

Application for a Managed Aquifer Recharge (MAR) Permit



Form No. ECY 070-663 (11-2022)

- Schedule a pre-application meeting before you apply.
- Refer to accompanying guidance to complete this form.
- Incomplete applications will be returned.
- All fees are non-refundable (RCW 90.03.470(13)).

Choose a processing option:

- Standard Processing (Department of Ecology). A minimum \$50 fee is required to apply. Additional fees may apply.
- Cost Reimbursement Processing (Ecology approved contractor). Contact Department of Ecology to obtain information on this option.

Guidance to Applicants for a Managed Aquifer Recharge Permit

Instructions for Form No. ECY 070-663

November 2022 ECY 070-663A

Publication and Contact Information

This document is available on the Department of Ecology's website at: https://apps.ecology.wa.gov/publications/summarypages/070-663A.html

Washington State Department of Ecology --- www.ecology.wa.gov

Water Resources Program P.O. Box 47600 Olympia, WA 98504-7600 Phone: 360-407-6872

Region/ Office	Counties served	Mailing Address	Phone
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Office of Columbia River	OCR has jurisdiction for designated OCR projects, and new projects located within one mile of the Columbia River.	1250 W Alder St Union Gap, WA 98903	509-457-7141
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Thurston, Skamania, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300

For additional information, contact the Ecology office where your project is located:

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 WRPublications@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

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Water Resources Program Washington State Department of Ecology Olympia, Washington This page is purposely left blank

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Guidance to Applicants for a Managed Aquifer Recharge Permit

Instructions for use with Form No. ECY 070-663

Introduction

This document provides guidance to applicants as they prepare the Application for a Managed Aquifer Recharge (MAR) Permit. The application process can be lengthy and complex, and wait times can be significant. Therefore, we strongly encourage applicants to read through this guidance document before preparing the MAR application.

A completed *Application for a Managed Aquifer Recharge (MAR) Permit* consists of the application form, required fees, an attached report addressing application requirements, and various attachments such as maps and other reports. This information is covered in the guidance that follows.

Managed Aquifer Recharge projects are often designed to augment low stream flows by adding water to spreading basins or other infiltration facilities, and having that water migrate through the surficial aquifer and discharge to a nearby stream later in the year when it is more beneficial to fish and related instream resources. MAR projects require access to a source of water. This supply will likely come from a new diversion and water right from high flow season (typically winter and spring) streamflow. This new diversion will likely be an interruptible surface water right issued for times of the year when flows are above an instream flow or a surface water source limitation. It could be from the same source to which the MAR water will return as groundwater baseflow, or from another nearby surface water source. As long as the applicant needs to apply for a new source of water, they will use this form. If the applicant has an existing surface water right that will supply the source water for a MAR project or wants to use Reclaimed Water as the source, they cannot use this form.

Intentionally adding water to Washington aquifers to increase groundwater baseflow discharge requires careful consideration to protect the water quality of both ground and surface water sources and to ensure it will not impair senior water rights.

In 1997, the state legislature recognized that it is in the public interest to encourage artificial recharge of aquifers by using seasonally available water when such water is in excess of the needs of either existing water right holders or instream resources (See Notes in RCW 90.03.255; 90.44.055). This is essentially what a MAR project does when implemented.

In this guidance, "Ecology" and "the department" refer to the Department of Ecology unless otherwise qualified. The intent of this document is to ensure that the applicant provides the information an investigator needs (whether from Ecology or a cost reimbursement contractor) to prepare a Report of Examination based on the science, laws, and administrative rules related to water right permitting in Washington state.

If, in using this guidance document, you are unsure of how to proceed, contact the Ecology office where your proposed project is located for assistance.

How to use this guidance

We have added references to applicable laws, rules, policies, and guidance in several sections in the application. We use these documents when we review and process your application. These references are intended to provide transparency to our process, and to aid you in understanding why we ask for certain material.

- <u>Schedule of Fees</u>¹
- <u>Cost-Reimbursement Agreements²</u>

¹ Schedule of fees, https://app.leg.wa.gov/RCW/default.aspx?cite=90.03.470

² Cost Reimbursement Agreements, https://app.leg.wa.gov/RCW/default.aspx?cite=90.03.265

- Applications for water right, transfer, or change ³
- Application procedure and contents (surface water)⁴
- <u>Applications procedure and contents, and consideration of water impoundment or other</u> resource management technique⁵ (groundwater)
- General declaration of fundamentals for utilization and management of waters of the state⁶
- <u>State Environmental Policy Act</u>⁷ (SEPA)
- <u>SEPA Procedures</u>⁸

Fees

Fees are non-refundable: <u>RCW 90.03.470(13)⁹</u>.

As all fees are non-refundable, DO NOT send in more than the minimum \$50 application fee. We will notify you if additional fees are required for your application.

Processing option you are choosing

There are two processing options available for MAR permit applications:

Option 1: Standard Processing

A minimum fee of \$50 is required to be submitted with your application. For larger impoundments, additional examination fees are required and will be requested by Ecology. You may estimate the total fee by using the <u>Fee Estimator¹⁰</u>.

If you choose standard processing, Ecology staff will review and process your application and issue the permit decision. Processing time depends on the complexity of the application, the number of competing applications filed before yours, and staff resources.

Option 2: Cost-Reimbursement Processing

You may choose a contractor from a list of cost-reimbursement contractors to process your application, or Ecology will assign one at your request. Ecology must agree to enter into a cost-reimbursement contract with you before a contractor will be retained.

By using the cost-reimbursement option, the applicant pays the full cost of processing their application. Typically, costs are paid to an approved consultant and Ecology. In some cases, you must pay to process any applications filed earlier than yours (senior applications) for the same body of water.

For the examination of an application to store water, a fee of two dollars for each acre foot of storage proposed shall be charged, but a minimum fee of fifty dollars must be paid at the time of application. In no case will the examination fee for a storage project be less than \$50 or more than \$25,000 dollars.

In addition to the examination fee, the applicant is required to bear other costs and fees. For example, publication of a legal notice is required for all applications, and the applicant must bear these publication costs. Additional fees are also required at the time a certificate is issued by Ecology.

³ Applications for water right, transfer, or change, https://apps.leg.wa.gov/RCW/default.aspx?cite=90.03.255

⁴ Application Contents (surface water), https://apps.leg.wa.gov/rcw/default.aspx?cite=90.03.260

⁵ Application Contents (groundwater), https://apps.leg.wa.gov/rcw/default.aspx?cite=90.44.055

⁶ General fundamentals, https://apps.leg.wa.gov/rcw/default.aspx?cite=90.54.020

⁷ SEPA, https://apps.leg.wa.gov/RCW/default.aspx?cite=43.21C

⁸ SEPA, https://apps.leg.wa.gov/RCW/default.aspx?cite=43.21C

⁹ RCW 90.03.470: Schedule of fees, https://app.leg.wa.gov/RCW/default.aspx?cite=90.03.470

¹⁰ Fee Estimator, https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-rights/Fee-estimator

If you decide to have your application processed using cost reimbursement, the \$50 application fee is waived (RCW 90.03.265¹¹). Information about the Cost Reimbursement¹² process is available on our website.

Date of pre-application consultation with Ecology Name of Ecology contact for pre-application

We strongly recommend pre-application consultation prior to filing your application. Pre-application consultations offer an opportunity to get questions answered and obtain advice on application requirements in order to prevent unnecessary work and expense. If you have completed a pre-application consultation with Ecology, your application should include the date and staff contact for the pre-application meeting.

 <u>Water Right Pre-Application Consultation Form</u> https://apps.ecology.wa.gov/publications/summarypages/ecy070440.html

Name of proposed Managed Aquifer Recharge project Water Resource Inventory Area (WRIA)

Enter the project name and Water Resource Inventory Area where the project is located. If you are unsure, use the <u>WRIA map look-up¹³</u> link, enter the address, and follow the instructions provided on the map to determine the WRIA.

Section 1. Applicant Information

Enter the applicant/business name of the person, organization, or water system for which the MAR permit is requested. For instance, if the permit is required for a public water system, enter the name of the system (e.g., Green Acres Water Works). Enter a mailing address, including zip, daytime telephone, an alternate or cell phone number, and an email address.

Provide the name of a contact person (if different from above) to contact in case Ecology has questions about the application or proposed project. Describe the relationship of the contact person to the applicant, e.g., consultant, water systems engineer, chair of water system, etc.

Section 2. Purpose and Period(s) of Use

Purpose(s) of use	Rate (check one box only) CFS GPM	Acre-feet per period (AF)	Period of infiltration (continuous, or date range of infiltration)
Surface and/or groundwater augmentation:			
MAR			
Surface and/or groundwater augmentation:			
MAR			
Surface and/or groundwater augmentation:			
MAR			
Surface and/or groundwater augmentation:			
MAR			
Total:		AF/YR	

All MAR projects need to identify the source of the water that will be infiltrated in the MAR. The project name provides Ecology and the applicant a reference that can be convenient when discussing the project with each other and stakeholders.

If you plan to apply the water infiltrated in a MAR project to beneficial use (once it has returned to a surface water source), you are required to apply for an additional water right permit for out-of-stream use (see applications below):

¹¹ RCW 90.03.265, https://app.leg.wa.gov/RCW/default.aspx?cite=90.03.265

 ¹² Cost Reimbursement, https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-rights/Cost-reimbursement
 ¹³ WRIA look-up,

https://waecy.maps.arcgis.com/apps/webappviewer/index.html?id=996e6b21ae394cc3a3b63c6da0c3aa0a

- <u>New Water Right Use Form No. ECY 040-1-14</u> (https://fortress.wa.gov/ecy/publications/SummaryPages/ECY040114.html)
- <u>Application for Change/Transfer of a Water Right Use Form No. ECY 040-1-97</u> https://fortress.wa.gov/ecy/publications/summarypages/ECY040197.html

Section 3. Point(s) of Diversion or Withdrawal Location(s)

Provide the source name and location information (legal description) for each water source. Use a separate application for each water source. Attach additional sheets if more than four points of diversion or withdrawal are proposed.

Source name (reference by number below)	QTRQTR	QTR	SEC	TWP (N)	RGE _E _W	PARCEL NO.
1. Johnson Creek	NW	NW	03	25	04E	400228301330
2. Johnson Creek	NE	NW	03	25	04E	400228301350
3.						
4.						

Point(s) of Diversion (SURFACE WATER ONLY)

 \Box SPRING \boxtimes CREEK \Box RIVER \Box LAKE \Box OTHER:

SOURCE (identified above)	TRIBUTARY TO:	GPS/ LAT-LONG
1.	Smith Creek	47.3725N 122.0902W
2.	Smith Creek	47.3730N 122.0900W
3.		
4.		

Section 4. Related Water Rights (if applicable)

Prepare a report that addresses the elements in this section and attach it to your application. Refer to the section number in your report.

Section	Required information
4.1	List any other water rights (applications, permits, certificates, or claims) related to this application. Include any rights that overlap the place of use.

List any water rights (applications, permits, certificates, or claims) related to this MAR application.

Provide a map displaying the information for this section, including points of diversion, points of withdrawal, and places of use.

Ecology needs to know details of your water rights portfolio, and if there are other water rights or claims that are attached to the proposed place of use in your application. Provide a list of water rights and identify which attribute (such as place of use or points of withdrawal) shares or overlaps with the requested MAR application

Section	Required information
4.2	Explain how the water rights listed above have been exercised.

Explain how the water rights provided in this section have been used and how that use relates to the proposed MAR project.

- If no water rights were identified, enter "NA."
- If one or more water rights were identified, provide the information discussed in your preapplication meeting with Ecology, which may include a feasibility study.

Section	Required information	
4.3	If Reclaimed water will supply any of the source water, identify all Reclaimed Water Permits issued by either the Department of Ecology or the Department of Health that will be used for this MAR project.	Chapter 173-219 WAC

The information below provides an <u>example</u> of the how to provide the requested information.

EXAMPLE

Name of proposed Managed Aquifer Recharge project: Covington Water District MAR Project

Water Resource Inventory Area (WRIA):

9

Source water right numbers:

S1-100726P

Source of water for project:

Covington Water District (CWD) is a partner in the Regional Water Supply System (RWSS). They get municipal supply from the Tacoma Public Utilities (TPU) Pipeline #5 that diverts water from the Green River at TPU's Headworks Diversion Dam. Half of the MAR water will come out of CWD's 14,077 acrefeet per year share of the RWSS. The other half of the MAR water will come from a new interruptible surface water right out of the Green River which is the subject of this water right application.

If you still have questions about your water rights, contact the appropriate Ecology regional office Water Resources Program staff, referenced in the inside cover page of this guidance.

Section 5. Place of Use/Location of Spreading Basin(s) or Infiltration Facilities

Identify each proposed spreading basin or other infiltration facility to the nearest section QTRQTR or parcel number. Attach a map and outline the area to be infiltrated, if applicable.

Infiltration site(s) QTRQTR section	Parcel No.	SEC	TWP (N)	RNG □ E □ W	Infiltration Rate (cfs)	LAT	LONG
SWSE	01	16	37	05E	1	48.6891	-122.1718

Horizontal Datum UGS84

□ NAD83 □

□ NAD27 □ other (describe)

Legal landowner of proposed place of use (if different than applicant)	Phone no:	Other no:
Address:		
City:	State:	Zip:
Email address (if available):		

Attach additional sheets as necessary.

If you don't own the property location for the infiltration method, have you secured permission from the owner(s)?

☐ Yes ☐ No

If you are using an infiltration trench to recharge the aquifer using buried perforated pipes [see WAC 173-218-040(5)(a)(iii)] is your underground injection control well registered according to WAC 173-218-060? Yes No

If yes, provide UIC Site ID#:

Describe the location of each infiltration gallery or spreading basin that the proposed project will use to provide water to the storage aquifer. All locations should be described using the Quarter-Quarter (QTR-QTR) section within which the feature is located, or parcel number. If the applicant has the GPS location, fill in the LAT/LONG boxes in the table. In the case of basins that cover multiple QTR-QTR section locations, use the location of the center point of the basin.

Identify each proposed infiltration gallery, or recharge pond to the nearest section QTR-QTR or parcel number, if known. In addition, provide a map showing the location(s) relative to cities, major water features, and Water Resource Inventory Area (WRIA) boundaries.

Section 6. Facility Operation Details

This section is used to provide a basic description of the storage aquifer (aquifer name) as well as basic information of the scope of the project, such as quantity of water to be stored, whether stored water is to be treated (i.e., chlorine, UV, ozone, etc.), and the timing of both when the water will be infiltrated and when it will emerge as groundwater baseflow discharge. See example below:

Proposed storage aquifer name: Sumas Aquifer	Number of acre-feet to be stored: 360	Maximum infiltration rate in cubic feet per second (cfs): 1 cfs			
Months of the year that infiltration recharge will occur: 6 months, November through April	Months of the year during which additional groundwater baseflow discharge will occur (use attachment to document how you determined this): 12 months				
Briefly describe any water treatment prior to infiltration (use attachment if necessary): none					

Provide a map displaying the extent of the storage aquifer and the location of regulated streams.

Section 7. System Design and Operation

Prepare a report that addresses the elements in this section and attach it to your application. **Refer** to the section number in your report.

Section	Required information	Reference(s)
7.1	Provide a description of the proposed water supply system from the point of diversion or withdrawal to the proposed place of use.	
7.2	7.2 Provide preliminary design plans and specifications for the proposed use, including diversion and conveyance facilities, if applicable, and the proposed flow rate and volume design capacity.	
7.3	For surface water diversions, describe how your plans comply with WDFW fish screening requirements.	Chapter 77.57 RCW

Section	Required information	Reference(s)
7.4	Provide a general timeline that includes the steps needed to begin the project, complete the project, and put the water to full beneficial use.	
7.5	7.5 Identify and discuss other land-use or environmental permits required and the timeline to obtain those permits.	

Section 8. Maps and Other Documentation

The following minimum requirements must be provided with your application. Attach a report(s) and refer to the section number in your responses.

Further information on each section is provided below.

Section	Required information	Reference(s)
8.1	 A map showing: Location of proposed managed aquifer recharge project Any associated existing points of diversion or withdrawal Estimated area where water will be infiltrated within the storage aquifer Well monitoring network locations Nearby hazards (e.g., geologic, contaminate, groundwater, flooding, stream channel migration, etc.) 	RCW 90.03.260(7)
8.2	 A copy of the feasibility study conducted, if done, to document: The site characterization Aquifer characteristics Anticipated infiltration rate The chemical compatibility of the source water and native groundwater The available aquifer capacity demonstrating that infiltration of water can occur without creating overflows to the surface An estimate of the groundwater baseflow timing and location(s) of discharge If a feasibility study hasn't been conducted, these types of information will be needed by Ecology Water Resources Program technical staff before they can evaluate this MAR permit application. Describe how you will obtain this information. 	RCW 90.03.260(7)
8.3	A Quality Assurance Project Plan (QAPP) to demonstrate to Ecology's Water Quality Program that surface, and ground waters of the state will not be degraded by this MAR project. Ecology's Water Quality Program has developed such a QAPP for grant applicants to use when applying for MAR project funding from the Streamflow Restoration Grant Program under RCW 90.94. The QAPP can be found at: <u>https://apps.ecology.wa.gov/publications/documents/1910050.pdf</u> For projects <u>not</u> using a new surface water right as the source for the MAR facility, applicants are <u>strongly urged</u> to discuss the project with Water Resources staff before developing any QAPPs.	RCW 90.03.260(7)
8.4	A copy of the legal description of property where the MAR project is located (taken from a real estate contract, property deed, or title insurance policy).	
8.5	If platted property, a complete copy of the plat map.	
8.6	The site address and detailed driving instructions to the project site.	

8.1 Project Map

In addition to the maps required in Sections 2, 3, 4, 5, and 6, provide your project map, showing:

- The proposed aquifer project area
- Include public land survey lines (Section, Township, and Range)
- Source diversion and/or withdrawal locations
- Any associated infiltration facilities or spreading basins
- Well monitoring network locations
- Nearby hazards (e.g., geologic, contaminate, groundwater, flooding, stream channel migration, etc.)

Section 9. Environmental Assessment

Prepare a report that addresses the elements in this section and attach it to your application. **Refer** to the section number in your report.

Section	Required information	Reference(s)
9.1	Describe the aquatic uses of any related surface water bodies (i.e., fish and wildlife, recreation and aesthetic, water quality, etc.).	RCW 90.54.020

Indicate whether your project requires any other land use or environmental permits. Identify the status of those applications or permits. Indicate when all needed permits should be obtained. Examples of other permits include Hydraulic Project Approval for in-water construction, clearing and grading permit for preparing land for agricultural use, and building permits for facility construction.

<u>For surface water diversions</u>, describe how your plans comply with Washington Department of Fish and Wildlife's (WDFW) fish screening requirements.

For surface water diversion, provide confirmation that your fish screening does and will comply with requirements of WDFW as stated in <u>Chapter 77.57 RCW</u>, Fishways, Flow, and Screening. (https://app.leg.wa.gov/RCW/default.aspx?cite=77.57&full=true)

9.2	Indicate whether the related surface water is fish-bearing, including whether it is inhabited by salmonids. List species and the times of year they are present. Refer to Salmonscape at https://apps.wdfw.wa.gov/salmonscape/	RCW 90.54.020
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Indicate whether the related surface water is fish-bearing, including whether it is inhabited by salmonids. List species and the times of year they are present.

In addition to using the link to the WDFW <u>SalmonScape</u> (https://apps.wdfw.wa.gov/salmonscape/) website, applicants are encouraged to work closely with regional office staff of WDFW and/or to retain the services of a professional fishery biologist in making the required determinations and conducting the environmental assessment.

9.3	A copy of State Environmental Policy Act (SEPA) Threshold Determination.	RCW 43.21C WAC 173-802
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Your environmental assessment and analysis must, at a minimum, describe:

- 1) The environment within the MAR project area, including:
 - a) Proximity to contaminated areas;
 - b) Present and prior land use(s) within the MAR project area;
 - c) Location(s) of historical or existing wetland habitat(s);
 - d) Location(s) of historical or existing flood plain(s);
 - e) Location(s) of historical or existing surface water body or spring, including documented:
 - i. Base flows;
 - ii. Seven-day low flows;

- iii. Maximum flows.
- 2) Adverse impacts to the surrounding environment by the MAR project, including, but not limited to:
 - a) Slope stability;
 - b) Wetland habitat;
 - c) Flood plain;
 - d) Ground deformation;
 - e) Surface water body or spring.
- 3) If an environmental assessment has already been performed for the purposes of this specific MAR project, the application may simply refer to that documentation and need not repeat that analysis.

Attach a copy of any SEPA checklists or environmental analyses related to this project with this application

If there are multiple points of diversion consider the sum total of the diversions when evaluating the threshold criteria below:

- It is a surface water right application for more than 1 cubic feet per second <u>WAC 197-11-800 (4)</u>. If the project is for agricultural irrigation, the threshold is increased to 50 cubic feet per second, so long as the project will not receive public subsidies;
- It is a groundwater right application for more than 2,250 gallons per minute <u>WAC 197-11-800 (4)</u>;
- It is an application combined with other water right applications for the same project, exceeds the amounts above:
- It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
- It is part of a series of exempt actions that, considered together, trigger the need to do a threshold determination, as defined under <u>WAC 197-11-305</u>.

Section 10. Signatures

The following parties **must** sign the permit application:

- Applicant (or authorized representative)
- Legal Owner or Part-Owner Place of Use

All **property** owners within the proposed place of use must sign the application. If you do not have the signatures of all property owners, do not submit the application. For water rights proposed to serve water to customers, such as public water systems, municipal water suppliers, and irrigation districts, it is only necessary to include the signature of organization's authorized representative.

If there are multiple owners such as LLCs that are owned by the applicant, include supporting documents (such as corporation ownership information from the Washington Secretary of State's <u>Corporations and Charities Filing System</u> (https://ccfs.sos.wa.gov/#/) to explain the relationship between the legal land owners and applicant, if any.