West Virginia

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.

In West Virginia, for the purpose of reporting volumes, produced water "means any water originating from subsurface formations that is brought to the surface along with oil or natural gas." W. Va. Code of State Rules § 35-8–11.1.d. Flowback water is distinguished as "water from hydraulic fracturing activities." W. Va. Code of State Rules § 35-8–9.1.b.3.

- 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.

For purposes of this survey, neither the West Virginia Code or its legislative rules define "recycle" or "reuse," but the West Virginia Legislature explicitly stated that "Practices involving reuse of water in the fracturing and stimulating of horizontal wells should be considered and encouraged by the department, as appropriate." W. Va. Code § 22-6A-2(a)(7).

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.

In West Virginia, the right to produce water during well completion and oil and gas production operations lies with the owner of the mineral estate, unless a deed or lease has provided otherwise.

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

In West Virginia, ownership of produced water from oil or gas wells after it has been brought to the surface lies with the owner of the mineral estate, unless a deed or lease has provided otherwise.

- iii. Use and/or reuse of produced water in the oilfield.
- iv. Use and/or reuse of produced water outside of the oilfield.
- 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			
Other (please specify)			
specify)			

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			
Government			
Other (please specify)			

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

No. In West Virginia, the quality of the produced water does not play a role in the ownership of the water.

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.).

No West Virginia statutes, rules, or judicial opinions dictate liability for produced water handling. It remains an open question in this State.

- ii. Use and/or reuse of produced water in the oilfield:
 - 1. By the producer

No West Virginia statutes, rules, or judicial opinions dictate liability for use and/or reuse, by the producer, of produced water in the oilfield. It remains an open question in this State.

2. By a different operator

No West Virginia statutes, rules, or judicial opinions dictate liability for use and/or reuse, by a different operator, of produced water in the oilfield. It remains an open question in this State.

iii. Use and/or reuse of produced water outside of the oilfield.

No West Virginia statutes, rules, or judicial opinions dictate liability for use and/or reuse of produced water outside of the oilfield. It remains an open question in this State.

4. State or Provincial Regulatory Agency

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

The West Virginia Department of Environmental Protection's Office of Oil and Gas is charged with the regulation of activities that involved the use/reuse of produced water, but there are no State laws regarding the production, handling, storage, use, or disposal of produced water.

Contact information:

Chief James Martin, WVDEP, 601 57th St. SE, Charleston, WV 25304

Brief summary of areas of responsibilities:

The WVDEP Office of Oil and Gas is responsible for monitoring and regulating all actions related to the exploration, drilling, storage, and production of oil and natural gas.

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

Our office is not aware of any federal agencies working in West Virginia that are charged with regulating the use and/or reuse of produced water.

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.

West Virginia does not have any incentives to use and/or reuse produced water in the oilfield.

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

West Virginia does not have any incentives to use and/or reuse produced water outside the oilfield.

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.

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

7. Other Information

a. Please provide any additional notes or commentary below.