



Dewatering and Remediation Activities

Water Rights Administration Considerations

Kevin Rein, P.E.

Jeff Deatherage, P.E.



COLORADO
Department of Natural Resources

What are the Issues?

- For Dewatering and Remediation Activities:
 - Potential water rights impacts
 - Regulatory compliance

Areas of Responsibility

- The Colorado Division of Water Resources (State Engineer) is responsible for:
 - Administration of water rights in the priority system. Curtail diversions when out of priority.
 - Issue water well permits and enforce limits on well operation.
- Water Courts grant water rights.

What are the Issues?

- Potential water rights impacts
- Regulatory compliance

Potential Water Rights Impacts

- Interception (diversion) of surface water
 - Beneficial use/consumption
- Diversion of ground water
 - Beneficial use/consumption
- Water quality?
 - Not in DWR purview

Potential Water Rights Impacts

What is the potential?



Potential Water Rights Impacts

Under Colorado's Constitution, those who put the water to use first are entitled to get their water first during periods of water shortage.

Junior water rights (more recent)

- May not divert during certain dry periods
- Must let water pass by to senior rights



Potential Water Rights Impacts

- Interception of surface water
 - Beneficial use/consumption
- Diversion of ground water
 - Beneficial use/consumption
- Water quality?
 - Not in DWR purview

Potential Water Rights Impacts

- Interception of surface water
 - Beneficial use/consumption
- Diversion of ground water
 - Beneficial use/consumption
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 - Not in DWR purview

Potential Water Rights Impacts

- Interception of surface water, potential beneficial use or other consumption
- Interception of surface water can:
 - Change the timing of flow in the stream
 - Induce incidental consumption
- However if:
 - No intentional beneficial use,
 - Limited incidental consumption, limited timing change,
 - Then no administration necessary.
- This can be difficult to achieve.

Potential Water Rights Impacts

- Interception of surface water
 - Beneficial use/consumption
- Diversion of ground water
 - Beneficial use/consumption
- Water quality?
 - Not in DWR purview

Potential Water Rights Impacts

- Diversion of ground water
 - Beneficial use/consumption
- As with surface water, diversion of ground water can:
 - Change the timing of flow in the stream
 - Induce incidental consumption
- However if:
 - No intentional beneficial use,
 - Limited incidental consumption,
 - Then no administration necessary.

Potential Water Rights Impacts

- Interception of surface water can result in immediate impact to the stream.
- Diversion of ground water can result in delayed impact to the stream.
- Any reduction in the amount of water available and needed for use by water rights due to a dewatering or remediation action, may cause injury to those water rights.

What are the Issues?

- Potential water rights impacts
- Regulatory compliance
 - Well permits/notices
 - Augmentation plans (water replacement)

Regulatory Compliance

- Surface water diversion has no permitting requirement, but diversions are allowed only at times when all senior rights are satisfied.
- Ground water diversion requires well permit or notice.
- Diversion of surface water or ground water may require replacement water to be provided to prevent injury to water rights. Replacement requires approval of a Plan by the State Engineer/Division of Water Resources or the Water Court.

Regulatory Compliance

Water well permitting

- When is a well permit or notice required?
 - Anytime ground water will be pumped/diverted.
 - Includes exposure of ground water in a pit or excavation.

Regulatory Compliance

Water well permitting

- Common well types for dewatering and remediation activities:
 - Temporary construction dewatering
 - Permanent dewatering systems
 - Monitoring holes
 - Monitoring wells
 - Remediation wells

Regulatory Compliance

Water well permitting

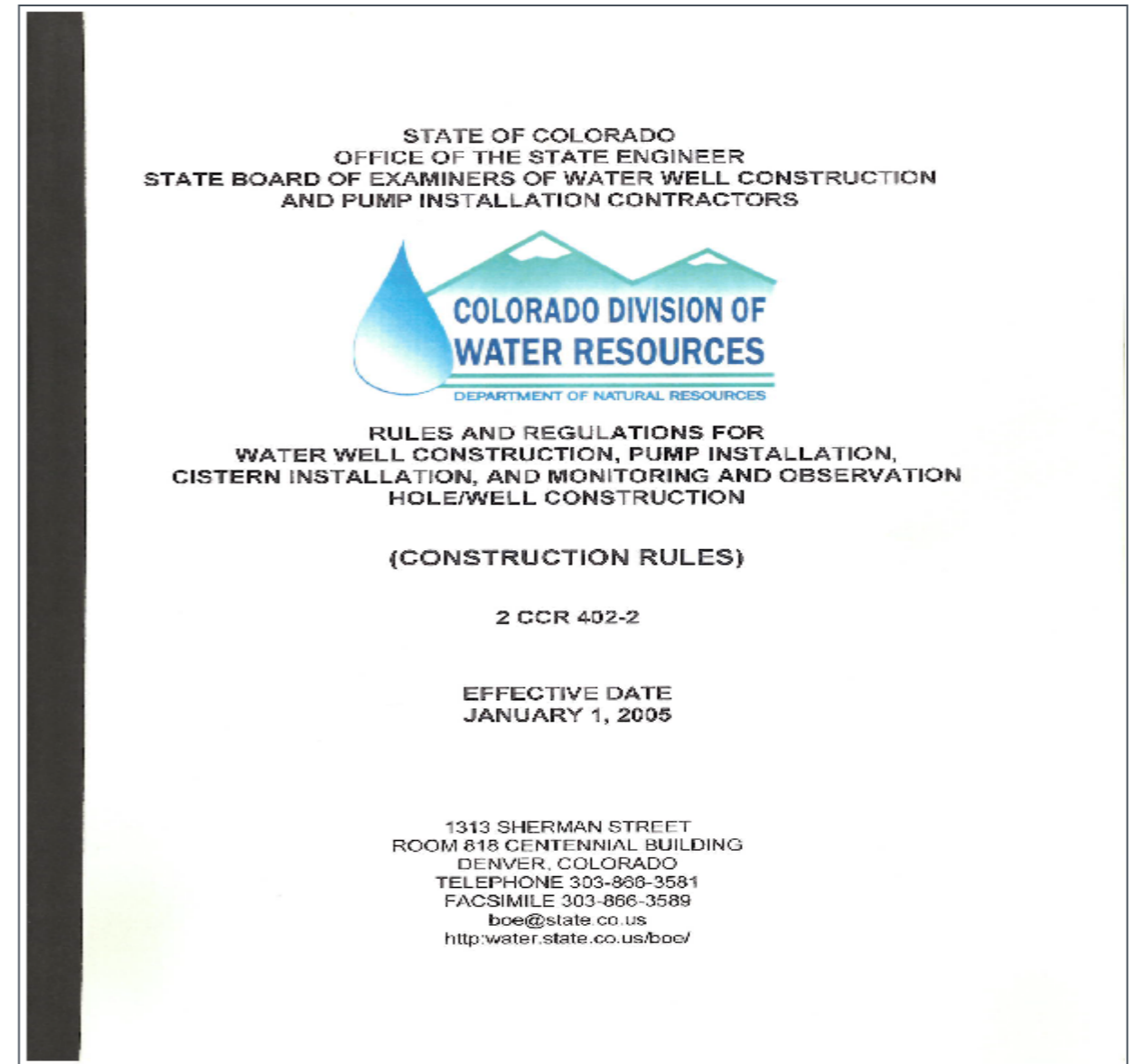
- Water Well Construction Rules (Rules)
 - Rules under the authority of the State Board of Examiners of Water Well Construction and Pump Installation Contractors (BOE)
 - Rules and statutes establish requirements for water well permits, notices, and contractor licensing.

Regulatory Compliance

Rules available on DWR website at:

www.water.state.co.us

- Documents and Forms
- Rules and Regulations
- Board of Examiners



Regulatory Compliance

Water well permitting

- **Temporary Construction Dewatering Wells**
 - “Notice of Intent to Construct Dewatering Wells” must be submitted 3 days prior to construction of well. (Form GWS-62)
 - “Temporary” = 1 year or less
 - Well permit required if in existence more than one year (permanent dewatering system).
 - Augmentation may not be necessary if water returned to system without beneficial use.

Regulatory Compliance

Water well permitting

- **Monitoring Holes**
 - Used for temporary monitoring and observation only - no beneficial use
 - “Notice of Intent to Construct Monitoring Holes” must be submitted 3 days prior to construction of well. (Form GWS-51)
 - “Temporary” = 1 year or less
 - Well permit required if in existence more than one year (monitoring well).

Regulatory Compliance

Water well permitting

- **Remediation Wells**
 - Ground water pumped and treated. If minimal consumption (<10,862 gallons/year for entire recovery/remediation project) occurs and water is returned to the ground at same location, may be able to obtain well permits for remediation without augmentation plan per DWR Policy 94-5.
 - Well permit must be obtained for each well prior to pumping of ground water.

Regulatory Compliance

Water well permitting

- All forms available on DWR website at:
- www.water.state.co.us
- Documents and Forms
 - Forms
 - Well Permitting Forms

Potential Water Rights Impacts

- Injury to water rights may be addressed by providing replacement water in same time, location, and amount to offset any impacts of dewatering or remediation.
- Replacement water must come from legal source.
- Temporary replacement plan = Substitute Water Supply Plan (statutory approval = § 37-92-308)
 - **Approved by Division of Water Resources**
- Permanent replacement plan = Augmentation Plan
 - **Approved by water court**

Summary – Surface Water and Ground Water Diversions

- Diversion of surface water and ground water have potential to impact other water users,
- How and when the water is disposed is critical,
- The operator may need to develop a plan to mitigate impacts to water rights,
- The operator may need to satisfy well permitting requirements.

Sources of Additional Information

DWR Web Page (www.water.state.co.us)

- Well permit search tool
- Map search tool - AquaMap
- Application Forms
- Water Well Construction Rules

Ground Water Information Desk (Denver)

303-866-3587 (Monday-Friday, 9am-4pm)

AskDWR@state.co.us



Colorado Division of Water Resources

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The **Colorado Division of Water Resources (DWR)**, also known as the *Office of the State Engineer*, administers water rights, issues water well permits, represents Colorado in interstate water compact proceedings, monitors streamflow and water use, approves construction and repair of dams and performs dam safety inspections, issues licenses for well drillers and assures the safe and proper construction of water wells, and maintains numerous databases of Colorado water information. [More...](#)

New! Ground Water Forms now only in PDF

Due to security concerns, all ground water forms are available in PDF format only to be printed and completed until further notice.

New! How to Research by Template

Quick Start guidance to effectively search DWR's Imaged Documents (Weblink) by Topical Template such as *Water Court*.

New! Updated Snake Diagram

Graphical relative magnitude representation of Colorado Historical Average Annual Stream Flows leaving the state

Upcoming Events

Ground Water Commission Board Meeting
10:00 AM on August 19, 2011 at:
100 N. Wilcox, 2nd Floor, Castle Rock, 80104

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Popular Data and Mapping Tools

- [Well Permit Search](#)
- [Real-time Streamflow](#)
- [Map Search \(AquaMap\)](#)
- [Water Rights Search](#)
- [More Data Search Tools...](#)

Popular Topics

- [Arkansas River Irrigation Improvement Rules](#)
- [Republican River CREP Amendment Environmental Assessment](#)
- [San Luis Valley Advisory Committee](#)
- [Produced Nontributary Ground Water](#)
- [Well Permits by Type](#)

Popular Resources

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Questions?

