May 14, 2018

Brad Wilson
Bogus Basin Recreational Assn. Inc.
2600 Bogus Basin Rd
Boise, ID 83702

Re: Reference No. NWW-2017-00627, Bogus Basin Recreational Assoc., Snowmaking Pond

Dear Mr. Wilson:

The Department of Environmental Quality (DEQ) has considered water quality certification for construction related to the referenced project. DEQ is issuing the attached 401 Water Quality Certification subject to the terms and conditions contained therein.

This certification shall remain in effect until December 31, 2020, at which time construction must be completed.

If you have any questions or further information to present please contact Julia Achabal at (208) 373-0321, or via email at Julia.Achabal@deq.idaho.gov.

Sincerely,

[Signature]

Aaron Scheff
Regional Administrator
Boise Regional Office

JRA/am

cc: Christen Marve Griffith, COE, Boise
Loren Moore, DEQ State Office
2018AKF46
Idaho Department of Environmental Quality
Final §401 Water Quality Certification

May 14, 2018

404 Permit Application Number: NWW-2017-00627 – Bogus Basin Recreational
Association Snowmaking Pond

Applicant/Authorized Agent: Bogus Basin Recreational Assn. Inc.

Project Location: Latitude N 43° 45' 49", longitude W -166° 06' 47". Boise County,
near Bogus Basin Ski Area, Idaho.

Receiving Water Body: Bogus Creek

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 activities receiving Section 404 dredge and fill permits and issue water quality
certification decisions.

Based upon its review of the joint application for permit, received on March 5, 2018, 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 activity 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.

This certification shall remain in effect until December 31, 2020 at which time construction must
be completed.

Project Description

The purpose of this project is to build a retention dam and in-stream 70 acre-foot water storage
pond to provide water for snowmaking purposes. 830 linear feet of Bogus Creek will be
impacted by construction and 0.39 acres of adjacent wetlands will be converted to open water.

Construction includes a bypass diversion structure and development of an approximate 1000
linear foot open bypass channel. This channel will be constructed along the east side of the
retention pond, run through the embankment via culvert, then back into an open channel below
the dam before re-entering Bogus Creek downstream.
This project will result in the permanent loss of 230 linear feet of stream and 0.39 acres of adjacent wetlands will be converted to open water. Mitigation for wetland loss will include 0.78 acres of new wetlands around the project site.

**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**

The primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

**Receiving Water Body Level of Protection**

This project is located on Bogus Creek within the Payette Subbasin assessment unit (AU) 17050122SW004_02 (Shafer Creek – 1st and 2nd order). This AU has been designated for cold water aquatic life, salmonid spawning and primary contact recreation beneficial uses. 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).

This AU is included in Category 3 (Unassessed Waters) of the 2014 Integrated Report. Therefore, DEQ must provide an appropriate level of protection on a case-by-case basis using
information available at this time (IDAPA 58.01.02.052.05.b). Because no data is currently available the applicant has agreed to assume that the affected waterbody is high quality. Therefore, DEQ has provided Tier 2 antidegradation protection to Bogus Creek. For future 401 certifications, DEQ will evaluate the level of antidegradation protection based on available information at that time.

The only pollutant of concern for this project is sediment. Because sediment is not relevant to contact recreation, project activities will not result in a lowering of water quality with respect to recreational beneficial use support. Sediment is relevant to the aquatic life beneficial use and the permittee must minimize the transport of sediment though implementation of best management practices (BMPs).

**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 uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state’s numeric and narrative criteria. These criteria are set at levels that protect and maintain designated and existing beneficial uses.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both existing and designated uses is maintained and protected 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 Bogus Creek is considered high quality for cold water aquatic life and salmonid spawning. As such, the water quality relevant to these uses 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 cold water aquatic life and salmonid spawning uses of the Bogus Creek (IDAPA 58.01.02.052.06). The only pollutant of concern is sediment. Construction of this Bogus Basin snowmaking pond project should occur in a period of low flow. A Storm Water Pollution Prevention Plan will be developed to manage and maintain storm water quality at the construction site. Before construction of the proposed embankment
and pond, a permanent concrete bypass/flow measurement structure and a lined bypass channel (or temporary pipeline during construction) will be constructed to divert water around the project site reducing the potential for increased turbidity and downstream water quality impacts from pond excavation. A temporary sediment basin will be constructed on the downstream end of the disturbed channel reach to divert naturally occurring flows and settle out suspended sediment, if needed, before the water is returned to Bogus Creek. The transitions into and out of the sediment basin will be riprap protected to further prevent soil erosion and turbidity. During construction of the reservoir pool and embankment foundation, a permanent underdrain pipe will be installed to convey groundwater inflows and seepage from pond excavations through the embankment work area. The underdrain pipe will be extended to near the top of an additional temporary sediment basin constructed to help decant cleaner water from the top and prevent turbid waters from entering Bogus Creek. The underdrain pipe will exit at the toe of the embankment into a riprap outfall to prevent scour. A perforated underdrain pipe will also be installed beneath the pond liner and this pipe feature will ultimately connect to the permanent embankment underdrain pipe. Throughout project construction, as materials are excavated to construct the pond and embankment, they will be stockpiled in areas below the embankment or near the proposed pump station but will be protected from groundwater or surface water intrusion as another measure to preserve Bogus Creek water quality.

Onsite mitigations for project impacts include the development of 0.78 acres of wetland to offset the loss of 0.39 acres of existing wetlands. New wetlands will be constructed along the bypass channel and below the dam to provide additional creek shade, habitat and proper wetland function offsetting impacts in the project area. The new and increased wetland areas will have habitat comparable to Bogus Creek and existing wetlands. Healthy trees and shrubs within the disturbed wetland area will be transplanted to the bypass channel to speed soil stabilization and riparian effect. Stockpiles of soils and wetland foliage from the impacted wetlands will be used in the mitigation areas to hasten remediation of the site. All areas will be seeded and vegetated with native scrub/shrub and woody species to speed soil stabilization and minimize erosion. Additionally, woody debris from the project area will be chipped and spread on top of exposed soils to prevent soil scour. As the project is proposed, DEQ does not expect long-term impacts or a lowering of water quality to Bogus Creek. As such, the project complies with IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06.

Permanent erosion and sediment controls must be implemented which will minimize or prevent future sediment contributions from the project area. The provisions in the 404 permit, coupled with the conditions of this certification, ensure that degradation to Bogus Creek will not occur. Therefore, DEQ concludes that this project complies with the Tier II provisions of Idaho’s WQS (IDAPA 58.01.02.051.02; 58.01.02.052.06 and 58.01.02.052.08).
Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.

2. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances—including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.

3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.

4. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.

5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.

6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.

7. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the Section 404 permit.

8. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit must be obtained. More information can be found at https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10.

Special Conditions

9. Construction shall not proceed until the Professional Engineer on the project reviews and accepts a dewatering plan submitted by the contractor.

10. Saturated material removed during excavation and stockpiled shall be managed to prevent turbid water from entering Bogus Creek.
Fill Material

11. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
12. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.
13. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
14. All temporary fills shall be removed in their entirety on or before construction completion.
15. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

16. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ’s Catalog of Stormwater Best Management Practices for Idaho Cities and Counties, available online at http://www.deq.idaho.gov/media/494058-entire.pdf. Other resources may also be used for selecting appropriate BMPs.
17. One of the first construction activities shall be placing permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
18. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
19. Permanent erosion and sediment control measures shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.
20. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
21. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
22. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
23. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
24. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
25. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
26. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.

27. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.

28. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. Placement of clean aggregate at all construction entrances or exits and other BMPs such as truck or wheel washes, if needed, must be used when earth-moving equipment will be leaving the site and traveling on paved surfaces.

**Turbidity**

29. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02). *Any violation of this standard must be reported to the DEQ regional office immediately.*

30. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity. Visual observation is acceptable to determine whether BMPs are functioning properly. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs).

31. Containment measures such as silt curtains, geotextile fabrics, and silt fences must be implemented and properly maintained to minimize instream sediment suspension and resulting turbidity.

32. Turbidity monitoring must be conducted, recorded, and reported.

   Results from the compliance point sampling must be compared to the background levels sampled during each monitoring event. If the downstream turbidity exceeds upstream turbidity by 50 nephelometric turbidity units (NTU) or more, the project is causing an exceedance of the WQS. If an exceedance occurs, the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the applicant must modify the activity (this may include modifying existing BMPs).

   Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The log must include background measurements (in NTUs) or observations; compliance point measurements or observations; comparison of background and compliance point monitoring as a numeric value (in NTUs) or in narrative form; and location, time, and date for each sampling event. The report must describe all exceedances and subsequent actions taken and the effectiveness of the action including subsequent monitoring.

**In-water Work**

33. Work in open water is to be kept at a minimum and only when necessary. Equipment shall work from an upland site to minimize disturbance of waters of the state. If this is not
practicable, appropriate measures must be taken to ensure disturbance to the waters of the state is minimized.

34. Construction affecting the bed or banks shall take place only during periods of low flow.
35. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
36. Work in waters of the state shall be restricted to areas specified in the application.
37. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
38. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

**Pollutants/Toxics**

39. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

**Vegetation Protection and Restoration**

40. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
41. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
42. Fencing and other barriers should be used to mark the construction areas.
43. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
44. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

**Dredge Material Management**

45. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

**Management of Hazardous or Deleterious Materials**

46. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
47. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
48. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.

49. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.

50. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.

51. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).

52. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, the responsible persons in charge must
   a. Make every reasonable effort to abate and stop a continuing spill.
   b. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.
   c. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
      · Boise Regional Office: 208-373-0550 / 888-800-3480
   d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

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 Julia Achabal, Boise Regional Office, 373-0321 or Julia.Achabal@deq.idaho.gov.

Aaron Scheff
Regional Administrator
Boise Regional Office