

Wyoming

1. Definitions

- a. Produced Water – Water brought to the surface during oil or gas well drilling, completion, and production operations, which may include formation water, injected water, and flowback water.
 - i. If your state defines the term “produced water,” please provide that definition below.

WOGCC does not define “produced water” in statute or rule.

- b. Recycle/Reuse – To process or treat produced water or its constituent substances for beneficial use.
 - i. If your state defines the term “recycle” or “reuse,” please provide the definition(s) below.

WOGCC does not define “recycle” or “reuse” in statute or rule.

2. Ownership

- a. Please describe the authority (deed, lease, contract, statute, regulation, case law, common law etc..) and include any relevant citations under which any of the following occurs.

- i. The right to produce water during well completion and oil and gas production operations.

The state of Wyoming owns all waters within the state. Any Owner/Operator with the right to complete or produce a well has the right to produce water as a byproduct of those operations. If the water is produced in conjunction with coalbed methane or if it is going to be reused or recycled inside or outside of the oil and gas industry then it is considered a beneficial use and an appropriation must be granted by the State Engineer’s office before the beneficial use can occur.

- ii. Ownership of produced water from oil or gas wells after it has been brought to the surface.

All water is owned by the state of Wyoming, but the owner/operator has the right to produce the water as a by-product of oil and gas production. The owner/operator has ownership (and liability) of the water if it is to be disposed or used for enhanced recovery. For other uses such as reuse or recycling, which are considered beneficial uses, the owner/operator must be granted an appropriation for the water by the SEO.

- iii. Use and/or reuse of produced water in the oilfield.
WOGCC permits reuse of produced water for stimulations and injection in enhanced recovery projects. Depending on the quality of the water it could also be used for dust abatement.
- iv. Use and/or reuse of produced water outside of the oilfield.
Use/reuse of produced water outside the oilfield would be permitted by the Wyoming Department of Environmental Quality, but it is also considered a beneficial use of the water and an appropriation for the water must be granted by the SEO.

b. Place an "x" in each box to indicate who holds the right to each of the following regarding water that has not yet been produced.

Who	Possession	Use	Other rights (please specify)
Landowner			
Operator			
Government	x	x	
Other (please specify)			

All water is owned by the state of Wyoming. Rights to appropriate that water must be granted by the SEO, except in certain cases where the right to produce the water is granted by statute or rule. For example, an oil or gas operator has the right to produce water during the production of oil and gas, which is considered a byproduct of the oil/gas production.

c. Place an "x" in each box to indicate who holds the right to each of the following regarding produced water after it has been brought to the surface.

Who	Possession	Use	Other rights (please specify)
Landowner			
Operator	x	x	
Government	x	x	
Other (please specify)			

The operator owns the produced water after it has been brought to the surface. If the water is to be used for any beneficial use (reuse/recycling), the rights to the water is held by the state of Wyoming and an appropriation of the water must be granted by the SEO prior to its use.

d. Does the quality of the produced water play a role in the ownership of the water?

No.

3. Liability

- a. Please provide the cite to any relevant state statute/case law/regulation regarding liability for:
 - i. Produced water handling (extraction, transportation, sale, etc.).
Liability rests with the Owner/Operator as defined by WOGCC rules. Transporters, disposers and other water handlers may also carry liability during the time the water is in their possession.
 - ii. Use and/or reuse of produced water in the oilfield:
 1. By the producer
WOGCC holds the Owner/Operator liable while the water is in their possession or the possession of a contractor/service provider working on their behalf. Other liabilities may exist either contractually or from other agencies.
 2. By a different operator
WOGCC holds the Owner/Operator liable while the water is in their possession or the possession of a contractor working on their behalf. Other liabilities may exist either contractually or from other agencies.
 - iii. Use and/or reuse of produced water outside of the oilfield.
WOGCC does not regulate uses of produced water outside the oilfield and cannot comment on where liabilities may or may not exist.

4. State or Provincial Regulatory Agency

- a. State or provincial agencies charged with regulating the use/reuse of produced water:

Wyoming Oil and Gas Conservation Commission, Wyoming Department of Environmental Quality, Wyoming State Engineer's Office - Depending on the type of use/reuse any one or all of these agencies may have some level of authority over the water.

Contact information:

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Brief summary of areas of responsibilities:

WOGCC regulates use/reuse within the oil and gas industry as long as it remains with the original operator. SEO appropriation of the water is required for certain uses.

WDEQ regulates use/reuse outside of the oil and gas industry or in some cases where the water is transferred between operators.

- b. Federal agencies charged with regulating the use and/or reuse of produced water: If available, please provide appropriate contact information.

Bureau of Land Management-Wyoming State Office

5. Incentives

- a. Does your state or province have any incentives to use and/or reuse produced water in the oilfield? If so, please describe.

Wyoming does not have specific incentives to reuse produced water. There are often inherent market incentives to reuse produced water.

- b. Outside of the oilfield? If so, please describe.

No incentives.

6. Innovations and Successes

- a. Do you have any innovative or unique approaches to addressing use and/or reuse of produced water? If so, please provide a brief description.

Innovations WOGCC is aware of relate mostly to the increased tolerance to use of higher TDS produced water by stimulation service providers. Water treatment companies continue to attempt new methods for water treatment but newer technologies have generally not been able to make their technology cost competitive.

- b. Does the quality of the produced water pose impediments to recycling and reuse?

The quality of some produced water can cause it to be unfit for certain uses (e.g. stimulations). In most cases, produced water in Wyoming is of fairly good quality and can be recycled or reused within the industry without significant treatment. Reuse outside the industry may require treatment depending on the intended use.

7. Other Information

- a. Please provide any additional notes or commentary below.