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**Agriculture & Natural Resources  
Committee**

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**SSB 5018**

**Brief Description:** Concerning underground artificial storage and recovery projects.

**Sponsors:** Senate Committee on Agriculture, Water & Rural Economic Development (originally sponsored by Senators Honeyford and Ericksen).

**Brief Summary of Substitute Bill**

- Provides that underground artificial storage and recovery projects meeting certain standards are deemed to comply with state water quality standards for groundwater.

**Hearing Date:** 3/24/15

**Staff:** Peter Clodfelter (786-7127).

**Background:**

Underground Artificial Storage and Recovery Projects.

Storing water in a reservoir requires a permit from the Department of Ecology (DOE) (and putting that water to beneficial use may require a secondary permit). A reservoir requiring a permit includes, in addition to any surface reservoir, any naturally occurring underground geological formation where water is collected and stored for subsequent use as part of an underground artificial storage and recovery project. These types of projects are also commonly referred to as "aquifer storage and recovery" projects or "ASR" projects.

Generally, these types of projects include any project that is intended to artificially store water in the ground through injection, surface spreading and infiltration, or other DOE-approved methods, and to make subsequent use of the stored water. However, excluded from the definition of an underground artificial storage and recovery project and the reservoir permit requirement, but subject to other regulations, are:

- irrigation return flow and operational and seepage losses that occur while irrigating land;

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- water that is artificially stored due to the construction, operation, or maintenance of an irrigation district project;
- projects using certain reclaimed water; and
- small irrigation impoundments, i.e., lined surface storage ponds less than ten acre feet in volume used to impound irrigation water under an existing water right where use of the impoundment meets certain requirements.

Any underground artificial storage and recovery project is required to meet certain standards for review and mitigation of adverse impacts. Those standards, which are set by the DOE, address considerations like aquifer vulnerability and hydraulic continuity, potential impairment of existing water rights, geotechnical impacts and aquifer boundaries and characteristics, chemical compatibility of surface waters and groundwater, recharge and recovery treatment requirements, system operation, water rights and ownership of water stored for recovery, and environmental impacts.

An applicant is responsible for analyzing each underground artificial storage and recovery project and each underground geological formation that the applicant seeks a reservoir permit for; the DOE is then responsible for reviewing that analysis.

#### Groundwater Quality Standards.

The state's water quality antidegradation policy is intended to ensure the purity of the state's groundwaters and to protect the natural environment (90.48 and 90.54 RCW; WAC 173-200-030). Pursuant to the antidegradation policy, existing and future beneficial uses are required to be maintained and protected and degradation of groundwater quality that would interfere with or become injurious to beneficial uses must not be allowed. Also, degradation of high quality groundwaters constituting an outstanding national or state resource must not be allowed. Further, whenever groundwaters are of a higher quality than the water quality criteria assigned to the groundwaters, the existing water quality is required to be protected and, generally, contaminants may not be added to the water even if doing so would not violate the assigned water quality criteria.

To work in conjunction with the antidegradation policy, water quality criteria set by the DOE establish maximum contaminant concentrations for the protection of a variety of beneficial uses of groundwaters, including its use as drinking water. The DOE's rules list individual contaminants and assign a maximum level of each contaminant per liter of groundwater. However, the DOE's rules acknowledge that some groundwaters of the state support environmental systems with existing and future beneficial uses requiring more stringent protection than that provided by the human health criteria and are subject to additional regulation.

#### Drinking Water Quality Standards.

The State Department of Health (DOH) sets drinking water quality standards to assure safe and reliable public drinking water and to protect the public health. The criteria established by the DOH include maximum contaminant levels and maximum residual disinfectant levels for drinking water. Purveyors of drinking water are required to routinely sample water quality to determine compliance with those criteria.

#### **Summary of Bill:**

An underground artificial storage and recovery project (project) is deemed to comply with state water quality standards for groundwater if the following requirements are met:

- Water stored in the project is controlled so that there is a high likelihood that the quantity of water stored will be available for recovery;
- Water stored in the project that is not recovered does not preclude groundwater from being used for beneficial use in the future;
- The project is protective of aquatic resources; and
- At the point of injection or other point agreed upon by the project applicant and the Department of Ecology, water quality for water in the project does not exceed 50 percent of the state drinking water quality standard for maximum contaminant levels or maximum residual disinfectant levels adopted by the State Department of Health.

**Appropriation:** None.

**Fiscal Note:** Not requested.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.