Nevada

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.
        There is no definition for "produced water" in Nevada.

    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.
        Nevada does not have a regulatory definition for recycle or reuse associated with oil or gas operations. Currently regulation NAC 445.27445 Reclaimed Water is only defined for treated sewage.

        NAC 445A.27445 "Reclaimed water" defined. (NRS 445A.425) "Reclaimed water" means sewage that has been treated by a physical, biological, or chemical process, which is intended for a use identified in NAC 445A.276 to 445A.2771, inclusive, and that meets the corresponding water quality criteria for the specified use. The term does not include graywater.

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.
        NAC 534.444 Waiver to use water to explore for oil, gas or geothermal resources.

        NRS 534.050 Permit to appropriate water required before sinking well in designated groundwater basin
        NAC 534.424 Plugging of well: Responsibility for cost
        NRS 534.020 Underground waters belong to public and are subject to appropriation for beneficial use
        NRS 534.025 Removal of underground waters to alleviate hazards caused by secondary recharge is beneficial use

ii. Ownership of produced water from oil or gas wells after it has been brought to the surface.
Produced water is not defined, however all use of water requires a permit from the State Engineer except for domestic wells. (534.180)

NRS 534.020 Underground waters belong to public and are subject to appropriation for beneficial use.

iii. Use and/or reuse of produced water in the oilfield.
Same as above.

iv. Use and/or reuse of produced water outside of the oilfield.
Same as above.

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**	**All water within the boundaries of the state, whether above or beneath the surface of the ground, belongs to the public and is subject to appropriation for beneficial uses.**
Other (please 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)	**X**	**X**	**The holder of a water right is the owner of the water. Does not grant access or easement to use of the water.**

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.).

All sources of water within the boundaries of the State whether above or beneath the surface of the ground, belong to the public. (NRS 533.025 and 534.020).

ii. Use and/or reuse of produced water in the oilfield:

1. By the producer

To acquire permission to use water, a person must file an application with the State Engineer. The application must be supported by a map prepared in a prescribed form by a water rights surveyor. The map must show the point of diversion and place of use of the water within proper legal subdivisions. The water use must be maintained from the same well and used within the place of use described and for the manner described. If this changes a new application MUST be filed.

NDEP would regulate the water use and/or reuse if the water is discharged to the environment. Discharge is defined in NRS 445A.345. Discharges to the environment require a permit from NDEP.

NRS 445A.345 "Discharge" defined. "Discharge" means any addition of a pollutant or pollutants to water.

2. By a different operator

An agreement between an operator and a producer does not waive the requirements above.

NDEP would regulate the water use and/or reuse if the water is discharged to the environment. Discharge is defined in NRS 445A.345. Discharges to the environment require a permit from NDEP.

NRS 445A.345 "Discharge" defined. "Discharge" means any addition of a pollutant or pollutants to water.

NRS 445A.415 "Waters of the State" defined. "Waters of the State" means all waters situated wholly or partly within or bordering upon this State, including but not limited to:
1. All streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems; and
2. All bodies or accumulations of water, surface and underground, natural or artificial.

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

Any use and/or reuse of water within the state above or below ground is subject to (NRS 534.180)

NDEP would regulate the water use and/or reuse if the water is discharged to the environment. Discharge is defined in NRS 445A.345. Discharges to the environment require a permit from NDEP.

NRS 445A.345 "Discharge" defined. "Discharge" means any addition of a pollutant or pollutants to water.

NRS 445A.415 "Waters of the State" defined. "Waters of the State" means all waters situated wholly or partly within or bordering upon this State, including but not limited to:
1. All streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems; and
2. All bodies or accumulations of water, surface and underground, natural or artificial.

4. State or Provincial Regulatory Agency

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

Contact information:

Division of Water Resources
Office of the State Engineer
901 S. Stewart Street, suite 2002
Carson City, NV 89701
775-684-2800

Brief summary of areas of responsibilities:

The mission of the Nevada Division of Water Resources (NDWR) is to conserve, protect, manage and enhance the State's water resources for Nevada's citizens through the appropriation and reallocation of the public waters. In addition, the Division is responsible for quantifying existing water rights; monitoring

water use; distributing water in accordance with court decrees; reviewing water availability for new subdivisions and condominiums; reviewing the construction and operation of dams; appropriating geothermal water; licensing and regulating well drillers and water rights surveyors; reviewing flood control projects; monitoring water resource data and records; and providing technical assistance to the public and governmental agencies.

This is all done with authority granted under Nevada Administrative Code (NAC), Nevada Revised Statutes (NRS) and Nevada Water Law

Contact information:

Nevada Division of Environmental Protection
Bureau of Water Pollution Control
775-687-9418
https://ndep.nv.gov/

Brief summary of areas of responsibilities:

Water quality and discharges to the environment for produced water in oil or gas operations are regulated by the NDEP Bureau of Water Pollution Control (BWPC).

b. Federal agencies charged with regulating the use and/or reuse of produced water: If available, please provide appropriate contact information.
Discharge to Waters of the US: EPA Region 9 NPDES (Nevada has NPDES primacy)

Discharge through injection: EPA Region 9 UIC (Nevada has UIC Class II primacy)

Discharge to Water of the State: NDEP-BWPC

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.
No.

b. Outside of the oilfield? If so, please describe.
No.

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.

While water may be used for a secondary use it should be noted that it would require a secondary permit with Division of Water Resources as well

b. Does the quality of the produced water pose impediments to recycling and reuse?
Yes all recycling and reuse activities will require a permit with NDEP.

7. Other Information

a. Please provide any additional notes or commentary below.

The biggest thing to remember for Nevada Water Rights is if you are pumping water, diverting water in any way or benefiting by using the water in any way it probably needs a permit. Also, there is over 100 years of Nevada Water Law and case law in the state and no way could be fully inclusive of that here. *Nevada water law* is based on two fundamental concepts: prior appropriation and beneficial use.

While "produced water" is not defined in Nevada, if the water has no permitted beneficial us its disposal is, in NAC 522.380 Underground Disposal of Waste Fluid By injection – Procedure for disposal of water (authorized under NRS 522.040 (4) b4).

1. A person who wishes to dispose of salt water, brackish water or other water unfit for domestic use or for livestock, irrigation or other use with a disposal well must obtain:

(a) Approval to drill and complete the disposal well from the Administrator; and

(b) A permit from the State Department of Conservation and Natural Resources pursuant to NRS 445A.300 to 445A.730, inclusive, that authorizes the person to inject fluids through a well.

2. Disposal wells must be cased and the casing cemented in such a manner that no damage is caused to fresh water, oil, gas or other minerals. All injection must be through tubing and below the packer unless another means is approved by the Administrator.

3. The application for approval to drill and complete a disposal well for salt water, brackish water or other water unfit for domestic use or for livestock, irrigation or other use must be verified by the applicant and filed in duplicate with the Division. The application must include:

(a) A plat showing the location of each disposal well and the location of all oil and gas wells, including abandoned wells, wells being drilled and dry holes, and the names of lessees of record of land within one-half mile of the proposed disposal well;

(b) The formation and depths to which all wells are currently completed;

(c) The name, description and depth of the formation into which water is to be injected;

(d) Logs of each disposal well, or a description of the typical stratigraphic level of the disposal formation in each disposal well;

(e) A description of the casings in each disposal well of the proposed casing program, and the proposed method for testing the casings before use of each disposal well;

(f) A statement specifying the source of water to be injected;

(g) The estimated minimum and maximum amount of water to be injected daily;

(h) The estimated minimum injection pressure; and

(i) The names and addresses of the operator of the project.