

## Using Mitigation Strategies for New Water Uses in the Quilcene–Snow Watershed

### Introduction

On December 31, 2009, a water resources management rule for the Quilcene-Snow watershed became effective (WAC 173-517, Water Resources Management Program for the Quilcene-Snow Water Resource Inventory Area, WRIA 17). Because water is limited in the basin at the same time demands are increasing, the rule establishes limits and requirements for new water uses, to stretch supplies for current and future uses. One important option for securing water for a new use is mitigation.<sup>1</sup>

This document provides information on the legal basis for mitigation, the Department of Ecology’s (Ecology) current thinking on its use, and guidance for applying it to new uses in WRIA 17.

### Background

Washington increasingly lacks water where and when it is needed for communities and the environment. It is often difficult to find water for new uses in many parts of the state including WRIA 17.

These conditions make it difficult to meet the “four-part test”<sup>2</sup> required by Washington water law when Ecology evaluates water right applications. In response, the Washington State Legislature authorized Ecology to consider “resource management techniques” when making water availability determinations or considering whether the impacts from withdrawals can be offset.<sup>3</sup>

When evaluating water right applications, the **four-part test** requires Ecology to determine that:

- water is available (physically and legally)
- water will be applied to a beneficial use
- there will be no impairment (negative effects) to existing rights
- the proposed use will not be detrimental to the public interest.

*Mitigation* is an important resource management technique, used to avoid, minimize or compensate for impacts of a water use.

### Impact of case law on mitigation

The Courts have helped shape Ecology’s perspective on mitigation. The Washington State Supreme Court ruled in *Postema v. Pollution Control Hearings Board, et al* (2000) that the legal test for impairment is “no impairment,” affirming Ecology’s authority to deny applications for withdrawal of even small amounts of groundwater because of the connection (hydraulic continuity) with surface waters. This decision has largely driven the need to mitigate for new water rights.

<sup>1</sup> WAC 173-517, see sections 030(12), 110(4), 120(2)(a); 150(8)(a), 150(10), 160(7)

<sup>2</sup> See RCW 90.03.290 and RCW 90.44.060

<sup>3</sup> See RCW 90.44.055 and RCW 90.03.255

The Pollution Control Hearings Board decision *Squaxin Island Tribe v. Ecology and Miller Land and Timber LLC* (2006) provides some additional information about what is expected in a mitigation proposal.

## Mitigation in general

Mitigation may allow Ecology to approve an application where otherwise it would be denied. Under Washington water law, mitigation must address environmental benefits and costs, and must address water availability or otherwise offset adverse impacts. A variety of approaches have been used. Ecology considers mitigation on a case-by-case basis: the suitability of an approach depends on the unique characteristics of the site.

There are many types of mitigation. The variables generally are amount, timing, location and type/kind.

- **Water-for-water:** Replacement water is similar in quantity, timing and location.
- **Out-of-time:** Provide the same amount of water, but shift the time when water is present in a stream.
- **Out-of-place:** Provide the same amount of water, but shift the location of water in a stream.
- **Out-of-kind:** Non-water mitigation such as protection or enhancement of riparian or recharge areas.

Generally, Ecology favors mitigation that offsets impacts in-kind (e.g. water-for-water as opposed to water for riparian enhancements), in-time, and in-place. In many cases, mitigation types are mixed and matched.

Examples of in-kind mitigation include:

- Relinquishing or putting existing water rights into trust
- Conserving water from existing uses to provide mitigation water
- Storing and recovering surface or ground water
- Transferring water into basins
- Using reclaimed water
- Augmenting stream flow from a deep well source.

## Mitigation plans

A “mitigation plan” is a document, developed through joint discussions between a water right applicant (or their representative) and Ecology staff, that describes:

- The effects of a proposed water use
- The proposed mitigation for those effects
- Any assurances needed to ensure the effectiveness of the mitigation.

Mitigation plans may be developed by project applicants or any other person or entity that has interest and expertise in water resource management for protection of aquatic habitat. Typically a qualified hydrogeologist or engineer will be necessary.

Water right applicants may submit mitigation proposals in situations where water would normally not be available for appropriation. Applicants may also submit mitigation proposals later if notified that impairment would likely cause the application to be denied.

A mitigation plan may address impacts to a stream basin reach or other area for an individual withdrawal or for multiple withdrawals in a subbasin. The plan must show that the proposed withdrawal with mitigation in place will not:

- Impair existing water rights including instream flow rights.
- Be detrimental to the public interest.
- Consume water from a closed source.

### **What a mitigation plan must include**

The applicant is responsible for submitting a complete mitigation plan. A mitigation plan must include:

- Identification of the source of supply.
- Analysis of the consumptive quantity of water that will be depleted from the source.
- Evaluation of the reliability of the mitigation.
- Identification of water rights that will be affected by the proposed withdrawal.
- A detailed hydrological analysis, analytical model, or numerical model.
- Measuring and monitoring plan to ensure compliance, including a quality assurance/quality control plan.

In addition, the plan must include *financial assurance mitigation measures* for the duration of the water use and prohibit water provided for the purpose of mitigation from being used for any other purpose. The project applicant must maintain financial assurance in the amount necessary to ensure operation of the mitigation over the life of the project. Acceptable mechanisms include trust funds, surety bonds guaranteeing performance, letters of credit and insurance.

Before approving any mitigation plan for WRIA 17, Ecology will consult with the Washington State Department of Fish and Wildlife, Tribes with interest in the area, and Jefferson County.

### **High level of certainty required**

There are many technical challenges associated with developing mitigation strategies including evaluating the magnitude, location, timing, and water quality impacts of a project. Often the analysis requires the use of sophisticated analytical or numeric models. However, the uncertainty associated with such methods can be high and the data needed to increase certainty often is not available. Case law indicates mitigation plans should have a high level of certainty, in large part because most water rights are intended to be used forever.

The adequacy of a mitigation proposal is reviewed in comparison with the statutory requirements for permitting (the “four-part test:” water availability, beneficial use, public interest, and impairment. See page one text box.) For some statutory tests, we might accept mitigation that is out of kind, time or place. If mitigation is necessary to avoid impairment, then the owner of the potentially impaired water right

could waive the impairment, affecting the amount of mitigation required. Our options with regard to privately held rights are different than if the State holds a water right in trust, or for an adopted instream flow right.

### **Mitigation for individual water rights**

Mitigation plans are typically submitted for individual water rights applications. Recognizing that Ecology does not have sufficient staff to process many water right applications, the Legislature enacted the Cost Reimbursement Act in 2000 (RCW 43.21A.690). This is useful for people considering submitting a mitigation proposal to know because it allows applicants to pay for the cost of processing the application themselves. This allows Ecology to get to their applications more quickly.

For individual water rights, the applicant is responsible for proposing and submitting a mitigation plan to Ecology. Plan development can be done in consultation with Ecology staff.

### **Mitigation for increasing use from an exempt well**

Mitigation is an option for well users under the groundwater permit exemption (RCW 90.44.050) in the Quilcene–Snow watershed. It can be used to increase your water use to secure irrigation water in the Chimacum subbasin. It can also be used to increase use up to 5000 gallons per day in other subbasins otherwise limited to 500 gallons per day.

Mitigation water can be made available for exempt wells through a pooled mitigation or water bank approach. Using this approach, an entity such as a conservation district, utility, or local government could provide a pool or bank of water in the subbasin of interest from which the exempt well user would be able to purchase mitigation water. The entity providing water for the pool may provide water out of its existing water rights portfolio or apply for a new appropriation of water from Ecology.

### **Updates on water availability for Chimacum subbasin**

When the U.S. Geological Survey (USGS) modeling study for Chimacum subbasin is completed, Ecology reserves the right to review findings from the study on the effect of groundwater withdrawals on surface waters. If the study identifies areas where groundwater withdrawals do not impact surface waters, Ecology can remove exempt well conservation standards specified in the WRIA 17 rule from those areas. Delineation of these areas and notification of findings will be made through a water supply bulletin which Ecology will distribute to the County and local Watershed Planning Unit, and post on the Ecology webpage.

### **For more information**

Ecology Southwest Regional Office  
360-407-6300

Ecology Quilcene-Snow webpage:  
<http://www.ecy.wa.gov/programs/wr/instream-flows/quilsnowbasin.html>

#### **Special accommodations:**

To ask about the availability of this document in a version for the visually impaired, call the Water Resources Program at 360-407-6872. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.