



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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Governor Brad Little  
Director John H. Tippetts

June 10, 2019

Mike Lidgard  
U.S. EPA Region 10  
Office of Water and Watersheds  
NPDES Permits Unit (OWW-191)  
1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

Subject: Final 401 Water Quality Certification for Jug Mountain LLC ID-0028029

Dear Mr. Lidgard:

The Boise Regional Office of the Department of Environmental Quality (DEQ) has reviewed the above-referenced proposed final permit for Jug Mountain LLC. Section 401 of the Clean Water Act requires that states issue certifications for activities which are authorized by a federal permit and which may result in the discharge to surface waters. In Idaho, DEQ is responsible for reviewing these activities and evaluating whether the activity will comply with Idaho's Water Quality Standards, including any applicable water quality management plans (e.g., total maximum daily loads). A federal discharge permit cannot be issued until DEQ has provided certification or waived certification either expressively, or by taking no action.

This letter is to inform you that DEQ is issuing the attached final 401 certification subject to the terms and conditions contained therein.

Please contact me directly at (208) 373-0420 or via email at [Aaron.Scheff@deq.idaho.gov](mailto:Aaron.Scheff@deq.idaho.gov) to discuss any questions or concerns regarding the content of this final certification.

Sincerely,

A handwritten signature in blue ink that reads "Aaron Scheff".

Aaron Scheff  
Regional Administrator  
Boise Regional Office

c: John Drabek, U.S. EPA Region 10

ec: Loren Moore, DEQ State Office



## Idaho Department of Environmental Quality Final §401 Water Quality Certification

June 10, 2019

**NPDES Permit Number(s):** ID0028029 Jug Mountain Ranch, LLC

**Receiving Water Body:** Cold Creek tributary to Boulder Creek

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Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon its review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

### Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

### ***Pollutants of Concern***

Jug Mountain Ranch discharges the following pollutants of concern: 5-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), *E.coli* bacteria, pH, ammonia, nitrite, total kjeldahl nitrogen, and total phosphorus (TP). Effluent limits have been developed for all of these pollutants.

### ***Receiving Water Body Level of Protection***

The Jug Mountain Ranch discharges to the Cascade Lake Reservoir and its tributaries within the North Fork Payette Subbasin assessment unit (AU) 17050123SW011\_02 (Boulder/Willow Creek—1<sup>st</sup> and 2<sup>nd</sup> order irrigated sections). This AU has not yet been designated. Because DEQ presumes most waters in the state will support cold water aquatic life and primary or secondary contact recreation beneficial uses, undesignated waters are protected for these uses (IDAPA 58.01.02.101.01.a). In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2014 Integrated Report, this AU is not fully supporting one or more of its presumed uses. The aquatic life use is not fully supported. Causes of impairment include total phosphorus. The contact recreation beneficial use is fully supported. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the aquatic life use and Tier II protection (IDAPA 58.01.02.051.02) in addition to Tier I for the contact recreation use (IDAPA 58.01.02.052.05.c).

### ***Protection and Maintenance of Existing Uses (Tier I Protection)***

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing and designated uses and the level of water quality necessary to protect existing and designated uses shall be maintained and protected. In order to protect and maintain existing and designated beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses. The effluent limitations and associated requirements contained in the Jug Mountain Ranch permit are set at levels that provide reasonable assurance the discharge will comply with the narrative and numeric criteria in the WQS.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations for point

source discharges, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL.

Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

The EPA-approved *Cascade Reservoir-Phase I Watershed Management Plan* (DEQ 1996) and *Cascade Reservoir, Phase II Watershed Management Plan* (DEQ 1998) established phosphorus wasteload allocations for point sources. The wasteload allocations in these TMDLs were designed to ensure the Cascade Lake Reservoir and its tributaries would achieve the water quality necessary to support its existing and designated aquatic life beneficial uses and comply with the applicable numeric and narrative criteria.

The 1996 and 1998 TMDLs were completed prior to the Jug Mountain development; therefore Jug Mountain did not receive a wasteload allocation for TP. Additionally, since the TMDLs did not incorporate a reserve for growth, the TMDL requires new discharges to offset 30% of the nonpoint phosphorus loads from the land on which the facility is located in addition to a no-net-increase in phosphorus loading from their facility. In accordance with this requirement, Jug Mountain is able to offset its phosphorus load and meet the no-net increase requirement through a grazing management plan, streambank stability, and riparian habitat improvements. The effluent limitations and associated requirements contained in the Jug Mountain Ranch final permit are set at levels that comply with the no-net-increase requirements for discharges that were not included in the 1996 and 1998 TMDLs.

The 2011 *Cascade Reservoir Tributary TMDL Addendum* was completed to address the sediment loading from tributaries, including the Boulder Creek subwatershed, into the Cascade Reservoir. Boulder Creek received a bank stability target of 80% to address the nonpoint sources of sediment in the watershed. The discharge from Jug Mountain is not expected to impact bank stability and implementation of the grazing management plan is expected to offset phosphorus loading. To date, Jug Mountain has inherently improved bank stability in the watershed as the result of changes in grazing management to reduce historical grazing.

In sum, the effluent limitations and associated requirements contained in the Jug Mountain Ranch permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the Cascade Reservoir 1996 and 1998 TMDLs. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Cascade Lake Reservoir and its tributaries in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

### ***High-Quality Waters (Tier II Protection)***

The Cascade Lake Reservoir and its tributaries are considered high quality for recreation. As such, the water quality relevant to recreation uses of the Cascade Lake Reservoir and its tributaries must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to recreation uses of the Cascade Lake

Reservoir and its tributaries (IDAPA 58.01.02.052.05). These include the following: bacteria and total phosphorus. Effluent limits are set in the proposed and existing permit for these pollutants.

For a reissued permit or license, the effect on water quality is determined by looking at the difference in water quality that would result from the activity or discharge as authorized in the current permit and the water quality that would result from the activity or discharge as proposed in the reissued permit or license. For a new permit or license, the effect on water quality is determined by reviewing the difference between the existing receiving water quality and the water quality that would result from the activity or discharge as proposed in the new permit or license (IDAPA 58.01.02.052.06.a).

### Pollutants with Limits in the Current and Proposed Permit

For pollutants that are currently limited and will have limits under the reissued permit, the current discharge quality is based on the limits in the current permit or license (IDAPA 58.01.02.052.06.a.i), and the future discharge quality is based on the proposed permit limits (IDAPA 58.01.02.052.06.a.ii). For the Jug Mountain Ranch permit, this means determining the permit's effect on water quality based upon the limits for bacteria and total phosphorus in the current and proposed permits. Table 1 provides a summary of the current permit limits and the proposed or reissued permit limits.

**Table 1. Comparison of current and proposed permit limits for pollutants of concern relevant to uses receiving Tier II protection.**

Pollutant	Units	Current Permit			Proposed Permit			Change <sup>a</sup>
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
<b>Pollutants with limits in both the current and proposed permit</b>								
<i>E. coli</i>	no./100 mL	126		406	126		406	NC
Total Phosphorus	mg/l	3	—	—	3	—	—	NC
	lb/day	1.8	—	—	1.8	—	—	

<sup>a</sup> NC = no change.

The proposed permit limits for other pollutants of concern that have limits in Table 1, *E. coli* and total phosphorus, are the same as those in the current permit (“nc” in change column). Therefore, it is unlikely that any adverse change in water quality or significant degradation will result from the discharge of these pollutants.

In sum, DEQ concludes that this discharge permit complies with the Tier II provisions of Idaho's WQS (IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06).

### Other Conditions

This certification is conditioned upon the requirement that any material modification of the permit or the permitted activities—including without limitation, any modifications of the permit to reflect new or modified TMDLs, wasteload allocations, site-specific criteria, variances, or other new information—shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

## Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the “Rules of Administrative Procedure before the Board of Environmental Quality” (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Kati Carberry, Boise Regional Office, (208) 373-0434, [Kati.Carberry@deq.idaho.gov](mailto:Kati.Carberry@deq.idaho.gov).



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Aaron Scheff

Boise Regional Administrator

Boise Regional Office