

Resource Contact: Coordination & Hydrology Section

Effective Date: 10-31-91

Revised: 10-31-91

CONSUMPTIVE AND NONCONSUMPTIVE WATER USE

References: Chapter 173-500 WAC

Purpose: To expand upon the definition of consumptive and nonconsumptive water use as defined in WAC 173-500-050.

Application: These classifications of water use apply to water right appropriations and adjudicated certificates issued pursuant to chapters 90.03 and 90.44 RCW.

The consumptive and nonconsumptive classifications of water are important when assessing the quantity of water allocated. Water used consumptively diminishes the source and is not available for other uses; whereas nonconsumptive water use does not diminish the source or impair future water use.

1. Consumptive Use of Surface and Ground Water

Consumptive water use causes diminishment of the source at the point of appropriation.

Definition: Diminishment is defined as to make smaller or less in quantity, quality, rate of flow, or availability.

By-pass reach defined. A water use may be consumptive to a specific reach of a stream when water is diverted, used, and returned to the same source at a point downstream not in close proximity to the point of diversion. The stream reaches between the point of withdrawal and point of discharge is the by-pass reach.

2. Nonconsumptive Water Use, Surface Water

Surface water use is nonconsumptive when there is no diversion from the water source or diminishment of the source. Additionally, when water is diverted and returned immediately to the source at the point of diversion following its use in the same quantity as diverted and meets water quality standards for the source, the water use is classified as nonconsumptive. Examples of this classification include the following:

- a. Water use in hydroelectric projects when the water is not diverted away from the natural confines of the river or stream channel. These hydroelectric projects are commonly called run-of-the-river projects.
- b. Water use in some beautification ponds and fish hatcheries when the outflow is returned to the point of diversion, i.e., there is no bypass reach in the system. The

continuous use of water by such a facility does not result in diminishment of the source; inflow is equal to outflow.

These facilities normally require water to fill or charge the system once a year. The water used to fill or hydraulically charge such a system is consumptive and does cause a diminishment of the source. Water use to fill these facilities will be allowed, subject to instream flows and existing rights, when water is available.

Exception to 2.B. Water use can be classified as nonconsumptive when the water is returned to the same pool from which it is diverted and the pool's water elevation is not changed by the initial start-up and stopping of the diversion.

Definitions:

A pool in a river system is a body of water which has the same water surface elevation, within 0.05 of one foot, at any point between the point of diversion and the point of discharge.

A pool in a lake system is the body of water with no flow restriction between the diversion point and the point of discharge and the velocity of the water at both points is the same or within ten (10) percent of each other. If the diversion point and the discharge point are separated by a restrictive, natural or artificial, channel the water bodies are considered separate and distinct.

Some of the above described projects may cause an increase in bank storage, evaporation rate, or preclude others uses of the water body in the vicinity of the project. The Department recognizes the consumptive nature of these factors. However, due to the complexity of quantifying these factors, it is the Department's policy to classify the project's water use as nonconsumptive.

3. Nonconsumptive Water Use, Ground Water

Ground water use is nonconsumptive when there is no diminishment of the source. In order not to diminish the source, the withdrawn water is injected or infiltrated immediately back to the aquifer. The water must be returned in the same quantity and quality (excluding temperature change) at a point in close proximity to the withdrawal wells. An example of this use is a heat pump.

Before issuing a permit which proposes to use injection wells, ensure that the applicant can obtain an injection well permit if required by the Water Quality Program. See Chapter 173-218 WAC.

4. CONCURRENT USE OF GROUND AND SURFACE WATER

Combined use of ground and surface water use may be classified nonconsumptive if the quantity of water captured is returned in close proximity to the source immediately after use.

Direct hydraulic continuity between the source and point of discharge must be unequivocal.

When a project proposed nonconsumptive combined use of surface and ground water, the draft report of exam shall be sent to the section supervisor of the Hydrology and Coordination Section for review and comment.

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Special Note: These policies and procedures are used to guide and ensure consistency among water resources program staff in the administration of laws and regulations. These policies and procedures are not formal administrative regulations that have been adopted through a rule-making process. In some cases, the policies may not reflect subsequent changes in statutory law or judicial findings, but they are indicative of the department's practices and interpretations of laws and regulations at the time they are adopted. If you have any questions regarding a policy or procedure, please contact the department.