within tanks placed on a well pad or in an area with down gradient perimeter berming;
 - Berms around all crude oil, condensate, and produced water tanks per 603.e.(12); and
 - Notification of potentially impacted Public Water Systems within 15 stream miles downstream prior to commencement of new surface disturbing activities.

Appendix VI - List & Map of Public Water Systems Subject to Protection

- The COGCC staff has recommended some modifications that reflect more accurately the requirements of Rule 317B.
- The COGCC Commission will consider amending the list and map at a rulemaking hearing scheduled for April 28, 2009.