

Administering the Trust Water Rights Program

June 2022

Publication 22-11-012

Water Resources Program
Washington State Department of Ecology
Olympia, Washington



Publication Information

This document is available on the Department of Ecology's website at:
<https://apps.ecology.wa.gov/publications/summarypages/2211012.html>

Related Information

[Trust water rights - Washington State Department of Ecology](#)

Contact Information

Water Resources Program

P.O. Box 47600

Olympia, WA 98504-7600

Phone: 360-407-6872

Website¹: [Washington State Department of Ecology](#)

ADA Accessibility

The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request an ADA accommodation, contact Ecology by phone at 360-407-6872 or email at WRpubs@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

¹ <https://ecology.wa.gov/About-us/Contact-Us>

Table of Contents

	<u>Page</u>
Introduction.....	1
Types of trust water rights	2
Donations	4
Temporary donations	4
Permanent donations	7
Purchases and Leases	8
Short-term leases	8
Long-term leases and purchases	8
Water Banks	9
1. Consultation with Ecology	11
2. Request to establish a water bank.....	11
3. Ecology evaluates banking requests	12
4. Negotiating water banking agreements	12
5. Change/transfer of a mitigating right	15
6. Establishing a water bank	19
7. Managing a water bank	20
Other Trust Water Right Agreements	22
Examples of other trust water right agreements	22
Appendix A: Summary Matrix of Trust Water Right Processing.....	25
Appendix B. Example Quit Claim Deed.....	28
Appendix C. Assigning Quantities to Primary and Secondary Reaches	30
Calculating consumptive use	30
Assigning quantities to primary and secondary reaches	31

Introduction

This guidance document supplements Policy 1010: *Administration of the Trust Water Rights Program* and describes the requirements and procedures for creating all types of trust water rights within the framework of the Trust Water Rights Program (TWRP). Each section includes links to forms, applications, and other policies and guidance related to the creation of trust water rights.

The Washington State Legislature created the TWRP in 1991 in response to concerns that water supply options had been exhausted in most areas of the state. The goal of this new statewide program was to provide alternatives for developing water supplies. Under the new trust water statute Chapter 90.42 RCW, the Legislature directed Ecology to acquire water rights into the TWRP, or “into trust” to address both instream and out-of-stream needs. A water right is acquired into trust and becomes a trust water right only when both of the follow steps occur:

1. The water right holder conveys a right to Ecology, and
2. Ecology accepts the water right into the TWRP. Only Ecology can accept water rights “into trust.”

Water rights held in trust are considered exercised, meaning they are not subject to relinquishment while held in trust. Water rights authorized for any purpose may be transferred or conveyed into trust and held on a temporary or permanent basis .

Exercise of a trust water right occurs when:

1. Ecology acquires a water right through donation, lease, purchase, or other means.
2. Notice of the trust water right has been given.
3. The historical use of the water right stops or is reduced. If necessary, a watermaster or stream patroller may curtail or regulate junior water users to protect a senior trust water right.

Tenets of the TWRP

Ecology has **sole** authority to hold water rights in trust.

A trust water right is created only when a right is **both**:

- 1) Conveyed to Ecology by the water right holder, and
- 2) Accepted by Ecology into the TWRP.

A trust water right is **considered exercised** and not subject to relinquishment.

A trust water right may be exercised for **any** beneficial use.

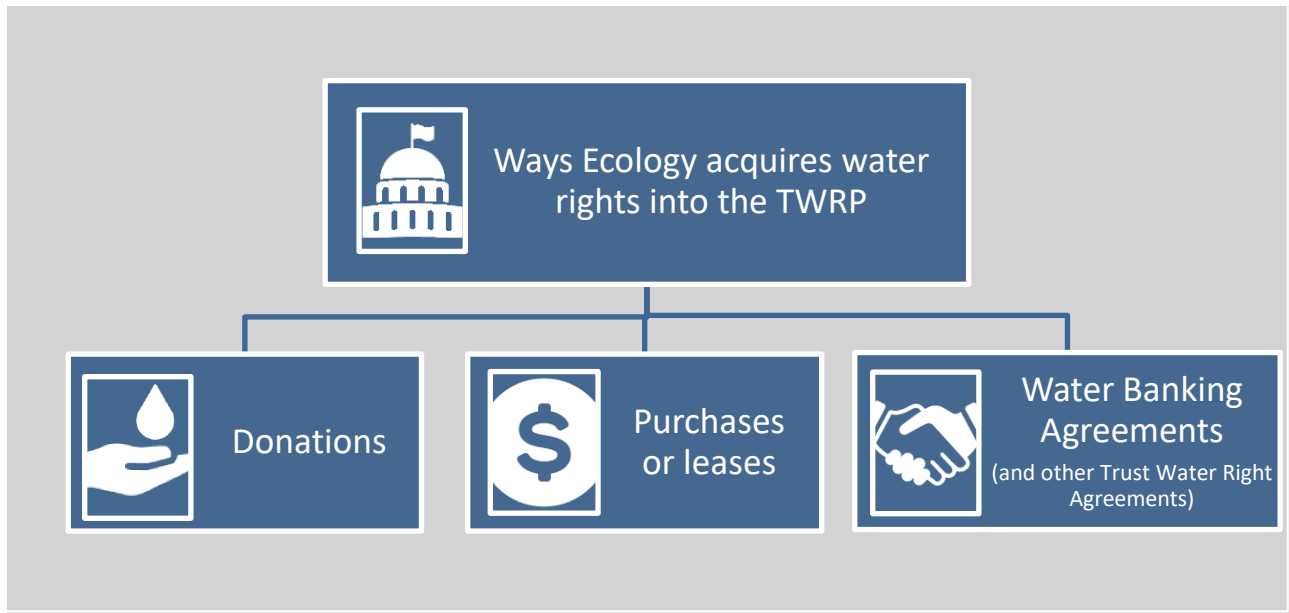
Ecology may hold a trust water right **temporarily or permanently**.

A water right transferred into trust **retains** its original priority date.

Types of trust water rights

The process for creating different types of trust water rights is defined by how a water right will be conveyed into trust and how it will be used in the future. This guidance describes the following types of trust water rights and the procedures for their creation (also see Appendix A: Summary Matrix of Trust Water Right Processing).

- **Donations:**
 - A water right holder voluntarily donates a right either on a temporary or permanent basis. The water right is enrolled in the TWRP to preserve surface water or groundwater resources without monetary compensation.
- **Purchases and leases:**
 - Ecology pays for a water right and enters into a purchase and sale agreement or lease agreement with the water right holder.
- **Water banking agreements:**
 - A type of Trust Water Right Agreement that describes creation and operation of a water bank including:
 - Transfer of legal interest in a water right(s) to the TWRP for mitigation use
 - The process for mitigating and permitting new uses
- **Other trust water right agreements:**
 - Ecology enters into an agreement with a water right holder describing how Ecology will hold and manage a water right in the TWRP. Ecology enters into these contractual arrangements to specify the conditions under which a trust water right may be used for instream and out-of-stream purposes. These agreements allow Ecology to acquire water rights by “other means” ([RCW 90.42.080\(1\)\(a\)](#)).



Donations

Water right holders may temporarily or permanently donate all or a portion of their water right into the TWRP. The water right holder must agree not to divert or withdraw water under their water right while it is donated into the TWRP. Donations are simple agreements that acknowledge that a water right will be held in trust exclusively for preserving surface water or groundwater resources and cannot be used to mitigate new uses (Policy 1010: Section 5). The donated water right is not subject to relinquishment while in the TWRP. However, relinquishment or non-use of the water right that may have occurred prior to donation cannot be reversed or addressed in any way by donating a water right.

Policy 1010 defines a donation as “a water right enrolled in the TWRP to preserve surface water or groundwater resources without monetary compensation.” There are two types of trust water right donations:

- **Permanent Donation** – A donated water right held in the TWRP that has been deeded to Ecology.
- **Temporary Donation** – A donated water right held in the TWRP for a specified non-permanent period of time.

Temporary donations

Ecology will accept temporary donations based on the requirements of RCW 90.42.080:

- Only the portion of the water right that has been used during the previous five years can be temporarily donated to the TWRP unless non-use was excused under the relinquishment statute RCW 90.14.140.
- Donating a water right into the TWRP is not evidence of the validity or quantity of a water right. The temporarily donated quantities are considered exercised and not subject to relinquishment while held in the TWRP ([RCW 90.14.140\(2\)\(h\)](#)). However, any relinquishment or non-use of the water right that occurred prior to a temporary donation cannot be reversed.
- Conditions prescribed by the donor include the proposed quantities (instantaneous and annual) and term of the donation.

Ecology will not accept the donation of:

- **Permits**, which are not perfected water rights. Ecology may consider accepting permits into trust through other means on a case-by-case basis. Permit holders may perfect the water use and seek certification for that use from Ecology. Once certificated, the water right (or a portion of that right) may be donated.²

² *Okanogan Wilderness League v. Ecology & Town of Twisp*, PCHB No. 93-316 (1994) and *R.D. Merrill Co. v. PCHB*, 137 Wn.2d 118, 969 P.2d 458 (1999).

- **Permit-exempt uses**, which cannot be used for other purposes like instream flow or groundwater preservation.
- **Any water right intended to be used for mitigation**, however, a water right that has been temporarily donated can subsequently be used for mitigation once a change in purpose to instream flow for mitigation under RCW 90.03.380 is complete (Policy 1010, Section 4.4).

Processing temporary donations

Step 1: Submit request

The donor submits the [Temporary Donation to the Trust Water Rights Program](#) form (form ECY 070-488) via email to the appropriate region office located on the form. Donors that cannot submit the form electronically may request a hard copy and submit it by standard mail to the appropriate regional office listed in the form.

No fee is required to process a temporary donation to the TWRP.

The donor must identify the following in the form:

- A specific water right or claim that is active and in good standing.
- Proposed quantities for temporary donation that are equal to or less than the quantities authorized under the water right or claim.
- Water right ownership: the donor must own the place of use of the water right proposed for donation. If a portion of a right is being donated, the donor must own a portion of the place of use approximately equal to what is needed to beneficially use the donated quantities.
- The term of the temporary donation: the donor must provide an expiration date that has not already passed.

Donation quantity

The donor must attest that the quantities proposed for donation plus any portion retained for use does not exceed the donor's highest use within the last five years, **unless**:

- There is a sufficient cause for nonuse. Relinquishment applies in the preceding five years. In this case, the quantities proposed for donation plus any retained use cannot exceed the highest use in the five years preceding the qualifying exemption ([RCW 90.14.140 \(1\)](#));

OR

- The right or claim is for municipal or hydropower purposes, and annual license fees are paid in accordance with chapter 90.16 RCW. In this case, the quantities proposed for donation plus any retained use cannot exceed historical beneficial use ([RCW 90.14.140\(2\)\(a\) or \(d\)](#)).

The donor must specify both the annual and the instantaneous quantity of water proposed for donation on the form. (Contact Ecology if you cannot specify both of these quantities.)

Purpose of use

Temporary donations will be considered exercised for instream flows or groundwater preservation use. Donations will not be used to mitigate water uses during the term of the temporary donation (Policy 1010).

Step 2: Ecology's review

Ecology will review the donation form for completeness, then send an email to the donor to accept or not accept the temporary donation. Donors who submit the form by standard mail will receive a standard mail response from Ecology as described below.

- **Accept:** Ecology will identify the quantities and term of the temporary donation.
- **Not Accept:** Ecology will state that the temporary donation is not accepted. The response may also indicate the reason(s) why it is not accepted and suggest changes necessary for the donation to be accepted in the future.

Additional review

Ecology may conduct a more thorough review to verify recent use and quantities. Ecology staff may request additional information from the donor, including proof of recent water use from the donor. Ecology may refer to water right documents, aerial photography, metering records, remote sensing imagery, model estimates, or any other available information.

Step 3: Public notice

Accepted temporary donations will be posted on Ecology's [website](#) according to RCW 90.42.040(5)(c). Interested parties may sign up to receive notice of newly accepted temporary donations.

Step 4: Management of the temporary donation

If accepted, the donated water right is held in the TWRP for the period of time provided by the donor (term). When the term of a temporary donation expires, the water right reverts to the donor in the same quantities that were accepted into the TWRP.

A water right holder may modify the terms (such as duration or quantity) of a water right donation prior to its expiration without submitting a new donation form by contacting Ecology.

Ecology may cancel a temporary donation if:

- A donor requests to cancel the temporary donation by sending an email or letter to the appropriate regional office listed in the form.
- Ecology determines that the water right no longer qualifies for a donation (e.g., Ecology determines that the donated water right continued to be diverted or withdrawn, and put to use.)

Ecology does not notify the donor when a donation expires. Once the term of the donation ends or the donation has been withdrawn or canceled, the previously donated water right reverts to the donor and is again subject to the relinquishment provisions under chapter 90.14 RCW.

During the term of the donation, it is the donor's responsibility to notify a buyer of any land with appurtenant water rights that have been donated.

Impairment

Exercising a donated water right in trust cannot cause impairment to other water right holders. While an impairment analysis is not conducted prior to accepting a temporary donation, other water right holders may claim impairment as a result of a temporary donation being exercised ([RCW 90.42.080\(4\)](#)). In response to an impairment claim, Ecology will determine if the temporary donation impairs any existing water rights. If Ecology finds there is impairment, the temporary donation will be altered or terminated. This decision whether to alter or terminate is appealable to the Pollution Control Hearings Board under RCW [43.21B.230](#).

Relinquishment

Under RCW 90.42.040(4)(c), water rights accepted into the TWRP are considered exercised, and do not relinquish from non-use while in trust. Temporarily donating a water right into the TWRP resets the five-year relinquishment "clock." Therefore, after a donation expires, a right would not relinquish within the five years following the donation. However, water rights that have relinquished prior to a donation can never be reset through a donation.

Permanent donations

Ecology will accept water rights for permanent donation that meet the requirements in RCW 90.42.080(4) and are conveyed to Ecology in the form of a recorded deed (see *Conveying a water right*, page 20).

Purchases and Leases

Ecology can acquire water rights through leases and purchases. A lease agreement or purchase and sale agreement provides a clear transfer of interest, conveying the right to Ecology to be held in trust. Leased and purchased water rights may be exercised for any beneficial use, both instream and out-of-stream. However in most cases, water rights that are leased or purchased by Ecology are changed to instream flow or groundwater preservation.

The requirements for Ecology to acquire water rights into trust by purchase and lease under chapter 90.42 RCW are outlined in Appendix A and summarized as follows:

Short-term leases

- Short-term leases are defined as being less than five years. Creating a trust water right through a short term lease does not require public notice to be published in a newspaper, but instead notice may be posted online. A review of the water right under RCW 90.03.380 is not required. Fewer requirements encourages faster processing, as would be needed during times of drought or other emergencies.

Long-term leases and purchases

- Creating a trust water right through a long-term lease or purchase requires review of the water right under RCW 90.03.380, which includes publishing notice in local newspapers. This review is almost always associated with a change application to transfer the leased or purchased water right to instream flow. The rare exception would be if Ecology leased or purchased a right that had already been transferred to instream flows. Refer to the change process described below (see page 16).

Water Banks

Ecology has authority in chapter 90.42 RCW to promote water banking activities through the TWRP to address presently unmet and future water needs throughout the state. While the statute describes water banking as something Ecology may engage in to address water supply challenges, it does not define what a water bank is or how a water bank is created.

Policy 1010 defines a **water bank** as a mutually-agreed upon contractual arrangement involving:

- *Transfer of legal interest* in a water right to the state for mitigation use. In most cases, this will require conveyance of the water right to Ecology by deed.
- *Execution of a water banking agreement* (a type of trust water right agreement) describing use of that water right through the TWRP to mitigate water resource impacts, future water supply needs, or any beneficial use under chapters 90.03, 90.44, or 90.54 RCW that would otherwise impair existing water rights.

Any individual or entity may request to establish a water bank. However, Ecology retains sole discretion to determine when and where to do so.

Table 1 provides an overview of the steps required to establish a water bank. Each step is discussed in further detail in the following sections.

Table 1. Steps to Establish a Water Bank

1. Consult	<ul style="list-style-type: none">• Consultation between a prospective banker and Ecology provides an informal opportunity to discuss a water banking request being submitted, or ask questions about a future request.• Consultation is encouraged but not required.
2. Request	<ul style="list-style-type: none">• Prospective banker submits:<ul style="list-style-type: none">○ Form: Request to Establish or Modify a Water Bank
3. Evaluate	<ul style="list-style-type: none">• If Ecology evaluates the water banking request and determines to proceed with establishing the bank, the prospective banker submits a Water Right Change Application to create a mitigating right.
4. Negotiate	<ul style="list-style-type: none">• Ecology and the prospective banker negotiate a water banking agreement that defines the terms and conditions for operation of a bank.
5. Change/ Transfer	<ul style="list-style-type: none">• Ecology or a conservancy board processes the water right change application to create a mitigating right.
6. Establish	<ul style="list-style-type: none">• A final water right change decision is issued by Ecology to provide the mitigating right for the bank.• Ecology and the prospective banker execute a water banking agreement.• The mitigating right is conveyed to Ecology by recorded deed
7. Manage	<ul style="list-style-type: none">• Ecology manages the mitigating right in trust, responds to impairment concerns, and provides reporting of bank information on its website.

1. Consultation with Ecology

Any individual or entity interested in establishing a water bank can request a consultation meeting with Ecology at any time. Prospective bankers should contact the region office where a proposed bank intends to operate prior to submitting any forms or applications. Consultation meetings are not required, but are highly recommended. These meetings provides a valuable opportunity for prospective bankers to learn about any specific challenges they may face, and to better understand the requirements for submitting the necessary documentation. These meetings also allow Ecology to start planning for staff time needed to process new water banks.

2. Request to establish a water bank

To establish a water bank, a prospective banker must submit:

- A [*Request to Establish or Modify a Water Bank*](#) (“water banking request”)
 - No fee required

The water banking request form requires a prospective banker to describe the overall plan and intent for a new water bank. It is important that the prospective banker provides as much information as possible to assist Ecology in evaluating the proposal. Prospective bankers may provide additional support for the water bank, such as letters from local governments, tribes, and stakeholders confirming that the bank would serve existing water needs. For example, a water banking request describing a bank intending to serve permit-exempt uses may be accompanied by a letter from the county planning department demonstrating the need to mitigate for new permit-exempt uses.

The water banking request must also reference at least one water right that will be changed/transferred for mitigation use in the water bank. Ecology will consider whether the water right appears suitable to mitigate the proposed new uses without impairing existing water rights or the public interest (RCW 90.42.040(4)(a)). A full review will be conducted as part of the change/transfer process if Ecology agrees to process the water banking request (see *Change/Transfer of a mitigating right*, page 15).

The water banking request should include the following information:

- Water bank description
 - Objectives of the water bank and a description of the new uses the bank intends to serve including:
 - Purposes of use,
 - Period of use,
 - Quantities, and
 - Sources of water that will serve the new uses.
 - The service area or geographic area where the intended new uses will be located. Include a map when possible.

- Mitigating water right description
 - A description of a water right, or portion of a water right that will serve to mitigate new uses (referred to here as the “proposed mitigating right”).

The prospective banker may submit a change application for the proposed mitigating right in conjunction with the water banking request form. However they may want to wait until Ecology determines if the water banking request will be processed before spending the time and funds to submit a change application.

3. Ecology evaluates banking requests

Ecology will review the water banking request form for completeness and determine whether to proceed according to the criteria described in Policy 1010, Section 4.2:

- *Administrative capacity within the Water Resources Program.*
- *Alignment with Program priorities.*
- *Potential detriment or injury to existing rights.*
- *Potential impairment of the public interest.*

Ecology’s regional section managers will consider regional priorities when evaluating a water banking request. Ecology’s choice whether to proceed with developing a water bank is discretionary and is not governed by [WAC 173-152-050](#), commonly referred to as the Hillis Rule. While the Hillis Rule allows Ecology to prioritize the processing of change applications associated with water banks, establishing water banks is at Ecology’s discretion and cannot be appealed to the Pollution Control Hearings Board (PCHB).

After evaluating a water banking request, Ecology may:

- **Agree to process** the banking request and begin negotiating a water banking agreement;
- **Decline to proceed**; or
- **Defer processing** until a later date.

If Ecology agrees to process a water banking request, the request will be posted on Ecology’s website for public comment for a minimum period of 30 days.

4. Negotiating water banking agreements

If Ecology agrees to process the water banking request, we may begin negotiating a water banking agreement with the prospective banker. At the same time, the prospective banker may submit the change application associated with the mitigating right discussed below in step 5: Change/Transfer of a mitigating right. Negotiating the water banking agreement and processing the water right change should happen concurrently.

Water banking agreements provide the legal basis for Ecology to hold a water right in the TWRP that will serve to mitigate new water uses. At the beginning of negotiations, Ecology will provide the first draft of the agreement to the prospective banker. This ensures that the necessary terms

outlined in Policy 1010: Section 4.3 are included. Additional terms and conditions may be added by Ecology or the prospective banker as negotiations progress.

Agreement negotiations are usually conducted during the same time as Ecology or a water conservancy board is processing a water right change/transfer to create a mitigating right. Finalizing the agreement usually is contingent on the change decision that determines whether the water right is valid, whether the right is suitable to be used as a mitigating right, and whether using the right to mitigate would impair existing rights or the public interest. Therefore, execution of the agreement occurs soon after the water right change decision is issued for the mitigating right (discussed further in 6. *Establishing a water bank* on page 19).

The following elements included in a water banking agreement are described below:

- Purpose of the Agreement
- Creating a Mitigating Right
- Allotting Mitigation to New Uses
- Authorizing New Mitigated Used
- Reporting
- Assigning and Terminating the Agreement

Purpose of the agreement

- The purpose of the water bank and a general summary of the agreement in which Ecology will hold a mitigating right(s) in the TWRP to serve as mitigation for the specified future new uses (as provided in the water banking request).
- A general description of the future uses to be mitigated.

Creating a mitigating right

- A water right is identified to serve as mitigation for new uses (mitigating right).
- An acknowledgement that the mitigating right must be reviewed through the change process in which the purpose of use is changed to instream flow (or groundwater preservation) for mitigation.
- The consumptive quantity of the mitigating right is identified. The methods and assumptions used to calculate the consumptive quantity are clearly stated.
- The legal mechanism by which the mitigating right will be held in trust: by executed agreement and conveying the right to Ecology by way of a recorded quit claim deed (see *Conveying a water right*, page 20, and Appendix B. Example Quit Claim Deed).
- Conditions may be included to address any potential impairment of existing water rights or detriment to the public interest. Examples include:

- *Suitability*: A mitigating right will be reviewed through the change process in which Ecology makes a tentative determination of the extent and validity of the right (see *Processing a change*, page 16). Ecology may determine the right is valid, but the full quantity may not be suitable as mitigation. For example, a valid right may be unavailable in the late season during dry years. The portion of the right related to the late season would be unsuitable to mitigate new uses.
- *Seniority*: If a portion of the mitigating right is retained by the water right holder for out-of-stream uses, Ecology may require that the portion serving as a mitigating right is considered senior to the retained portion. This may be important for a water bank that intends to serve new uses diverting from a highly regulated creek. Ecology may require that the mitigating right is considered senior to the retained portion to ensure mitigation is available to offset the new uses.
- *Seasonality*: If the mitigating right is seasonal, the new mitigated uses will usually be limited to the same season of use as the mitigating right.
- *Geographic Area*: There may be limits on where new uses are located. For example, the mitigating right may not be available to serve new uses in areas with declining aquifer levels or along a stream with critically low flows.
- *Other*: Any conditions may be included to ensure there is no impairment to existing rights or the public interest. For example, a portion of a mitigating right may be designated to permanently remain instream and not used for mitigation to ensure there is a benefit to streamflow. Another example may limit new uses to within the basin where the mitigating right originated.

Allotting mitigation to new uses

- The process by which the banker will allot mitigation to new or existing uses. For example: mitigation allotments should be recorded on the parcel in the county where water is intended to be used.
- Conditions and limitations to be placed on the mitigation allotments, examples include:
 - Metering requirements, which may include installing telemetered meters to ensure that the new uses do not exceed the consumptive use provided by the mitigating right or use water outside the authorized period of use.
 - Limited quantities allotted to specific purposes, like homes with limits on lawn size.
 - Required covenants like septic construction and placement.

Authorizing new mitigated uses

The manner in which Ecology will process applications for new mitigated water rights and requests for water budget neutral determinations. Ecology may agree to only process a limited number of new permit requests in a given time period.

Reporting

To satisfy RCW 90.42.170, the banker must provide quarterly accounting of the mitigation allotments that have been issued.

Assigning or terminating

- A banker seeking to assign the water banking agreement to another person or entity, must obtain written approval from Ecology.
- Ecology or the banker may terminate the agreement. However, if terminated, any portion of the mitigating right that has been allotted to a new use will be retained by Ecology in the TWRP.

5. Change/transfer of a mitigating right

Once Ecology has agreed to process a water banking request, a prospective water banker submits an [Application to Change/Transfer a Water Right](#) (“change application”) for a water right that is intended to serve as mitigation. This proposed mitigating right must undergo review according to RCW 90.03.380 (as required by RCW 90.42.110).

Applicants should refer to [Guidance to Applicants for Change/Transfer of a Water Right](#) and pay close attention to completing Appendix A of the change application.

A complete change application to create a mitigating right must include the following:

- Clear proof of ownership. If the water right is not owned by the applicant, the applicant must prove they have permission to operate a bank on the water right holder’s behalf. This is especially important if the application is seeking to transfer only a portion of the water right. The applicant should contact Ecology’s region office to determine if the right needs to undergo an administrative division prior to processing the water right change (also refer to [Policy 1070](#)).
- A request to change the water right’s purpose of use to *instream flow/groundwater preservation for mitigation*³ (Policy 1010).
- A request to change the water right’s place of use to the specific stream/river reaches or groundwater body where the right will be attributed while held in trust.
- A description of the intended new uses to be served by the water bank (RCW 90.42.110(2)) that matches the water banking request form submitted to Ecology.

³ The purposes of use mentioned in statute do not include mitigation ((RCW 90.14.031(2) and RCW 90.54.020(1)), however new purposes are recognized over time. The legislature added language to RCW 90.42 referring to mitigation associated with water banks and requires Ecology to track these “mitigating rights” in our databases and on our website (RCW 90.42.170).

Change applications seeking to create a mitigating right for a new water bank are considered water budget neutral and may be prioritized according to the Hillis Rule ([WAC 173-152-050](#)). However, this rule does not pertain to establishing water banks. Ecology will only prioritize the change applications associated with water banking requests that Ecology has agreed to act on (see *Ecology evaluates banking requests*, page 12 and POL 1010: Section 4.2). Change applications may also be submitted to [Water Conservancy Boards](#)⁴ in applicable counties.

Other transfers: No change required

In rare circumstances, a proposed mitigating right may have already undergone review through the change process or may not require a change. Rather than filing a change application in connection with their water banking request, the prospective water banker would submit an *Application to Enter a Water Right to the Trust Water Rights Program*. Ecology will evaluate whether creating and exercising the proposed trust water right for the banker's intent would impair existing rights or impair the public interest (RCW 90.42.040(4)(a)). Ecology will post draft decisions whether to transfer the water right to the TWRP on our website for a 30 day comment period. Final decisions to accept a right into trust are subject to appeal, and will be posted on Ecology's website for 30 days.

Processing a change

A change application to create a mitigating right will be processed according to [POL 1200: Policy for the Evaluation of Changes or Transfers to Water Rights](#).⁵ Since the intent of this change application is to create a mitigating right that will be held in trust, this change must be processed according to RCW 90.03.380 as well as chapter 90.42 RCW.

Ecology (or a water conservancy board) will conduct a tentative determination of extent and validity referred to here as an "extent and validity review." This review is required by RCW 90.03.380 to determine that the water right was lawfully established and the amount of water consistently applied to beneficial use.

Ecology must also assess whether the proposed exercise of the trust water right would impair existing rights or the public interest (RCW 90.42.040(4)(a)). A mitigating right must be suitable to mitigate future uses without causing impairment. Mitigating rights may be unsuitable for this purpose if:

- The water right's period of use is different than the intended new uses.
- The water right's priority date is junior to other water rights such that access to water may be curtailed.
- The water right provides water from a different source than the source for the intended new uses.
- The source of the water right is not physically available at all times.
- The water right is subject to established minimum instream flows.

⁴ <https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-rights/Water-conservancy-boards>

⁵ Transfers or changes in purpose of water rights established as family farm permits under chapter 90.66 RCW shall comply with the specific provisions in [RCW 90.66.065](#).

Consideration of impairment

Exercising a trust water right cannot cause detriment or injury to existing water rights, nor the public interest ([RCW 90.42.040\(4\)\(a\)](#)). Therefore, as part of reviewing the water right during the change process, Ecology (or a conservancy board) must determine if the change of a water right to instream flow/groundwater preservation for mitigation would impair existing water rights.

Existing rights

A change to instream flow or groundwater preservation is unlikely to impair existing water rights. However, Ecology must also consider the potential for impairment caused by mitigating future uses. Though the individual future uses may not be known, an overall description of location, purposes, and timing of those new uses is necessary to complete this evaluation ([RCW 90.42.110\(2\)](#)).

Public interest

Ecology must also consider impairment to the public interest when processing a change application to transfer a water right. Policy 1010 defines public interest as:

“The consideration of impacts to the public at large that would result from the creation and operation of a water bank. General guidelines for consideration of the public interest are set forth in the water resources fundamentals in RCW 90.54.020. As applicable, considerations should include environmental impacts, with emphasis on the protection, restoration, and recovery of threatened and endangered species; environmental justice; implications for public health and safety; aesthetic, recreational, and economic effects; and impacts on publicly owned resources and facilities.”

Several elements in this definition are addressed during the change process. However, the final change decision must consider all these elements together, and determine if use of that right for mitigation would impair the public interest.

Instream place of use

[RCW 90.42.110](#) requires that Ecology must indicate the stream reaches where a trust water right will be established. First, an extent and validity review assesses whether the right or portion of the right proposed to be transferred is valid. Then the right’s new place of use instream is described as specific reaches within the river or stream that the water right was historically diverted from. These reaches are known as the primary and secondary reaches, and they are assigned the amount of water being transferred to instream flow for mitigation. The following definitions describe the reaches that become the trust water right’s new place of use:

- “Primary reach” means that portion of a water body that benefits from both the former consumptive use and return flow waters of a water right; beginning at the original point of diversion and extending to the point where all return flows historically reentered the stream or river.
- “Secondary reach” means that portion of a water body that benefits only from the former consumptive use portion of a water right because it had received all of the return flow

waters while the water right was exercised. It begins at the end of the primary reach and extends downstream far enough to meet the purpose for which the right was acquired (ex. mitigate new uses, or improve flows for fish). For example, a mitigating right intended to mitigate new exempt uses located throughout a watershed would correspond to a secondary reach that extends to the mouth of the watershed.

A legal description of the beginning and end points of these reaches may be described by river mile, township, range, and section, or by GPS points.

Assigning quantities to instream reaches

In addition to describing the location of the primary and secondary reaches, we also describe the quantities assigned to these reaches. Assigning these quantities requires that we calculate the consumptive and non-consumptive fractions of the water right and describe a schedule of when these quantities will be present in the primary and secondary reaches.

Chapter 90.42 RCW requires that the primary and secondary reaches and the amount of trust water in the reaches are identified, but provides no method for how to do so. The goal is to mimic historical water use by describing a schedule of the timing and amount of water available instream. That way when the trust water right is exercised, it does not impair existing rights. The schedule usually describes monthly instantaneous quantities and volumes that correspond to the same period of use specified on the water right certificate or claim. One exception may be if delivery of a water right can be retimed through use of reservoir storage.

Appendix C. Assigning Quantities to Primary and Secondary Reaches describes how to calculate the quantities assigned to the reaches and provides a complete example.

Assigning quantities to groundwater bodies

Chapter 90.42 RCW describes groundwater held in trust as groundwater preservation. We attribute the mitigating right to a specific aquifer when possible. Therefore, the place of use for trust water rights based on groundwater is described as the aquifer from which the original right authorizes water use. Ecology's hydrogeologists may assist permitting staff to 1) determine if the mitigating right comes from a defined aquifer, and 2) determine if that aquifer is hydraulically connected to surface water. If the aquifer is not connected to surface water, we will assign the full quantities that are found to be valid (annual and monthly) to the aquifer as groundwater preservation. If the aquifer is highly connected to surface water, we may also assign the trust water right to a secondary reach (see Appendix C. Assigning Quantities to Primary and Secondary Reaches).

Change decisions

Once the requirements for a water right change under RCW 90.03.380 have been met, Ecology will issue a change decision in a Report of Examination (change ROE). However, the water right will not be considered exercised in the TWRP until a water banking agreement with Ecology is executed, and the water right is conveyed by deed to Ecology. A water right holder may not use, allocate, or exercise a mitigating right without a water banking agreement with Ecology.

As described in POL 1010: Section 4.6, a change in purpose of use to instream flows for mitigation should be accompanied by an executed water banking agreement. If the corresponding water banking agreement has not been executed at the time of the change, Ecology will include the following condition in the change decision:

If a water banking agreement is not executed within one year following completion of the appeal period under RCW 43.21B.110, the change will be canceled and the water right will revert to the original purpose of use.

The condition above allows the prospective banker to consider the final change decision before executing the agreement, and confirm there will be no appeal by any third parties. While this condition allows up to a year, it should take no more than a month to execute the agreement since the prospective banker should have already negotiated the water banking agreement with Ecology.

Water conservancy boards

Water conservancy boards may process change applications for mitigating rights associated with water banks; however, Ecology has sole discretion whether to accept a water right into the TWRP. A board's Record of Decision recommending approval should include the same provision described above. Ecology may elect to modify or add conditions as part of its review process. Prospective bankers that submit change applications to water conservancy boards should be negotiating water banking agreements with Ecology at the same time (WAC 173-153-060(b)).

Public review and comments

Ecology will post draft change decisions on our website for a 30-day comment period. Final decisions are subject to appeal, and will be posted on Ecology's website for a 30-day review period. Executed water banking agreements will also be posted for a 30-day review period.

6. Establishing a water bank

As discussed earlier, a trust water right is created when a water right is conveyed to Ecology by the water right holder and accepted by Ecology into the TWRP. Creating a trust water right to serve as mitigation for a water bank is no different.

1. The water banking agreement is executed between the water right holder and Ecology by both parties signing and dating the agreement.
2. The water right holder conveys the mitigating right to Ecology so it may be used for mitigation.

The water right holder must convey the mitigating right to Ecology by quit claim deed if the water bank plans to mitigate permanent and long term new uses (Policy 1010). Water banks intending to mitigate temporary new uses may rely on an executed agreement without deeding the mitigating right to Ecology.

Conveying a water right

Conveying a water right to Ecology requires:

- A quit claim deed conveying the mitigating right to Ecology that must be recorded with the county where the water right was originally authorized (see Appendix B).
- The deed should be recorded against a parcel that contains the water right's historical point of diversion/point of withdrawal or parcel(s) located within the historical place of use.
- Along with the deed, the water right holder must also record a [Real Estate Excise Tax Affidavit](#) form (REET) indicating that ownership of the water right has been transferred (even if no money is exchanged). Four original copies of the REET form are required at the time of recording, and all four copies must be signed by the water right holder and Ecology's legal representative. The county returns the recorded deed and REET form to the return address on the deed. The deed should be sent to Ecology's Headquarters Office after recording (see Appendix B. Example Quit Claim Deed).

It is common for only a portion of a water right to be conveyed to the TWRP. In these cases, the state holds the conveyed portion of the water right while the original water right holder retains a portion. To ensure that the water right is not enlarged to the detriment of other water rights competing for the same source, the deed should clearly delineate instantaneous and annual quantities so that each portion of the water right is clear. The deed may also include any limitations on water use.

7. Managing a water bank

Reporting

The water banking entity must provide quarterly accounting of mitigation allotments and bank balances to Ecology. Water bank accounting is posted on Ecology's website, as required by RCW 90.42.170. The water banking entity must also report any other information required by the water banking agreement, which may include measuring the source of the mitigating right, or specific metering related to the new uses.

Responding to impairment concerns

An established water bank that has begun allotting mitigation for new uses cannot impair existing water rights. RCW 90.42.040(4)(b) states: "If impairment becomes apparent during the time a trust water right is being exercised, the department shall cease or modify the use of the trust water right to eliminate the impairment." Ecology may determine that a water banking agreement must be renegotiated, amended, or terminated to address impairment.

Managing mitigating rights

Mitigating rights, like all trust water rights, are considered exercised while held in the TWRP. If necessary, Ecology may protect trust water rights from being impaired by other users.⁶ How Ecology exercises and protects mitigating rights is described in the provisions of the following documents:

1. The Report of Examination authorizing the change of the mitigating right; and
2. The water banking agreement.

⁶ Adjudicated or state-issued rights may be regulated in favor of senior trust water rights (Rettkowski v. Department of Ecology).

Other Trust Water Right Agreements

Ecology may hold water rights in the TWRP through other voluntary agreements with water right holders. These Trust Water Right Agreements define the terms and conditions of how the water rights will be held in trust and exercised for a variety of instream and out-of-stream uses.

Examples of other trust water right agreements

This section describes other types of trust water right agreements that specify circumstances for a water right to be transferred into trust and exercised as a trust water right.

Simple mitigation arrangements

Like water banks, simple mitigation arrangements are created through trust water right agreements. Water banks often mitigate an indeterminant number of future water uses over a long period of time, which requires an active partnership with Ecology. Simple arrangements mitigate a known number of existing or near-future uses. Simple mitigation arrangements include:

- **One-time mitigation projects** in which a water right holder transfers their water right to trust in exchange for a new water right. This may be referred to as a water right swap or source switch. For example, a water right holder applying to change from a creek diversion to a nearby well that is not in the same water source according to [POL 2010](#) would be denied the change. However, if moving to the well would not impair other water users, and provides benefit to the creek, Ecology may agree to accept the water right into trust and issue a new mitigated groundwater right.
 - The water right holder submits a change application to transfer the original right to instream flow for mitigation and an application requesting a new mitigated water right.
- **Mitigation reserves** in which a water right is held in trust to serve as mitigation for new uses without requiring issuance of specific allotments and permits. Ecology may establish this type of arrangement with a county government to provide mitigation for existing permit-exempt uses or to assist existing water right holders in avoiding curtailment.
 - The water right holder or public entity developing the mitigation submits a change to transfer a water right(s) to instream flow for mitigation. Ecology maintains an accounting of uses relying on the mitigation.

Other arrangements

As a condition of the Trust Water Right Agreement, the examples discussed above require that the proposed mitigating right goes through the change process to change its purpose of use to instream flows. In instances where the water right does not require a change, the water right holder submits an *Application to Enter a Water Right to the Trust Water Rights Program*. This

application serves as a request for Ecology to consider holding a right in trust for a specific aim without undergoing a change. Ecology will evaluate the application and determine whether creating and exercising the right in trust would impair existing rights or the public interest (RCW 90.42.040(4)(a)). The trust water right is created by executing a Trust Water Right Agreement between Ecology and the water right holder.

The following are examples where holding a water right in trust does not require a water right change:

- **Reservoir water rights** may be held by Ecology to manage the stored water for improving streamflow for fish and wildlife.
- **Diversion bypass** in which a water right holder has two authorized points of diversion and enters into a trust water right agreement stating that they will cease diverting water at the upper diversion. A trust water right is created within the reach between the upper and lower diversion.

Water conservation projects

Water right holders that receive financial assistance for water conservation projects are often required to convey the conserved water into trust as described in RCW 90.42.030. As with the other examples in this section, trust water rights from water conservation projects are created when Ecology enters into an agreement accepting the right into trust.

Publically funded water conservation programs may have guidelines that require participants to use that program's applications and contracts. An example of this type of program is the Washington Conservation Commission's Irrigation Efficiencies Grant Program (IEGP).

The process for creating trust water rights based on conserved water depends on the following considerations:

1. Is the water right's priority date earlier than 1991? (Only water rights existing as of July 28, 1991 qualify (RCW 90.42.020(6))
2. Will the water savings will be temporarily or permanently conveyed into trust?
3. Does the conservation project require a water right change, such as a change in point of diversion or place of use in conjunction with water conservation development?
4. Is there specific documentation that the funder requires to document the transfer of water savings into trust?

Step 1: Submit request

The water right holder submits one of the following:

- An application designed by the funder in partnership with Ecology;
- [*Application to Change/Transfer a Water Right*](#) ("change application"); or
- *Application to Enter a Water Right to the Trust Water Rights Program.*

Step 2: Public notice

The water right holder and Ecology work together to determine the quantity of conserved water that may be eligible for trust. That quantity is included in a brief description of the project that is provided for public notice in the following media:

- Notice is published in newspaper(s) in every county that the trust water right may be stored, diverted, or used [RCW 90.42.040(5)(a) and RCW 90.03.280]; and
- Notice is posted on Ecology's website describing the proposed creation of the trust water right [RCW 90.42.040(5)(b)].

Step 3: Ecology's review

If no water right change is required to create the water savings, or as part of the conservation project, then a water right review process is not required under RCW 90.03.380 (RCW 90.42.040(7)). While no formal review process is required, Ecology may request evidence that the water right is valid prior to the development of the project. Ecology may also require evidence of a valid water right when determining how much conserved water will be described in the public notice.

If a water right change is required, the full review process required under RCW 90.03.380 will be conducted by Ecology or a water conservancy board. However, if transfer of a portion of a water right into trust would assist in achieving established instream flows, Ecology will not conduct an extent and validity review of the portion of the water right that will remain with the water right holder (RCW 90.42.040(9)).

Finally, Ecology must determine that holding the conserved water in trust will not impair existing rights or the public interest (RCW 90.42.020(3)) regardless of whether a water right change is required.

Step 4: Trust water right creation

Ecology and the water right holder execute a trust water right agreement or conservation program contract. If the conserved water is being conveyed to trust permanently, the following steps are required:

- Ecology issues a letter order accepting the conserved water right into trust.
- The water right holder conveys the conserved portion of the water right to Ecology by Quit Claim Deed (see page 12 and Appendix B);
- Ecology issues a Certificate of Trust Water Right for the conserved portion; and
- Ecology issues a Superseding Water Right Certificate to the water right holder for the retained portion of the right.

Appendix A: Summary Matrix of Trust Water Right Processing

This matrix summarizes the elements required for processing different types of acquisitions, but it is not exhaustive. This information does not apply to Yakima Basin trust water rights acquired exclusively under Chapter 90.38 RCW.

	Water Banks, Purchases, and Long-Term Leases	Short-Term Lease (not to exceed 5 years)	Donations (temporary and permanent)	Water Conservation Projects (temporary and permanent)
Mechanism for Acquisition	Ecology's acquisition of all or part of a water right through one of the following agreements [RCW 90.42.080(1)(a) and (2)]: Water Banking Agreement Purchase and Sale Agreement Long-Term lease for more than 5 years	Ecology's short-term lease (for less than 5 years) of all or part of a water right [RCW 90.42.080(1)(a) and (2)].	Water right holder donates all or part of a water right to Ecology, on a temporary or permanent basis [RCW 90.42.080(1)(b)].	Ecology's acceptance of all or part of the net savings from operational or system improvements to be held in trust by contract or agreement [RCW 90.42.030(2) ; RCW 90.42.080(1)(a) and (2)]. Only water rights existing as of July 28, 1991 qualify [RCW 90.42.020(6)].
Application	For water banks, first submit: Request to Establish or Modify a Water Bank (ECY 070-679) For purchase, lease, and water banks Ecology agrees to develop submit: Application to Change/Transfer a Water Right (ECY 040-1-97)	Application to Change/Transfer a Water Right (ECY 040-1-97) OR Application to Enter a Water Right to the Trust Water Rights Program	Temporary Donation to the Trust Water Rights Program (ECY 070-488) For a permanent donation: Application to Enter a Water Right to the Trust Water Rights Program	Application to Change/Transfer a Water Right (ECY 040-1-97) OR Application to Enter a Water Right to the Trust Water Rights Program OR An application designed for a specific funding program.
Public Notice	Notice published in newspaper of every county that the trust water right may be stored, diverted, and used [RCW 90.42.040(5)(a) and RCW 90.03.280]; and Notice posted on Ecology's website describing proposed creation of a trust water right [RCW 90.42.040(5)(b)].	Notice posted on Ecology's website describing proposed creation of a trust water right [RCW 90.42.040(5)(c)].	Notice posted on Ecology's website describing proposed creation of a trust water right [RCW 90.42.040(5)(c)].	Notice published in newspaper of every county that the trust water right may be stored, diverted, and used [RCW 90.42.040(5)(a) and RCW 90.03.280]; and Notice posted on Ecology's website describing proposed creation of a trust water right [RCW 90.42.040(5)(b)].

	Water Banks, Purchases, and Long-Term Leases	Short-Term Lease (not to exceed 5 years)	Donations (temporary and permanent)	Water Conservation Projects (temporary and permanent)
Extent and Validity Determination	Required according to RCW 90.03.380 [RCW 90.42.040(4)(a) and (d), 90.42.080(5)]	Not required	Not required	Not required, but Ecology may require evidence of a valid water right [RCW 90.42.030(2)].
Amount of Water Eligible to be Acquired	No more than the amount identified in the tentative determination of the extent and validity of the right. The consumptive quantity may be based on historic use [RCW 90.42.080(5)]	The leased quantity, plus any portion of the water right retained for use cannot exceed the highest use within the last five years, unless: A qualifying exemption to relinquishment applies in the preceding five years. In this case, the quantities proposed for donation plus any retained use cannot exceed the highest use in the five years preceding the qualifying exemption (RCW 90.14.140 (1)); OR The right or claim is for municipal or hydropower purposes, and annual license fees are paid in accordance with chapter 90.16 RCW. The quantities proposed for donation plus any retained use cannot exceed historical beneficial use (RCW 90.14.140(2)(a) or (d)).	The donated quantity, plus any portion of the water right retained for use cannot exceed the donor's highest use within the last five years, unless: A qualifying exemption to relinquishment applies in the preceding five years. In this case, the quantities proposed for donation plus any retained use cannot exceed the highest use in the five years preceding the qualifying exemption (RCW 90.14.140 (1)); OR The right or claim is for municipal or hydropower purposes, and annual license fees are paid in accordance with chapter 90.16 RCW. The quantities proposed for donation plus any retained use cannot exceed historical beneficial use (RCW 90.14.140(2)(a) or (d)).	The water right holder and Ecology will determine the quantity of water eligible.
Impairment Analysis	Ecology must conduct an impairment analysis prior to authorizing a change of purpose [RCW 90.03.380(1)]. There can be no impairment of the public interest or of water rights existing at the time the trust water right is established [RCW 90.03.380(1) and RCW 90.42.040(4)(a)].	Not required [RCW 90.42.040(8)].	Not required [RCW 90.42.040(8)].	There can be no impairment of the public interest or of water rights existing at the time the trust water right is established [RCW 90.03.380(1) and RCW 90.42.040(4)(a)].

	Water Banks, Purchases, and Long-Term Leases	Short-Term Lease (not to exceed 5 years)	Donations (temporary and permanent)	Water Conservation Projects (temporary and permanent)
Decision and Final Documents	Trust Water Right Report of Examination [RCW 90.03.380(1)] ; Executed agreement <u>For purchases and water banking:</u> Quit Claim Deed conveying trust water right to Ecology Certificate of Trust Water Right issued to Ecology [RCW 90.42.040(2)] Superseding Water Right Certificate for any portion retained by the water right holder [RCW 90.42.040(2)] .	Letter order; Lease agreement signed by the water right holder and Ecology;	<u>Temporary donation:</u> Acceptance email or letter; <u>Permanent donation:</u> Acceptance email or letter; and Quit Claim Deed conveying trust water right to Ecology; and Certificate of Trust Water Right issued to Ecology [RCW 90.42.040(2)]	Executed agreement or contract (may be accompanied by a letter order or decision) <u>For permanent conveyance of saved water:</u> Quit Claim Deed conveying trust water right to Ecology; Certificate of Trust Water Right issued to Ecology [RCW 90.42.040(2)] ; and Superseding Water Right Certificate issued to the water right holder for the retained portion [RCW 90.42.040(2)] .
Exercise of Trust Water Right	The trust water right will be considered exercised when created [RCW 90.42.040(4)(c)] .	The trust water right will be considered exercised when created [RCW 90.42.040(4)(c)] .	The trust water right will be considered exercised when created [RCW 90.42.040(4)(c)] .	Public benefits to be obtained as consideration for the financial assistance provided [RCW 90.42.030(1)] .
Modification of Trust Water Right	Ecology must cease or modify a trust water right if impairment becomes apparent [RCW 90.42.040(4)(b)] . Any modification must be consistent with the purposes associated with public funding, to obtain maximum net benefits [RCW 90.54.020(2)] .	Ecology must cease or modify a trust water right if impairment becomes apparent [RCW 90.42.040(4)(b)] . Any modification must be consistent with the purposes associated with public funding, to obtain maximum net benefits [RCW 90.54.020(2)] .	May be modified to avoid impairment [RCW 90.42.080(4)]	Ecology must cease or modify a trust water right if impairment becomes apparent [RCW 90.42.040(4)(b)] . Any modification must be consistent with the purposes associated with public funding, to obtain maximum net benefits [RCW 90.54.020(2)] .

Appendix B. Example Quit Claim Deed

After recording return to:

Trust Water Rights Program Dept. of Ecology, Water Resources PO Box 47600, Olympia, WA 98504-7600
--

DOCUMENT TITLE: Quit Claim Deed – Water Right

GRANTOR: _____

GRANTEE: Washington State Department of Ecology, State Trust
Water Rights Program

LEGAL DESCRIPTION: Instream Flow in the _____ River (or creek; could be multiple connected surface water sources, or could be “Groundwater Preservation in the XXXX Aquifer”)

TAX PARCEL NO(S): _____ [the parcel that contains the water right’s historical point of diversion/point of withdrawal or parcel(s) located within the historical place of use]

REAL ESTATE EXCISE TAX: Exempt per WAC 458-61A-201 (include only if there is no consideration for the transfer)

QUIT CLAIM DEED – WATER RIGHT

THE GRANTORS, _____ and _____, for valuable consideration (or could be instead “for the purpose of placing a water right in trust for instream flow purposes, and for no monetary or other valuable consideration”), convey and quit claim to the WASHINGTON STATE DEPARTMENT OF ECOLOGY, STATE TRUST WATER RIGHTS PROGRAM (“Grantee”) all of Grantor’s right, title and interest in water right Certificate No. XXXXX, (or a portion of water right No.) described as follows:

XXX cubic feet per second, XXX acre-feet per year (XXX acre-feet per year consumptive), instream in a reach beginning at a point XXX, continuing downstream in the _____ River to its confluence with the _____ River, and continuing downstream to the (next confluence or Pacific Ocean). This instream flow right was established in Change Authorization

CXX-XXXXX and was historically appurtenant to real property situated in the County of _____, State of Washington.

DATED THIS _____ day of _____, 20XX.

XXX

XXX

STATE OF WASHINGTON)
) ss.
County of _____)

I certify that I know or have satisfactory evidence that **XXX and XXX**, are the individuals who appeared before me, and said individuals acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

GIVEN under my hand and official seal this _____ day of _____, 20XX.

Print Name: _____

Notary Public in and for the State of
Washington

My commission expires: _____

Appendix C. Assigning Quantities to Primary and Secondary Reaches

This appendix provides one example of how to attribute trust water quantities to a primary and secondary reach depicted in Figure 1. These reaches are also discussed in *Assigning Quantities to Instream Reaches* on page 18.

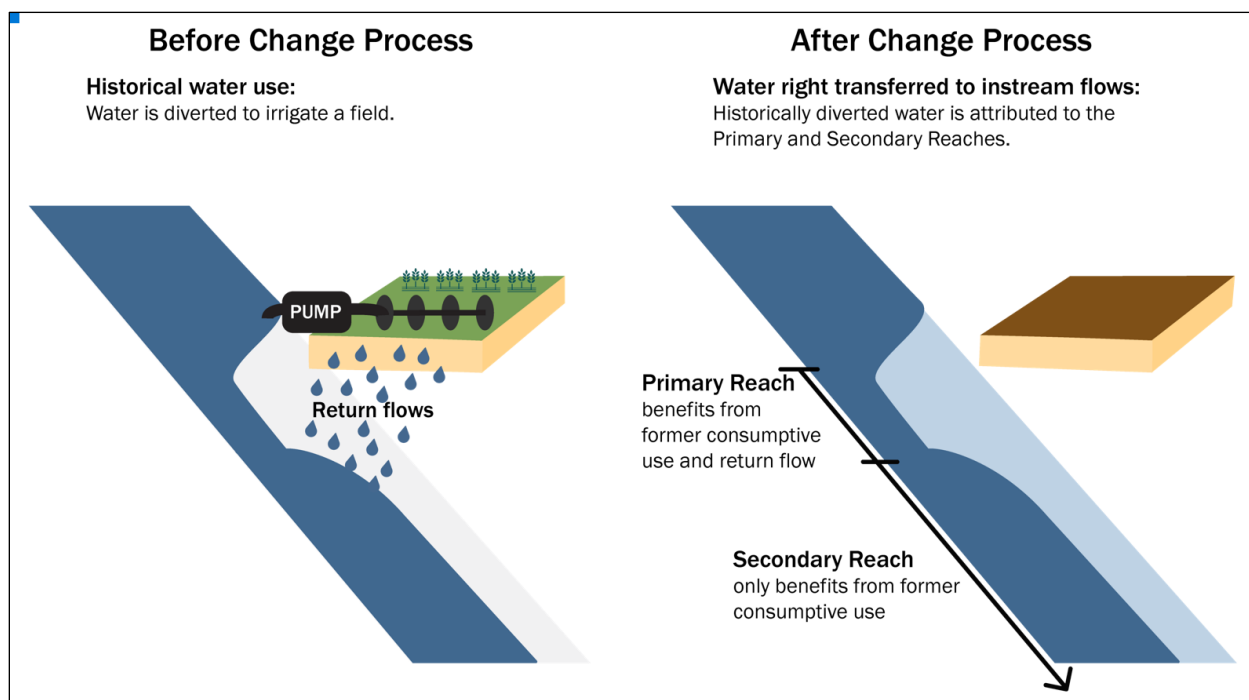


Figure B-1. A primary and secondary reach are created when a water right's purpose of use is being changed to either 1) instream flow, relating to a purchase or lease, or 2) instream flow for mitigation, relating to a water bank.

Calculating consumptive use

When a water right is being transferred to instream flow, or instream flow for mitigation, we must first calculate the consumptive and non-consumptive fractions of the right according to the methods presented in Ecology's [Guidance Publication 20-11-076: *Determining Irrigation Efficiency and Consumptive Use*](#). The following excerpt (from page 9) is provided here to describe one possible scenario of water use and the estimated consumptive quantity associated with that use.

“Example 1. A farmer has 10 acres of pasture that he irrigates with handlines. No water or power meter data are available. The WIG⁷ crop irrigation requirement (CIR) from Appendix B for pasture is 3 ac-ft/ac. The farmer’s water right allows an annual diversion of 40 ac-ft. Based on the table, the average handline is 75% efficient which is the same as that assumed in the original water right authorization. The total irrigation requirement (TIR) is $(3)/(0.75) = 4$ ac-ft/ac. The total water use estimate then is $(4 \text{ ac-ft/ac}) \times (10 \text{ acres}) = 40 \text{ ac-ft}$. From the table for average conditions, %CU is 85% and %RF is 15%. Therefore, the consumptive portion is $(40 \text{ ac-ft}) \times (0.85) = 34 \text{ ac-ft}$ and the RF = 6 ac-ft $(40 \text{ ac-ft} - 34 \text{ ac-ft})$.”⁸

If the water right holder in this scenario requests to change their water right to instream flow, or instream flow for mitigation we must first conduct an extent and validity review of the right (see *Change/Transfer of a mitigating right*, page 15). If the water right, or portion of the right proposed for transfer is valid, we proceed with assigning quantities to the primary and secondary reaches.

Assigning quantities to primary and secondary reaches

Chapter 90.42 RCW requires that the primary and secondary reaches are described and the amount of water within these reaches is calculated when a change/transfer is undertaken. However, there is no required methodology for calculating a schedule of when and how much water is assigned instream. The goal is to develop a schedule that reflects historical water use.

The following steps provide an example of calculating the quantities assigned to the primary and secondary reaches based on the excerpted example scenario above. In this scenario there are no metering records or power use records, which would have provided average monthly water use. Since these records are not available, we will estimate monthly water use for both the instantaneous diversion rate in cubic feet per second (cfs), and monthly volumes in acre-feet (ac-ft).

Step 1: Determine monthly volumes (acre-feet)

Primary reach

The amount of water in the primary reach is simply the total amount diverted that is authorized by the water right and confirmed by the extent and validity review (see *Change/Transfer of a mitigating right*, page 15). Since there are no metering or power records in the scenario above, the monthly volumes assigned to the primary reach are estimated using the monthly crop irrigation requirement (CIR) from the [Washington Irrigation Guide \(WIG\), Appendix A](#). The scenario above states that the water right holder diverted 4 ac-ft/yr for an annual total of 40 ac-ft/yr to irrigate 10 acres. We can determine the percent of water required for each month by dividing the monthly CIR by the annual CIR. Then we can determine the monthly volume by

⁷ The WIG or [Washington Irrigation Guide, Appendix A](#) contains crop irrigation requirements (CIR) for many locations throughout Washington State.

⁸ **CU** is consumptive use. **RF** is return flow.

multiplying the monthly percent by the total annual volume (40 ac-ft/yr). The results are listed in Table B-1 below.

$$\text{Primary Reach Volume (ac-ft)} = [\text{Monthly CIR} \div \text{Total CIR}] \times \text{Total Water Use (40 ac-ft/yr)}$$

Table B-1: The monthly volumes assigned to the primary reach.

Month	Crop Irrigation Requirement (CIR ⁹) (acre-feet per acre)	Percent of total volume (monthly CIR ÷ total CIR)	Primary Reach: Monthly volume (acre-feet)
April	0.06	2%	0.8
May	0.42	14%	5.6
June	0.60	20%	8.0
July	0.78	26%	10.4
August	0.63	21%	8.4
September	0.38	13%	5.2
October	0.13	4%	1.6
Total	3.00		40.0

Secondary reach

The monthly volume assigned to the secondary reach is only the consumptive portion of the water right. We calculate the amount of consumptive use in the secondary reach by multiplying the volume in the primary reach by the percentage of consumptive use. In the scenario above, the average percent consumptive use is estimated to be 85%.

$$\text{Secondary Reach Volume (acre-feet)} = (\text{Monthly Primary Reach Volume}) \times (\% \text{ Consumptive Use})$$

Table B-2: The monthly volumes assigned to the secondary reach.

Month	Primary Reach: Monthly volume (acre-feet)	Secondary Reach: Monthly volume (acre-feet)
April	0.8	0.7
May	5.6	4.7
June	8.0	6.8
July	10.4	8.9
August	8.4	7.1
September	5.2	4.3
October	1.6	1.5
Total	40.0	34.0

⁹ Crop Irrigation Requirements are found in the [Washington Irrigation Guide, Appendix A](#) (WAIG). These values are provided in inches, which are converted to acre-feet per acre by dividing by 12.

Step 2: Determine the instantaneous quantities

Primary reach

The instantaneous quantity assigned to the primary reach is the historic diversion rate authorized by the water right and confirmed by the extent and validity review (see *Change/transfer of a mitigating right*, page 15). In the scenario above there is no instantaneous quantity described. For the purposes of this example we will assume that the extent and validity review found that 0.2 cfs was historically diverted to irrigate the 10 acres. This constant rate is assigned to the primary reach throughout the period of use.

Primary Reach Flow (cfs) =

The instantaneous diversion rate authorized for the right and confirmed in the tentative determination.

Secondary reach

The instantaneous quantity assigned to the secondary reach is that portion of the diversion rate that would deliver the historic consumptively used water. This rate is estimated by converting the monthly consumptive use volume above to a constant flow rate. We use the known conversion factor of 1.9835 ac-ft/cfs/day, which states that almost 2 ac-ft is diverted from a stream if diverted at a rate of 1 cfs for 1 day (24 hours). The monthly consumptive volume from Table B-2 is divided by the product of 1.9835 ac-ft/cfs/day and days per month.

Secondary Reach Flow (cfs) =

Monthly consumptive use (ac-ft/month) ÷ [(1.9835 ac-ft/cfs/day) x (days per month)]

Table B-3: The monthly instantaneous quantities assigned to the secondary reach.

Month	Days per month	<u>Secondary Reach:</u> Monthly volume (acre-feet)	<u>Secondary Reach:</u> Instantaneous flow (cfs)
April	30	0.7	0.011
May	31	4.7	0.077
June	30	6.8	0.114
July	31	8.9	0.144
August	31	7.1	0.115
September	30	4.3	0.073
October	31	1.5	0.025

Step 3: Compile a schedule for the primary and secondary reaches

We compile a schedule for an instream flow right by bringing together the quantities calculated in the steps above. This schedule describes quantities of the instream flow right by month as in Table B-4. When Ecology issues a final change decision, this schedule, should be included.

Table B-4: This table is the schedule of the trust water right described in steps 1 and 2 above.

Month	Primary Reach Flow (cfs)	Primary Reach Volume (acre-feet per month)	Secondary Reach Flow (cfs)	Secondary Reach Volume (acre-feet per month)
April	0.2	0.8	0.011	0.7
May	0.2	5.6	0.077	4.7
June	0.2	8.0	0.114	6.8
July	0.2	10.4	0.144	8.9
August	0.2	8.4	0.115	7.1
September	0.2	5.2	0.073	4.3
October	0.2	1.6	0.025	1.5
TOTAL		40		34

Table B-5 is provided for ease in referring to the equations that were used to compile the schedule above in Table B-4.

Table B-5. Summary of the equations described in the steps for assigning quantities to the primary and secondary reaches.

Reach	Calculation
Primary Reach Flow (cfs)	The instantaneous diversion rate authorized for the right and confirmed in the extent and validity review.
Primary Reach Volume (acre-feet)	Monthly Crop Irrigation Requirement (acre-ft/month) ÷ Total Irrigation Requirement x Total Water Use
Secondary Reach Flow (cfs)	Monthly Consumptive Use ÷ (Days in each month x 1.9835 conversion factor for acre-ft/cfs/day)
Secondary Reach Volume (acre-feet)	Monthly Primary Reach Volume (acre-ft/month) x % Consumptive Use