

Application for a Permit to
Store Water in a Reservoir
 (Standard Review)



Oregon Water Resources Department
 725 Summer Street NE, Suite A
 Salem, Oregon 97301-1266
 503-986-0900
 www.oregon.gov/OWRD

You must use this form for any reservoir storing more than 9.2 acre-feet and with a dam more than 10 feet high.

SECTION 1: APPLICANT INFORMATION AND SIGNATURE

Applicant

NAME Terry Long		PHONE (HM) (503) 443-4401	
PHONE (WK)	CELL		FAX
ADDRESS PO Box 145			
CITY Mitchell	STATE OR	ZIP 97750	E-MAIL * canyonranching@yahoo.com

Organization

NAME		PHONE	FAX
ADDRESS			CELL
CITY	STATE	ZIP	E-MAIL *

Agent – The agent is authorized to represent the applicant in all matters relating to this application

AGENT / BUSINESS NAME Cascade GeoEngineering; contact: Jim Newton		PHONE (360) 907-4162	FAX ---
ADDRESS 21145 Scottsdale Drive			CELL
CITY Bend	STATE OR	ZIP 97701	E-MAIL * newtonjim@hotmail.com

Note: Attach multiple copies as needed

* By providing an e-mail address, consent is given to receive all correspondence from the Department electronically. (Paper copies of the final order documents will also be mailed.)

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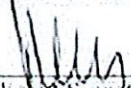
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By my signature below I confirm that I understand:

- I am asking to use water specifically as described in this application.
- Evaluation of this application will be based on information provided in the application packet.
- I cannot legally store water until the Water Resources Department issues a permit to me.
- The Department encourages all applicants to wait for a permit to be issued before beginning construction of any proposed diversion. Acceptance of this application does not guarantee a permit will be issued.
- If I begin construction prior to the issuance of a permit, I assume all risks associated with my actions.
- If I get a permit, I must not waste water.
- If development of the water use is not according to the terms of the permit, the permit can be cancelled.
- The water use must be compatible with local comprehensive land use plans.
- Even if the Department issues a permit, I may have to stop using water to allow senior water right holders to get water to which they are entitled.



I (we) affirm that the information contained in this application is true and accurate.


 Applicant Signature

Terry Long
 Print Name and Title if applicable

5/12/21
 Date

SECTION 2: PROPERTY OWNERSHIP

Indicate if you own all the lands associated with the project from which the water is to be diverted, conveyed, and used.

- YES, there are no encumbrances.
- YES, the land is encumbered by easements, rights of way, roads or other encumbrances.
- NO, I have a recorded easement or written authorization permitting access.
- NO, I do not currently have written authorization or easement permitting access.
- NO, written authorization or an easement is not necessary, because the only affected lands I do not own are state-owned submersible lands, and this application is for irrigation and/or domestic use only (ORS 274.040).
- NO, because water is to be diverted, conveyed, and/or used only on federal lands.

Affected Landowners: List the names and mailing addresses of all the owners of any lands that are not owned by the applicant and that are crossed by the proposed ditch, canal or other work, even if the applicant has obtained written authorization or an easement from the owner. *(Attach additional sheets if necessary).*

Legal Description: You must provide the legal description of: (1) the property from which the water is to be diverted, (2) any property crossed by the proposed ditch, canal or other work, and (3) any property on which the water is to be used as depicted on the map.

The Long Reservoir is located in township 11 south, range 20 east, section 9, W.M., tax lot 200. This storage application proposes to store groundwater from 4 wells in Long Reservoir. The four proposed wells are located below:

- Well 1 is located in township 11 south, range 20 east, section 10, W.M. tax lot 200.
 - 750 feet west and 625 feet north from the southeast corner of section 10.
- Well 2 is located in township 11 south, range 20 east, section 15, W.M. tax lot 200.
 - 2430 feet west and 1900 feet south from the northeast corner of section 15.
- Well 3 is located in township 11 south, range 20 east, section 15, W.W. tax lot 500.
 - 1260 feet west and 2715 feet south from the northeast corner of section 15.
- Well 4 is located in township 11 south, range 20 east, section 22, W.M. tax lot 2800.
 - 600 feet east and 1040 feet south from the northwest corner of section 22.

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Conveyance from each well to Long Reservoir is described below:

- Well 1 will convey water from the well directly west through township 11 south, range 20 east, section 10 and continue to section 9 where Long Reservoir resides.
- Well 2 will convey water from the well northwest across section 15, crossing section 10 and continue westward to section 9 where Long Reservoir resides.
- Well 3 will convey water from the well northwest across section 15, crossing section 10 and continue westward to section 9 where Long Reservoir resides.
- Well 4 will convey water from the well northwest across section 22, crossing section 15 and section 16 and continue northwest to section 9 where Long Reservoir resides.

SECTION 3: SOURCE OF WATER

A. Reservoir Name: Long Reservoir

B. Source: Provide the name of the water body or other source from which water will be diverted, and the name of the stream or lake it flows into. Indicate if source is run-off, seepage, or an unnamed stream or spring.

Source 1: Well 1	Tributary to: N/A
TRSQQ of POD: T11S, R20E, Section 10, SE of SE	
Source 2: Well 2	Tributary to: N/A
TRSQQ of POD: T11S, R20E, Section 15, SW of NE	
Source 3: Well 3	Tributary to: N/A
TRSQQ of POD: T11S, R20E, Section 15, NE of SE	
Source 4: Well 4	Tributary to: N/A
TRSQQ of POD: T11S, R20E, Section 22, NW of NW	

- Is the proposed reservoir in a wetland (as determined by DSL)? Yes No Don't know
- Is the proposed reservoir an enlargement of an existing dam/reservoir? Yes No
- Is the proposed reservoir in-channel of a stream or off-channel: In-channel Off-Channel
- If the reservoir is proposed to be in-channel, is the stream: Perennial Intermittent Ephemeral

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- If the reservoir is proposed to be in-channel, has ODFW determined that native migratory fish are present?
 Yes No Don't know
- Is the reservoir in the 100-year floodplain? Yes No Don't know
- If the reservoir is not in the channel of a stream, state how it is to be filled: Long Reservoir already is constructed and receives 23 acre-feet from Permit R-13455, source is Bear Creek, in addition to 24 acre-feet of additional water for annual maintenance (seepage and evaporation) under transfer T-8691. The 97 acre-feet requested in this application will be pumped from Proposed Wells 1, 2, 3, and 4.

SECTION 4: SENSITIVE, THREATENED OR ENDANGERED FISH SPECIES PUBLIC INTEREST INFORMATION

This information must be provided for your application to be accepted as complete. The Water Resources Department will determine whether the proposed use will impair or be detrimental to the public interest with regard to sensitive, threatened or endangered fish species.

To answer the following questions, refer to the map shown on [Attachment 3](#) or the link below to determine whether the proposed point of diversion (POD) is located in an area where the Upper Columbia, the Lower Columbia, and/or the Statewide public interest rules apply.

For more detailed information, click on the following link and enter the TRSQQ or the Lat/Long of a POD and click on "Submit" to retrieve a report that will show which section, if any, of the rules apply:
https://apps.wrd.state.or.us/apps/misc/lkp_trsqq_features/

If you need help to determine in which area the proposed POD is located, please call the customer service desk at (503) 986-0801.

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Upper Columbia - OAR 690-033-0115 thru -0130

Is the POD located in an area where the Upper Columbia Rules apply?

Yes No

If yes, you are notified that the Water Resources Department will consult with numerous federal, state, local and tribal governmental entities so it may determine whether the proposed use is consistent with the "Columbia River Basin Fish and Wildlife Program" adopted by the Northwest Power Planning Council in 1994 for the protection and recovery of listed fish species. The application may be denied, heavily conditioned, or if appropriate, mitigation for impacts may be needed to obtain approval for the proposed use.

If yes,

- I understand that the proposed use does not involve appropriation of direct streamflow during the time period April 15 to September 30, except as provided in OAR 690-033-0140.
- I understand that I will install, operate and maintain a fish screen and fish passage as listed in ORS 498.301 through 498.346, and 509.580 through 509.910, to the specifications and extent required by Oregon Department of Fish and Wildlife, prior to diversion of water under any permit issued pursuant to this application.
- I understand that the Oregon Department of Environmental Quality will review my application to determine if the proposed use complies with existing state and federal water quality standards.
- I understand that I will install and maintain water use measurement and recording devices as required by the Water Resources Department, and comply with recording and reporting permit condition requirements prior to diversion or use of water under any permit issued pursuant to this application.

Lower Columbia - OAR 690-033-0220 thru -0230

Is the POD located in an area where the Lower Columbia rules apply?

Yes No

If yes, you are notified that that the Water Resources Department will determine, by reviewing recovery plans, the Columbia River Basin Fish and Wildlife Program, and regional restoration programs applicable to threatened or endangered fish species, in coordination with state and federal agencies, as appropriate, whether the proposed use is detrimental to the protection or recovery of a threatened or endangered fish species and whether the use can be conditioned or mitigated to avoid the detriment.

If a permit is issued, it will likely contain conditions to ensure the water use complies with existing state and federal water quality standards; and water use measurement, recording and reporting required by the Water Resources Department. The application may be denied, or if appropriate, mitigation for impacts may be needed to obtain approval of the proposed use.

If yes, provide the following information (the information must be provided with the application to be considered complete).

Yes No The proposed use is for more than **one** cubic foot per second (448.8 gpm) and is not subject to the requirements of OAR 690, Division 86 (Water Management and Conservation Plans).

If yes, provide a description of the measures to be taken to assure reasonably efficient water use:

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Statewide - OAR 690-033-0330 thru -0340

Is the POD located in an area where the Statewide rules apply?

Yes No

If yes, the Water Resources Department will determine whether the proposed use will occur in an area where endangered, threatened or sensitive fish species are located. If so, the Water Resources Department, Department of Fish and Wildlife, Department of Environmental Quality, and the Department of Agriculture will recommend conditions required to achieve “no loss of essential habitat of threatened and endangered (T&E) fish species,” or “no net loss of essential habitat of sensitive (S) fish species.” If conditions cannot be identified that meet the standards of no loss of essential T&E fish habitat or no net loss of essential S fish habitat, the agencies will recommend denial of the application unless they conclude that the proposed use would not harm the species.

SECTION 5: WATER USE

- a) The use of the impounded water will be: Fish life, Wildlife, Fire Protection, Recreation, and Irrigation
- b) The amount of water to be stored is: 97 acre-feet.
- c) The area submerged by the reservoir, when filled, will be 9.8 acres. (This includes the 23 acre-feet of storage that is already permitted under Permit R-13455).

SECTION 6: DAM HEIGHT AND COMPOSITION

The maximum height of the structure will be approximately 27-feet for Long Reservoir feet above streambed or ground surface at the centerline of the crest of the dam.

Attach preliminary plans, specifications and supporting information for the dam and impoundment area including 1) dam height, 2) width, 3) crest width, 4) surface area and 5) preliminary fish passage design.

Note: If your dam height is greater than or equal to 10.0' above land surface AND your reservoir will store equal to or greater than 9.2 acre-feet, engineered plans and specifications must be approved by the Department's Dam Safety Section prior to storage of water.

The dam will be (check one): Earthfill Concrete Flash board Other

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If "other," provide the description: Long Reservoir has been previously constructed as an earth fill embankment structure.

SECTION 7: PRIMARY OUTLET WORKS

a) Describe the location and the dimensions of the outlet conduit through the dam:

NOTE: Most dams across a natural stream channel will need an outlet conduit having a minimum diameter of 8 inches or greater.

On the NW portion of the Long Reservoir dam, one 10" diameter smooth polyethylene pipe runs through the embankment for 94 feet and extends beyond the embankment on each side. On the upstream side of the dam, a manual valve controls the discharge from the inlet at the bottom of the reservoir. A second, vertical overflow pipe bypasses the valve on the 10" outlet pipe and releases water when the level reaches the inlet of the vertical overflow pipe.

b) How and when will the outlet be operated?

The Long Reservoir primary outlet has a control handled mounted at the top of the dam that operates the valve encased inside the dam embankment structure (see the attached design package). The outlet valve structure can be operated to allow for irrigation flows to exit the reservoir and feed the pump station below the dam outlet works, as irrigation water is cycled through the reservoir to hold 'bulge water' for water rights on the property.

c) If ODFW has determined fish are present in the stream, how do you propose to protect fish through the outlet conduit (the conduit does not constitute fish passage)?

This permit application pertains to groundwater pumping as the source to contribute additional water for storage and a fish screen is not applicable.

Further, this is an existing off-channel reservoir. Fish screening and bypass has been installed and approved by ODFW for the surface water diversion that feeds the reservoir for other water rights.

SECTION 8: EMERGENCY SPILLWAY

a) Describe the location and the dimensions of the spillway channel.

The reservoir spillway is located on the NE portion of the dam and runs along the side of a nearby native hill. See attachment for dimensions.

b) How will the emergency spillway be designed to prevent erosion?

Please see attached engineering drawings and description that have prior approval from OWRD Dam Safety Division. The proposed modified spillway consists of a constructed concrete and steel weir inlet that conveys water through the dam via a 16-inch nominal diameter HDPE pipe. The 16-inch pipe conveys emergency spillway flows to constructed native ground surface beyond the toe of the dam discharging into a stilling basin that will dissipate spillway flow energy prior to reconnection to Bear Creek. The proposed spillway modifications to the reservoir have been reviewed and approved by OWRD Dam Safety and state engineer Keith Mills, PE in September 2020.

c) What is the maximum design flow for the spillway? (Should be able to handle high flow events, 10-year flood events? 50-year flood events?)

The reservoir spillway is designed for a 100-year flood event.

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Name	Address	Telephone (Area Code)

SECTION 9: WATER QUALITY

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- a) Describe how the reservoir will be managed to maintain water quality in the reservoir and downstream. The reservoir receives irrigation diversion water to satisfy other water rights on the ranch during the irrigation season, thus turning the water in the reservoir. Additionally, the reservoir is equipped with wind driven turbine air compressors that inject air into the lowest portion of the reservoir at or near the upstream toe of the dam embankment. As for water downstream in Bear Creek, the reservoir will be managed as not to allow emergency spillway flow out of the reservoir except for significant storm flow events.
- b) Describe how the perimeter of the reservoir will be buffered to limit nutrient and bacteria contamination. The ranch does not have livestock on the ranch, only receiving browsing encounters with native wildlife. There is not inflow of impaired water into the reservoir that may likely have an effect on the reservoir nutrient load or potential for bacteria contamination.
- c) Describe how annual maintenance of the reservoir will be accomplished without discharging contaminated water instream. With no impaired water anticipated in the reservoir, and with seasonal irrigation water exchanging the water in the reservoir during the authorized irrigation season of March 1 through November 1 of each year, discharge of reservoir water will only occur on cultivated farm lands, without direct reconnection to surface water.

SECTION 10: PROJECT SCHEDULE (List Month and Year)

- a) Proposed date construction work will begin: Reservoir and fish screening have already been constructed and approved by ODFW many years ago. Modifications to the existing reservoir spillway will be completed upon approval of an increase in storage volume beyond the current 23 acre-feet plus irrigation bulge water volumes. (Fish passage approval is necessary prior to construction.)
- b) Proposed date construction work will be completed: Within 1-year following approval of a permit to increase the storage volume to the full 120-acre-foot volume.
- c) Proposed date water use will be completed: October 2026.

SECTION 11: WITHIN A DISTRICT

Check here if the point of diversion or place of use are located within or are served by an irrigation or other water district.

Irrigation District Name	Address	
City	State	Zip

SECTION 12: REMARKS

Use this space to clarify any information you have provided in the application.
This application is related to the groundwater application and is intended to be processed in conjunction with the groundwater application.

Minimum Requirements Checklist

Minimum Requirements (OAR 690-310-0040, OAR 690-310-0050 & ORS 537.140)

Include this checklist with the application

Check that each of the following sections are completed. The application will be returned if all required items are not included. If you have questions, please call the Water Rights Customer Service Group at (503) 986-0900.

Please submit the original application and signatures to the Water Resources Department. Applicants are encouraged to keep a copy of the completed application.

- X SECTION 1: Applicant Information and SignatureX
- SECTION 2: Property Ownership
- X SECTION 3: Source of Water
- X SECTION 4: Sensitive, Threatened or Endangered Fish Species Public Interest Information
- X SECTION 5: Water Use
- X SECTION 6: Dam Height and Composition
- X SECTION 7: Primary Outlet Works
- X SECTION 8: Emergency Spillway
- X SECTION 9: Water Quality
- X SECTION 10: Project Schedule
- N/A SECTION 11: Within a District
- X SECTION 12: Remarks

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Include the following additional items:

- Land Use Information Form with approval and signature of local planning department (*must be an original*) or signed receipt.
 - Provide the legal description of: (1) the property from which the water is to be diverted, (2) any property crossed by the proposed ditch, canal or other work, and (3) any property on which the water is to be used as depicted on the map.
 - Fees - Amount enclosed: \$ 2,242.40
See the Department's Fee Schedule at www.oregon.gov/owrd or call (503) 986-0900.
 - Map that includes the following items:
 - Map must be prepared by a Certified Water Rights Examiner
 - Permanent quality and drawn in ink
 - Even map scale not less than 4" = 1 mile (example: 1" = 400 ft, 1" = 1320 ft, etc.)
 - North directional symbol
 - Township, Range, Section, Quarter/Quarter, Tax Lots
 - Reference public-land survey corner on map
 - Location of each dam by reference to a recognized public land survey corner (distances north/south and east/west)
 - Indicate the area of use by Quarter/Quarter and tax lot identified clearly
 - TBD - Number of acres per Quarter/Quarter and hatching to indicate area of use if for primary irrigation, supplemental irrigation, or nursery

TBD – Specific locations of lands to be irrigated will be determined and included in the Secondary Use Application for irrigation use of stored water.

 - TBD-Location of main canals, ditches, pipelines or flumes (if well is outside of the area of use)
- TBD-location of ditch/pipeline from wells to reservoir will be determined at time of installation and testing of each well location to best match well output and routing to reservoir.**

Please note that a secondary application is required if there are out-of-reservoir uses associated with this application.

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Receipt for Request for Land Use Information

Applicant name: Terry Long

City or County: Wheeler County Staff contact: **Matt Davis**

Signature: *MD* Phone: **541-763-2126** Date: **5/14/21**

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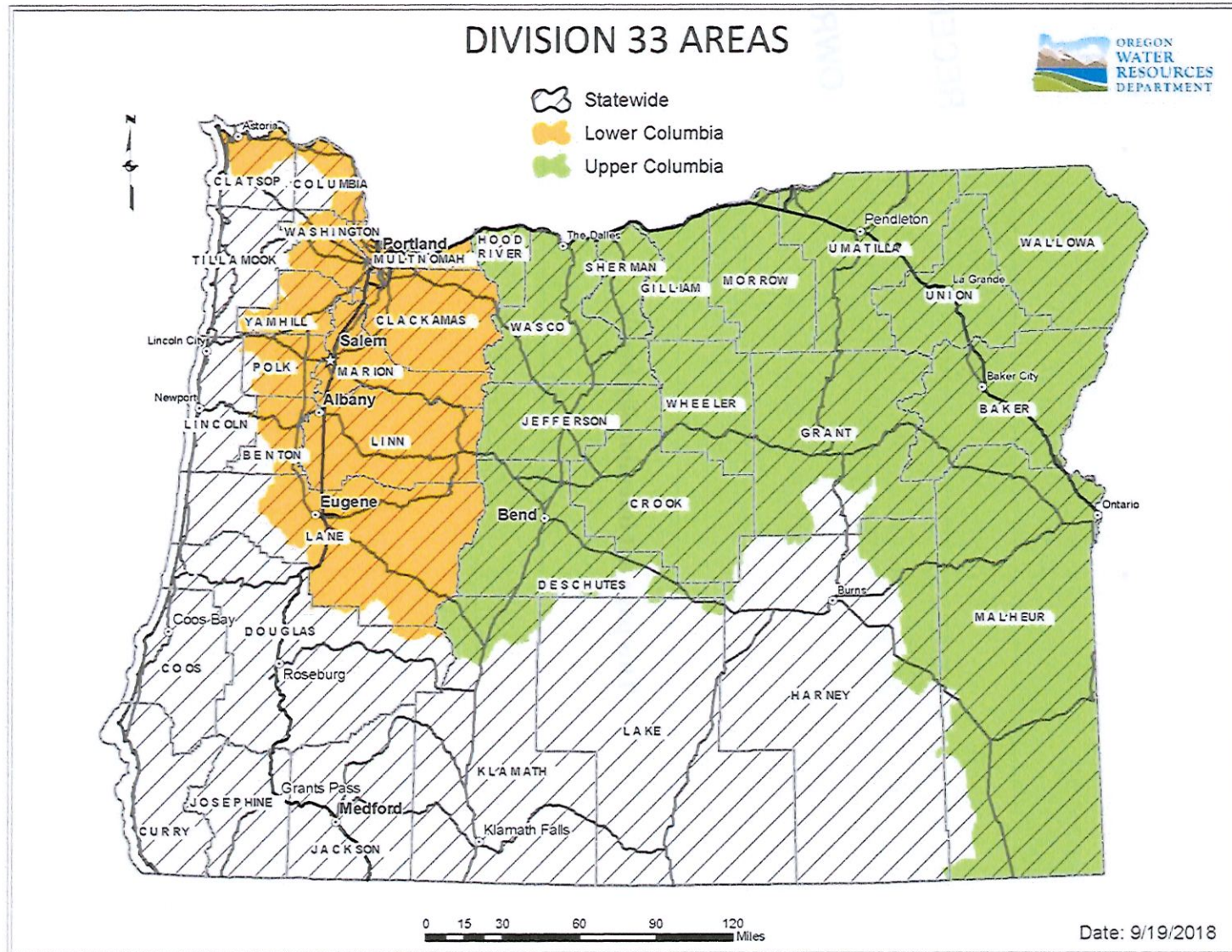
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DIVISION 33

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Figure 1: Map of Division 33 Areas



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For more detailed information, click on the following link and enter the TRSQQ or the Lat/Long of a POD and click on "Submit" to retrieve a report that will show which section, if any, of the rules apply: https://apps.wrd.state.or.us/apps/misc/lkp_trsqq_features/



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Date Received (Date Stamp Here)

OWRD Over-the-Counter Submission Receipt

Applicant Name(s) & Address: Terry Long
Po BOX 145 Mitchell, OR 97750

Transaction Type: Water Right App

Fees Received: \$ 2242.40

Cash

Check:

Check No. 1309

Name(s) on Check: Cascade Geoenineering LLC

Address on Check: 21145 Scottsdale dr.
Bend, OR 97701

Thank you for your submission. Oregon Water Resources Department (Department) staff will review your submittal as soon as possible.

If your submission is determined to be complete, you will receive a receipt for the fees paid and an acknowledgement letter stating your submittal is complete.

If determined to be incomplete, your submission and the accompanying fees will be returned with an explanation of deficiencies that must be addressed in order for the submittal to be accepted.

If you have any questions, please feel free to contact the Department's Customer Service staff at 503-986-0801 or 503-986-0810.

Sincerely,

OWRD Customer Service Staff

Submission received by: C. M. M. M. M.
(Name of OWRD staff)

Instructions for OWRD staff:

- Complete this Submission Receipt, and make two (2) copies. Place one copy with the check/cash; and place the other copy with the submission (i.e., the application or other document).
- Date-stamp all pages. (NOTE: Do not stamp check.)
- Give this original Submission Receipt to the applicant.
- Record Submission Receipt Information on the "RECEIVED OVER THE COUNTER" log sheet.
- Place the Submission Receipt with check/cash in the small top drawer (i.e., "Fiscal Pick Up Drawer"). Place the Submission Receipt with submission (application/other document) in the large bottom drawer.