Fact Sheet

The U.S. Environmental Protection Agency (EPA) Proposes to Issue a National Pollutant Discharge Elimination System (NPDES) Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act (CWA) to:

Garden Creek Farms Fish Division

NPDES Permit Number: ID0028533

Public Comment Start Date: October 15, 2018 Public Comment Expiration Date: November 14, 2018

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The EPA Proposes To Issue NPDES Permit

The EPA proposes to issue the NPDES permit for the facility referenced above. The draft permit places conditions on the discharge of pollutants from the aquaculture facility to waters of the United States. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged from the facility.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures
- a listing of proposed effluent limitations and other conditions for the facility
- a map and description of the discharge location
- technical material supporting the conditions in the permit

State Certification

The EPA has requested that Idaho Department of Environmental Quality (IDEQ) certify the permit under Section 401 of the Clean Water Act. Once the EPA receives the certification, the EPA will post the certification on its website. The EPA cannot issue a permit until IDEQ has granted or waived 401 certification. Comments regarding the certification should be directed to:

DEQ Idaho Falls Regional Office 900 N. Skyline Drive, Suite B Idaho Falls, ID 83402

Public Comment

Persons wishing to comment on, or request a Public Hearing for the draft permit for this facility may do so in writing by the expiration date of the Public Comment period. A request for a Public Hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for Public Hearings must be in writing and should be submitted to the EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, and all comments have been considered, the EPA's regional Director for the Office of Water and Watersheds will make a final decision regarding permit issuance. If no substantive comments are received, the tentative conditions in the draft permit will become final, and the permit will become effective upon issuance. If substantive comments are received, the EPA will address the comments and issue the permit. The permit will become effective no less than 30 days after the issuance date, unless an appeal is submitted to the Environmental Appeals Board within 30 days pursuant to 40 CFR 124.19.

Documents are Available for Review

The draft NPDES permit and related documents can be reviewed or obtained by visiting or contacting the EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday at the address below. The draft permits, fact sheet, and other information can also be found by visiting the Region 10 NPDES website at "http://EPA.gov/r10earth/waterpermits.htm."

US EPA Region 10 Suite 155 1200 Sixth Avenue, OWW-191 Seattle, Washington 98101 (206) 553-0523 or Toll Free 1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

The fact sheet and draft permits are also available at:

EPA Idaho Operations Office 950 West Bannock Street, Suite 900 Boise, Idaho 83702

DEQ Idaho Falls Regional Office 900 N. Skyline Drive, Suite B Idaho Falls, ID 83402

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Acronyms

| AML | Average Monthly Limit |
|--------------------|---|
| AWL | Average Weekly Limit |
| BA | Biological Assessment |
| BAT | Best Available Technology economically achievable |
| BCT | Best Conventional pollutant control Technology |
| BE | Biological Evaluation |
| BO or BiOp | Biological Opinion |
| BOD ₅ | Biochemical oxygen demand, five-day |
| BOD _{5u} | Biochemical oxygen demand, ultimate |
| BMP | Best Management Practices |
| BPT | Best Practicable |
| °C | Degrees Celsius |
| C BOD ₅ | Carbonaceous Biochemical Oxygen Demand |
| CFR | Code of Federal Regulations |
| CFS | Cubic Feet per Second |
| CV | Coefficient of Variation |
| CWA | Clean Water Act |
| DMR | Discharge Monitoring Report |
| DO | Dissolved oxygen |
| EA | Environmental Assessment |
| EFH | Essential Fish Habitat |
| EIS | Environmental Impact Statement |
| EPA | U.S. Environmental Protection Agency |
| ESA | Endangered Species Act |
| FR | Federal Register |
| Gpd | Gallons per day |
| HUC | Hydrologic Unit Code |
| ICIS | Integrated Compliance Information System |
| IDEQ | Idaho Department of Environmental Quality |
| LA | Load Allocation |
| | |

| lbs/day | Pounds per day |
|---------|---|
| LTA | Long Term Average |
| mg/L | Milligrams per liter |
| Ml | Milliliters |
| ML | Minimum Level |
| µg/L | Micrograms per liter |
| mgd | Million gallons per day |
| MDL | Maximum Daily Limit or Method Detection Limit |
| Ν | Nitrogen |
| NEPA | National Environmental Policy Act |
| NOAA | National Oceanic and Atmospheric Administration |
| NPDES | National Pollutant Discharge Elimination System |
| NSPS | New Source Performance Standards |
| OWW | Office of Water and Watersheds |
| O&M | Operations and maintenance |
| QAP | Quality assurance plan |
| RP | Reasonable Potential |
| RPM | Reasonable Potential Multiplier |
| RWC | Receiving Water Concentration |
| SS | Suspended Solids |
| TMDL | Total Maximum Daily Load |
| TSD | Technical Support Document for Water Quality-based Toxics Control |
| | (EPA/505/2-90-001) |
| TSS | Total suspended solids |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | United States Geological Survey |
| WLA | Wasteload allocation |
| WQBEL | Water quality-based effluent limit |
| WQS | Water Quality Standards |
| | |

I. Background Information

A. General Information

This fact sheet provides information on the draft NPDES permit for the following entity:

| Table 1. General Facility Inf | ormation |
|-------------------------------|---|
| NPDES Permit #: | ID0028533 |
| Applicant: | Garden Creek Farms |
| | Fish Division |
| Type of Ownership: | Private |
| Physical Address: | 15196 Highway 93 |
| | Challis, ID 83226 |
| Mailing Address: | P.O. Box 510 |
| | Challis, ID 83226 |
| Facility Contact: | Derrick Bosco |
| | Manager |
| | derrickb@gardencreekfarms.com |
| | 208-879-2378 |
| Facility Location: | 44.388127, -114.095621 |
| Receiving Water: | Warm Spring Hydro Canal and Warm Spring Creek |
| Facility Outfall Location: | Outfall 001: 44.387704, -114.096780 |
| | Outfall 002: 44.388582, -114.094610 |

Table 1. General Facility Information

B. Industry Description

At 40 CFR §122.24, the U.S. Environmental Protection Agency (EPA) defines concentrated aquatic animal production (CAAP) facilities as point sources subject to the National Pollutant Discharge Elimination System (NPDES) permit program. There are criteria for both cold water and warm water CAAPs. Garden Creek Farms – Fish Division (referred to hereafter as Garden Creek Farms) is a warm water CAAP meeting the following definition:

- 1. A facility as a hatchery, fish farm, or other facility that contains, grows, or holds warm water fish species or other warm water aquatic animals in ponds, raceways, or other similar structures, and includes:
 - a. Facilities which discharge at least 30 days per year, and
 - b. Facilities which produce more than 100,000 harvest weight pounds of aquatic animals per year.

Warm water aquatic animals include, but are not limited to, the Ameiuride, Centrarchidae and Cyprinidae families of fish, e.g., respectively, catfish, sunfish and minnows. The terms "aquaculture facility" and "hatchery" are used interchangeably to be synonymous with "CAAP facility."

Aquaculture facilities may use one of several types of production systems, including ponds, flow-through systems, and recirculating systems. Infrequent discharges may occur as a result of a storm event or draining for harvest or repairs. Due to decomposition of biological material and settling of solids (feces, uneaten feed, and sediment), ponds are capable of treating and removing pollutants in the water; and when discharges occur, pollutant loads are often relatively low because of the settling that has taken place within the pond. Management practices to minimize the discharge of pollutants from pond systems focus on minimizing disturbance of sediments, reducing drainage frequency, managing water levels, minimizing erosion in and around pond banks, feed management, and the proper use and storage of chemicals and therapeutic agents.

Flow-through production systems provide an environment that imitates the natural environment. In such systems, fresh water is diverted from streams, springs, and/or wells, and enters continuously at the top of the system near the water source. Smaller, younger fish are typically held at the top of the system near the water source, which provides the highest quality water. As fish grow, they can tolerate lower quality water, and they are moved to downstream units. Some flow-through systems are full-flow, discharging a single combined effluent stream with large water volumes and dilute pollutant concentrations. Others have two or more discharge streams, with the primary discharge from the flow-through production units, and smaller discharges from off-line settling basins. The most significant pollutants discharged from flow-through systems are solids from uneaten feed and feces, which are primarily organic matter which may have high 5-day biochemical oxygen demand (BOD₅) if not properly treated, and organic nitrogen and phosphorus.

Recirculating production systems utilize tanks with continuously flowing water and side stream treatment technologies, which continuously treat a portion of the flow and return it to the production system.

C. Permit History

The most recent NPDES permit for the aquaculture facility where Garden Creek Farms is located was issued to Epicenter Aquaculture (Epicenter) on October 25, 2007 (ID0028266) and became effective on December 1, 2007. Epicenter sold the facility and requested permit coverage be terminated; the permit was terminated on March 23, 2012. The previous permit was issued concurrently with two Idaho Aquaculture General Permits (IDG130000 and IDG131000) and conditions for all three permits were similar. An NPDES application for permit issuance was submitted by the permittee on December 8, 2014, and updated July 20, 2018. Because the previous permit coverage was terminated and there has been a change in ownership, this permit is being treated as a new permit issuance.

II. Idaho NPDES Authorization

In 2014, the Idaho Legislature revised the Idaho Code to direct the Idaho Department of Environmental Quality (IDEQ) to seek authorization from the EPA to administer the NPDES permit program for the State of Idaho. On August 31, 2016, IDEQ submitted a program package pursuant to CWA Section 402(b) and 40 CFR 123.21. On June 5, 2018, the EPA approved IDEQ's request for NPDES permit program authorization. Authority over NPDES permits will be phased; the first phase (i.e., municipal permits) will transfer to IDEQ on July 1, 2018. IDEQ would obtain permitting for industrial facilities on July 1, 2019. At that point

in time, all documentation required by the permit must be sent to IDEQ rather than to EPA and any decision under the permit stated to be made by EPA or jointly between EPA and IDEQ will be made solely by IDEQ. Permittees will be notified by IDEQ when this transition occurs.

III. Facility Information

A. Facility Overview

Garden Creek Farms is a fish hatchery located near Challis, Idaho. The hatchery first began operating in 1994. The previous facility (Epicenter) was a traditional flow-through facility but Garden Creek Farms took ownership in 2014 and made changes to increase its ability to recirculate its wastewater and improve its full-flow sediment basin. Garden Creek Farms operates at a ratio of 70 recirculated wastewater to 30 percent flow-through wastewater. The facility raises tilapia and barramundi, both warmwater species. The typical annual production is 78,000 pounds of tilapia and 26,000 pounds of barramundi. The facility has 18 raceways and 28 tanks. There are 8 recirculating grow tanks each with a 20,000 gallon capacity and 20 flow-through tanks varying in size from 300 gallons to 1,200 gallons. See Figure 1 in Appendix A for an overview of the facility.

Treatment Process

The facility's source water is from a series of geothermal springs near the headwaters of Warm Springs Creek, which were channeled into the Warm Spring Hydro Canal approximately 100 yards downstream of the headwaters.

Effluent from the raceways and recirculating tanks goes to a central drain via 8-inch pipes and then to a pump shed with a drum filter before passing to the full-flow settling basin. Additionally, the raceways have quiescent zones, where solids can settle out, and each zone drains to the settling basin. The facility continuously discharges; depending on the season and influent flow rates, varying amounts of effluent are pumped from the facility's settling basin through Outfall 1, which discharges into the Warm Spring Hydro Canal. Additionally, because it is a full-flow settling basin, water is continually drained from the surface of the settling basin into Warm Spring Creek via a stand pipe (Outfall 002) that maintains a consistent water level in the basin (and is used if the basin needs to be drained). Based on the discharge volume leaving the raceways and hatchery facility, Garden Creek Farms estimates its typical discharge rate is 12 cubic feet per second (cfs).

Raceway screens and rearing tanks are cleaned/brushed as needed, which is typically daily.

Effluent Characterization

Like with Epicenter, as well as hatcheries covered under the Aquaculture General Permits, the pollutants in the effluent are primarily associated with feed and feces. Other potential pollutants include residuals of drugs or chemicals used for maintenance of fish health or residuals of chemicals used for cleaning the facility. Garden Creek Farms does not use chemicals for cleaning. The only reported drugs/chemicals used by the facility for fish health are potassium permanganate, hydrogen peroxide, and florfenicol.

IV. Receiving Water

In drafting permit conditions, the EPA must analyze the effect of the facility's discharge on the receiving water. The details of that analysis are provided later in this Fact Sheet. This section summarizes characteristics of the receiving water that impact that analysis.

A. Receiving Water

This facility discharges to Warm Spring Creek and the Warm Spring Hydro Canal, which flows through a hydroelectric generator prior to joining Warm Spring Creek. Both water bodies are in the Warm Spring Creek Assessment Unit within the Upper Salmon Subbasin (HUC 17060201), Water Body Unit SL-132_04 (Warm Spring Creek – source to Hole-in-Rock Creek).

Warm Spring Hydro Canal and Warm Spring Creek do not have specific use designations in the Idaho Water Quality Standards (IDAPA 58.01.02.110 through 160). Cold water aquatic life is a presumed use. The Water Quality Standards state that such "undesignated waterways" are to be protected for the uses of cold water aquatic life and primary contact recreation (IDAPA 58.01.02.101.01).

In addition, Water Quality Standards state that all waters of the State of Idaho are protected for industrial and agricultural water supply, wildlife habitats and aesthetics (IDAPA 58.01.02.100.03.b and c, 100.04 and 100.05).

B. Water Quality

The EPA is not aware of any water quality data for the receiving water.

C. Water Quality Limited Waters

The State of Idaho's 2014 Integrated Report Section 5 (section 303(d)) lists Warm Spring Creek, from its source to Hole-in-Rock Creek, as impaired for sediment. The Warm Spring Hydro Canal flows into Warm Spring Creek downstream of the facility.

In September 2016, IDEQ published the Upper Salmon River Subbasin Assessment and TMDL: 2016 Addendum and Five-Year Review. It was approved by EPA on December 7, 2016. The Warm Spring Creek TMDL includes a wasteload allocation (WLA) for total suspended sediment (TSS) for the facility because it is located in the Warm Spring Creek watershed. The WLA is 471 lbs/day, based on Epicenter's reported discharge during operations (6.9 cfs) and technology-based effluent limit for TSS of 12.7 mg/L from the 2007 NPDES permit for Epicenter. As explained in more detail below, the draft permit proposes effluent limits consistent with the assumptions and requirements of the WLA.

D. Low Flow Conditions

Both receiving waters contain flow periodically but have a critical low flow of 0 cfs.

V. Effluent Limitations and Monitoring

In general, the CWA requires that the effluent limits for a particular pollutant be the more stringent of either technology-based limits or water quality-based limits. Technology-based limits are set according to the level of treatment that is achievable using available technology. A water quality-based effluent limit is designed to ensure that the water quality

standards applicable to a waterbody are being met and may be more stringent than technology-based effluent limits.

A. Pollutants of Concern

Pollutants of concern are those that either have technology-based limits or may need water quality-based limits. The EPA identifies pollutants of concern for the discharge based on those which:

- Have a technology-based limit
- Have an assigned WLA from a TMDL
- Had an effluent limit in the previous permit
- Are present in the effluent monitoring. Monitoring data are reported in the application and Discharge Monitoring Report (DMR) and any special studies
- Are expected to be in the discharge based on the nature of the discharge

To identify pollutants of concern for Garden Creek Farms, the EPA evaluated the Idaho Aquaculture General Permits, the previous permit for the facility (Epicenter), the permit application, and the Upper Salmon River TMDL. Based on the EPA's analysis, the pollutants of concern for Garden Creek Farms are five-day biochemical oxygen demand (BOD₅), biological wastes, floating and submerged matter, TSS, nutrients (phosphorus and nitrogen), ammonia, and therapeutic drugs and chemicals.

B. Technology-Based Effluent Limits

The intent of a TBEL is to require a minimum level of treatment based on currently available treatment technologies while allowing a discharger to choose and use any available control technique to meet the limitations. Accordingly, every individual member of a discharge class or category is required to operate their water pollution control technologies according to industry-wide standards and accepted engineering practices.

In developing TBELs for this permit, the EPA used the permit issued in 2007 to Epicenter because it used data from a warmwater hatchery in Idaho that produces tilapia, and current operations are similar to those at Epicenter, it incorporated the Effluent Limit Guidelines (ELGs) for CAAP facilities, and it was consistent with the Idaho Aquaculture General Permits (IDG130000 and IDG131000). Limitations and other requirements of these guidelines, standards, regulations, and permit are described below.

ELG-Based TBELs

40 CFR Part 451, which became effective September 23, 2004, contains ELGs for CAAP facilities. Although the NPDES permit program applies to all discharges from CAAP facilities, as defined at 40 CFR §122.24 (and in Section I.B. of this Fact Sheet), only those facilities that produce, hold, or contain 100,000 pounds or more of fish during any twelvemonth period are subject to the CAAP ELGs. The CAAP ELGs include narrative effluent limitations for production facilities, as well as reporting requirements for all facilities subject to the rule. The ELGs do not include numeric limitations because the EPA concluded that best management practices (BMPs) focusing on solids controls would also effectively control concentrations of other pollutants of concern, such as nutrients, because other pollutants are either bound to the solids or are incorporated into them. The draft permit contains the following narrative TBELs based upon the ELGs at 40 CFR §451.11(a) through (e).

- 1) The permittee must develop and maintain a BMP Plan on site, which describes how it will achieve the following requirements:
 - a. *Solids control.* The permittee must employ efficient feed management and feeding strategies; identify and implement procedures for routine cleaning of rearing units and off-line settling basins, and procedures to minimize any discharge of accumulated solids during the inventorying, grading, and harvesting of aquatic animals in the production system; and remove and properly dispose of aquatic animal mortalities on a regular basis.
 - b. *Materials storage*. The permittee must properly store drugs, pesticides, and feed in a manner to prevent spills, and implement procedures for containing, cleaning, and disposing of any spilled material.
 - c. *Structural maintenance*. The permittee must inspect, conduct regular maintenance of, and repair the production and wastewater treatment systems on a routine basis.
 - d. *Recordkeeping*. The permittee must document feed amounts and numbers and weights of aquatic animals to calculate feed conversion ratios, and document the frequency of cleanings, inspections, maintenance, and repairs.
 - e. *Training*. The permittee must train personnel in spill prevention and response and on the proper operation and cleaning of production and wastewater treatment systems.

40 CFR §451.11 allows the permitting authority to specify any additional requirements it deems necessary to apply as TBELs based on BPJ. Using this authority, the EPA has added two other minimum requirements under Recordkeeping and expanded the requirements associated with Solids Control to also include the broader operational controls listed below.

1) Recordkeeping:

- a. Document all medicinal and therapeutic chemical usage for each treatment at the facility.
- b. Maintain a copy of the label (with treatment application requirements) and the Material Safety Data Sheet (MSDS) in the facility's records for each drug or chemical used at the facility.
- 2) Operational Requirements:
 - a. Treatment equipment used to control the discharge of floating, suspended or submerged matter must be cleaned and maintained at a frequency sufficient to prevent overflow or bypass of the treatment unit by floating, suspended, or submerged matter.
 - b. Prevent fish from entering quiescent zones, full-flow, and off-line settling basins. Fish which have entered quiescent zones or basins must be removed as soon as practicable.

c. Control the release of transgenic or non-native fish or their diseases as specified in any permit(s) issued by the Idaho Department of Fish and Game for import, export, transport, release, or sale of such species, as required under IDAPA §13.01.10.100.

Numeric TBELs

The 2007 permit for Epicenter had numeric TBELs for TSS and total phosphorus (TP) based on facility-specific data. Because fish species produced and the quiescent zones and settling basin at Garden Creek Farms are the same treatment technology used at Epicenter, the same TBELs are proposed for this permit. However, because Garden Creek Farms has shifted towards using more recirculated wastewater, and that could affect the effluent quality, the TBELs may need to be modified in the future. No additional TBELs are being proposed as the EPA has determined that application of TSS and TP TBELs, combined with the national ELGs are the most appropriate TBELs for Garden Creek Farms. The numeric TBELs are presented in Table 2.

| Pollutant | Average Monthly Limit | Maximum Daily Limit | |
|----------------------|-----------------------|---------------------|--|
| | (mg/L) | (mg/L) | |
| Net TSS ¹ | 12.7 | 31.5 | |
| Net TP ¹ | 0.2 | 0.4 | |

 Table 2. Proposed TBELs for Outfalls 001 and 002

 1 Net = effluent concentration – influent concentration

C. Water Quality-Based Effluent Limits

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards. Discharges to State or Tribal waters must also comply with limitations imposed by the State or Tribe as part of its certification of NPDES permits under section 401 of the CWA. 40 CFR §122.44(d)(1) requires that permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State or Tribal water quality standard, including narrative criteria for water quality. If there is reasonable potential, the EPA must determine whether the TBEL will be protective of the corresponding water quality criteria, and if the TBEL is not protective of water quality standards are met and be consistent with any available TMDL WLA (40 CFR §122.44(d)(1)(vii)(B)). This section summarizes the proposed WQBELs.

Narrative WQBELs

In the absence of Idaho numeric criteria for the drugs and chemicals used at Garden Creek Farms and because solids control is one of the primary mechanisms for ensuring attainment of Idaho's narrative water quality standards within this permit, the following narrative WQBELs will apply to ensure discharges do not violate Idaho's general surface water quality criteria at IDAPA §58.01.02.200.

a) All approved drugs and registered pesticides must be used in accordance with applicable label directions (FIFRA or FDA), except as part of participation in

Investigational New Animal Drug (INAD) studies or as prescribed by a veterinarian;

- b) Discharge of any toxic substances, including drugs, pesticides, disinfectants, or other chemicals in concentrations that impair designated uses are prohibited;
- c) Discharge of copper sulfate and chelated copper compounds to waters of the U.S. is prohibited;
- d) Discharge of untreated cleaning wastewater (e.g., obtained from a vacuum or standpipe bottom drain system or rearing/holding unit disinfection) is prohibited;
- e) Discharge of floating, suspended or submerged matter, including solids, foam, fish guts, blood or dead fish, in amounts causing nuisance or objectionable condition or that may impair designated beneficial uses in the receiving water is prohibited;
- f) Removal of dam boards in raceways or ponds which allow accumulated solids in excess of the limits to be discharged to waters of the U.S. is prohibited;
- g) Sweeping, raking, or otherwise intentionally discharging accumulated solids from raceways or ponds to waters of the U.S. is prohibited; and
- h) Containing, growing or holding fish within the settling basin is prohibited; this prohibition does not apply to basins or ponds where fish are used as part of the waste treatment system.

Numeric WQBELs

The EPA concluded that where there is no impairment in the receiving water or applicable WLAs, the TBELs and narrative WQBELs are sufficient to meet water quality standards and no numeric WQBELs are necessary for the following pollutants of concern: BOD₅, biological wastes, floating and submerged matter, nutrients (phosphorus and nitrogen), ammonia, and therapeutic drugs and chemicals. This determination was made based on monitoring data from other Idaho hatcheries with similar treatment technology and the supporting documentation for the ELG, which concluded control of TSS also effectively controls other pollutants, such as nutrients, that are either bound to the solids or are incorporated into them [67 FR 57872].

Total Suspended Solids (TSS)

As discussed previously, the Upper Salmon River Subbasin Assessment and TMDL: 2016 Addendum and Five-Year Review assigns a WLA for Garden Creek Farms (cited in TMDL as Epicenter) for TSS of 471 lb/day (see Table 26 of the TMDL). The NPDES regulations state that effluent limits must be consistent with the assumptions and requirements of any EPA-approved WLA in a TMDL. (*See* 40 CFR 122.44(d)(1)(vii)(A)). The WLA was calculated based on the average monthly TBEL for Epicenter of 12.7 mg/L and a facility flow of 6.9 cfs. Therefore, the WLA applies on a monthly basis, and the average monthly limit (AML) for TSS of 471 lb/day is consistent with the assumptions and requirements of the WLA. Because the WLA is based on the TBEL, it is considered as stringent as the TBEL and will be the basis for the TSS effluent limit. Since this is the first time a load based limit will be applied to this facility, and it is based on a discharge value approximately 5 cfs less than Garden Creek Farms' discharge, the facility will receive an interim limit and compliance schedule to meet the TSS WQBEL. The limit will apply to the sum of Outfall 001 and 002.

D. Proposed Effluent Limits

The following effluent limitations, prohibitions, and conditions are proposed for Garden Creek Farms.

Table 3, below, presents the proposed numeric effluent limits and monitoring requirements in the draft permit for Outfalls 001 and 002. The proposed effluent limits are based on the limits in the previous permit for the facility and the 2016 TMDL WLA for TSS. However, the previous permit only authorized one outfall (001), and these limits and monitoring requirements apply to both outfalls (001 and 002).

| Parameter | Units | Average Monthly | Maximum Daily | Sample Location | Sample Frequency | Sample Type |
|---|---------|--------------------|-------------------|--------------------------|------------------------|---|
| Net ² Total Suspended Solids (TSS) for Sum of Outfalls 001 and 002 – Interim ⁵ | lbs/day | 823 | | Influent and Effluent | Quarterly ¹ | Calculation ⁴ |
| Net ² TSS for Sum of Outfalls 001 and 002 – Final | lbs/day | 471 | | Influent and Effluent | Quarterly ¹ | Calculation ⁴ |
| Net ² Total Phosphorus (as P) | mg/L | 0.2 | 0.4 | Influent and Effluent | Quarterly ¹ | Composite ³ |
| TSS Concentration Influent | mg/L | Report | Report | Influent | Quarterly1 | Composite3 |
| TSS Concentration Outfall 001 | mg/L | Report | Report | Effluent | Quarterly1 | Composite3 |
| TSS Concentration Outfall 002 | mg/L | Report | Report | Effluent | Quarterly1 | Composite3 |
| Flow | cfs | Report | Report | Effluent | Weekly | Meter, calibrated weir, or other approved method; |
| Floating, Suspended, or Submerged Matter | | See Part | VI.B., Effluent M | Ionitoring | Monthly | Visual Observation |

 Table 3. Draft Permit - Effluent Limits and Monitoring Requirements for Outfalls 001 and 002

1. Influent and effluent samples must be collected on the same day. Quarters are defined as: January 1 – March 31; April 1 – June 30; July 1 – September 31; and October 1 – December 31.

2. Net concentration (in mg/L) = effluent concentration – influent concentration.

3. Composite samples must consist of four or more discrete samples taken at one-half hour intervals or greater over a 24-hour period; at least one fourth of the samples must be taken during quiescent zone or raceway cleaning. A grab sample may be collected for influent instead of composite if the influent water quality is consistent throughout the day.

4. Net Loading (in lbs/day) for each outfall is calculated by multiplying the net concentration (in mg/L) by the average monthly flow (in cfs) for the month of sampling and a conversion factor of 5.4. Net TSS determinations will require influent analysis in addition to effluent analysis unless the permittee chooses to assume that the pollutant concentration in the influent is zero. For more information on calculating, averaging, and reporting loads and concentrations see the *NPDES Self-Monitoring System User Guide* (EPA 833-B-85-100, March 1985).

5. The interim TSS limitation is effective beginning the effective day of the permit, not to exceed 3 years.

Narrative Effluent Limits

1) Develop and implement a BMP Plan that addresses the minimum requirements listed in Part VII.C. of the Fact Sheet.

Prohibited Practices and Discharges

- 1) Discharge of untreated cleaning wastewater (e.g., obtained from a vacuum or standpipe bottom drain system or rearing/holding unit disinfection);
- 2) Discharge of any toxic substances, including drugs, pesticides, disinfectants, or other chemicals in concentrations that impair designated uses;
- 3) Discharge of copper and copper compounds to waters of the U.S.;
- 4) Discharge of floating, suspended or submerged matter, including solids, foam, fish guts, blood or dead fish, in amounts causing nuisance or objectionable condition or that may impair designated beneficial uses in the receiving water;
- 5) Removal of dam boards in raceways or ponds which allow accumulated solids in excess of the limits to be discharged to waters of the U.S.;
- 6) Sweeping, raking, or otherwise intentionally discharging accumulated solids from raceways or ponds to waters of the U.S.; and
- 7) Containing, growing or holding fish within the settling basin; this prohibition does not apply to basins or ponds where fish are used as part of the waste treatment system.

E. Antibacksliding

Section 402(o) of the Clean Water Act and federal regulations at 40 CFR §122.44 (l) generally prohibit the renewal, reissuance or modification of an existing NPDES permit that contains effluent limits, permit conditions or standards that are less stringent than those established in the previous permit (i.e., anti-backsliding) but provides limited exceptions. For explanation of the antibacksliding exceptions refer to Chapter 7 of the Permit Writers Manual *Final Effluent Limitations and Anti-backsliding*.

As a new permit, the antibacksliding regulations are not applicable. However, the limitations within this permit are at least as stringent as the permit previously issued to Epicenter.

VI. Monitoring Requirements

A. Basis for Effluent and Surface Water Monitoring

Section 308 of the CWA and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality.

The permittee is responsible for conducting the monitoring and for reporting results on DMRs or on the application for renewal, as appropriate, to the EPA.

B. Effluent Monitoring

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. The permittee has the option of taking more frequent samples than are required under the permit. These samples must be used for averaging if they are conducted using the EPA-approved test methods (generally found in 40 CFR 136) or as specified in the permit. Effluent samples must be collected from the effluent stream just prior to discharge into the receiving water.

The proposed monitoring frequency for TSS and TP is quarterly, which is the same as that in the 2007 Epicenter permit and consistent with the Idaho Aquaculture General Permit monitoring requirements for other aquaculture facilities in Idaho that produce between 100,000 and 500,000 pounds of fish annually. Once weekly flow measurements should be used to calculate the average monthly flow and a maximum daily flow (for the month). If no discharge occurs during the reporting period, "no discharge" shall be reported on the DMR.

The permittee must observe the surface of the receiving water in the vicinity of each outfall where the effluent enters the surface water. The permittee must maintain a written log of the observation which includes the date, time, observer, and whether there is presence of floating, suspended or submerged matter. The log must be retained and made available to EPA or IDEQ upon request.

C. Surface Water Monitoring

Because the receiving water has a critical low flow of 0 cfs, there is no assimilative capacity and no receiving water monitoring is required.

D. Electronic Submission of Discharge Monitoring Reports

The draft permit requires that the permittee submit DMR data electronically using NetDMR. NetDMR is a national web-based tool that allows DMR data to be submitted electronically via a secure Internet application.

The EPA currently conducts free training on the use of NetDMR. Further information about NetDMR, including upcoming trainings and contacts, is provided on the following website: <u>https://netdmr.epa.gov</u>. The permittee may use NetDMR after requesting and receiving permission from EPA Region 10.

E. Annual Reporting

Garden Creek Farms must submit an Annual Report that describes the previous year's production, feed rates, use of aquaculture drugs and chemicals, and the facility's efforts to adhere to required operating practices. The information that must be included in the Annual Report is in Appendix B of the permit.

F. Other Reporting

Based on the reporting requirements at 40 CFR 451.3, all permittees are required to report certain events to the EPA before or when they happen, including the use of an Investigational New Animal Drug (INAD) or the extra-label use of an aquaculture drug, failures in containment systems that result in unanticipated releases of pollutants, and spills of drugs and

pesticides that result in their release to receiving waters. The EPA has clarified the reporting requirements for INAD and extra-label drug use (See Section IV of the permit, and Chapter 6 of the EPA Compliance Guide for CAAP Facilities at

http://water.epa.gov/scitech/wastetech/guide/aquaculture/upload/2006_05_03_guide_aquacul ture_guidance_full-final.pdf).

VII. Other Permit Conditions

A. Compliance Schedules

Compliance schedules are authorized by federal NPDES regulations at 400 CFR 122.47 and Idaho WQS at IDAPA 58.01.02.400.03. Compliance schedules allow a discharger to phase in, over time, compliance with water quality-based effluent limitations when limitations are in the permit for the first time. The EPA has found that a compliance schedule is appropriate for Garden Creek Farms because it cannot immediately comply with the TSS effluent limit on the effective date of the permit.

The TSS concentration of a single sample collected by the facility in 2016 was 12 mg/L. Based on the flow used to develop the TMDL WLA being 6.9 cfs and Garden Creek Farms discharging at 12 cfs, the facility would need meet a TSS concentration of 7.2 mg/L or less to meet the WQBEL, whereas the TBEL used to develop the WLA is 12.7 mg/L. Because of the limited amount of effluent data and the fact that the facility has already recently expanded the capacity of its settling pond, which is the standard treatment technology used at similar hatchery facilities, the facility will be provided 3 years to meet the final effluent limit for TSS. The interim effluent limit of 823 lbs/day is based on the TBEL of 12.7 mg/L multiplied by the facility flow of 12 cfs and a conversion factor of 5.4.

B. Quality Assurance Plan (QAP)

Federal regulations at 40 CFR 122.41(e) require permittees to properly operate and maintain their facilities, including "adequate laboratory controls and appropriate quality assurance procedures." To implement this requirement, the permit requires the permittee develop or update a QAP to ensure that the monitoring data submitted to the EPA are complete, accurate, and representative of the effluent conditions.

Garden Creek Farms must develop a QAP and submit a certification statement containing the information in Appendix B of the permit to the EPA and IDEQ within 180 days of the effective date of this permit to certify that a QAP has been developed and is being implemented. The permittee may submit the notification as an electronic attachment to the DMR. The QAP must include the standard operating procedures the permittee follows for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting. The QAP must be kept on-site and made available to the EPA and the IDEQ upon request. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP, and must update it whenever there is a change in ownership or operator.

C. BMP Plan

The Clean Water Act authorizes and the EPA regulations at 40 CFR 122.44(k) provide for requirements to implement BMPs in NPDES permits to control or abate the discharge of pollutants whenever necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. The BMP Plan is intended to meet the narrative TBELs described in Section V.B of this Fact Sheet. Through implementation of the BMP Plan, the permittee will prevent or minimize the generation and discharge of wastes and pollutants from the facility to the waters of the U.S.

The BMP Plan must, at a minimum, describe how the permittee will achieve the following requirements:

Record Keeping:

- a. Document the frequency of cleanings, inspections, maintenance, and repairs.
- b. Document feed amounts and numbers and weights of aquatic animals to calculate feed conversion ratios.
- c. Document all medicinal and therapeutic chemical usage for each treatment at the facility. Include the information required in the Drug, Pesticide & Chemical Use Report (Appendix C of the permit) and in the Annual Report (Appendix A of the permit).
- d. Maintain a copy of the label (with treatment application requirements) and the Material Safety Data Sheet (MSDS) in the facility's records for each drug or chemical used at the facility.

Chemical Storage:

- a. Ensure proper storage of drugs and other chemicals to prevent spills that may result in the discharge to waters of the U.S.
- b. Procedures must be implemented to prevent the release of chemicals, disinfectants or cleaning agents to waters of the U.S.;

Structural Maintenance:

- a. Routinely inspect rearing and holding units and waste collection and containment systems to identify and promptly repair damage.
- b. Regularly conduct maintenance of rearing and holding units and waste collection and containment systems to ensure their proper function.

Training Requirements:

- a. Train all relevant personnel in spill prevention and how to respond in the event of a spill to ensure proper clean-up and disposal of spilled materials.
- b. Train personnel on proper structural inspection and maintenance of rearing and holding units and waste collection and containment systems.

Operational Requirements:

- a. Fish feeding must be conducted in such a manner as to minimize the discharge of unconsumed food.
- b. Treatment equipment used to control the discharge of floating, suspended or submerged matter must be cleaned and maintained at a frequency sufficient to prevent overflow or bypass of the treatment unit by floating, suspended, or submerged matter.
- c. Exclude fish from quiescent zones, full-flow and off-line settling basins. Fish which have entered quiescent zones or basins must be removed as soon as practicable.
- d. All approved drugs and registered pesticides must be used in accordance with applicable label directions (FIFRA or FDA), except under the following conditions, both of which must be reported to the EPA and IDEQ in accordance with Part VI.F., above:
 - i. Participation in Investigational New Animal Drug (INAD) studies, using established protocols; or
 - ii. Extralabel drug use, as prescribed by a veterinarian.
- e. Implement procedures to prevent the release of chemicals, disinfectants or cleaning agents to waters of the U.S.
- f. Implement procedures to ensure animal mortalities are removed from raceways on a regular basis.
- g. Implement procedures to control the release of transgenic or non-native fish or their diseases as specified in any permit(s) issued by the Idaho Department of Fish and Game for import, export, transport, release, or sale of such species, as required under IDAPA §13.01.10.100.

The permittee must certify that a BMP Plan has been developed and is being implemented by submitting the information contained in Appendix B of the permit to the EPA and IDEQ within 90 days of the effective date of this permit. The notification may be submitted as an electronic attachment to the DMR. The permittee must maintain a copy of the BMP Plan at the facility and make it available to the EPA, IDEQ, or an authorized representative upon request. The BMP Plan is an enforceable condition of the permit and must be amended whenever there is a change in the facility or in the operation of the facility which materially increases the generation of pollutants or their release or potential release to surface water. With any change in operator, the BMP plan must be reviewed and modified, if necessary.

The permittee must review the BMP Plan annually. A certified statement that the annual review has been completed and that the BMP Plan fulfills the requirements set forth in the permit is one of the items that must be included in the Annual Report (see information in Appendix A of the permit) which must be submitted to the EPA and IDEQ, due by January 20th each year.

D. Environmental Justice

As part of the permit development process, the EPA Region 10 conducted a screening analysis to determine whether this permit action could affect overburdened communities. "Overburdened" communities can include minority, low-income, tribal, and indigenous

populations or communities that potentially experience disproportionate environmental harms and risks. The EPA used a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify permits for which enhanced outreach may be warranted.

Garden Creek Farms is not located within or near a Census block group that is potentially overburdened. The draft permit does not include any additional conditions to address environmental justice.

Regardless of whether a facility is located near a potentially overburdened community, the EPA encourages permittees to review (and to consider adopting, where appropriate) Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities (see https://www.federalregister.gov/d/2013-10945). Examples of promising practices include: thinking ahead about community's characteristics and the effects of the permit on the community, engaging the right community leaders, providing progress or status reports, inviting members of the community for tours of the facility, providing informational materials translated into different languages, setting up a hotline for community members to voice concerns or request information, follow up, etc.

For more information, please visit <u>https://www.epa.gov/environmentaljustice</u> and Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.

E. Standard Permit Provisions

Sections III, V, and VI of the draft permit contain standard regulatory language that must be included in all NPDES permits. The standard regulatory language covers requirements such as monitoring, recording, and reporting requirements, compliance responsibilities, and other general requirements.

VIII. Other Legal Requirements

A. Endangered Species Act

The Endangered Species Act requires federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. An official species list was requested from the USFWS via the IPaC website (https://ecos.fws.gov/ipac/) on August 6, 2018, and the response stated that the only threatened, endangered, or candidate species, or critical habitats within the vicinity of the Garden Creek Farms is the North American wolverine (*Gulo luscus*), which is proposed threatened. Because this species is found in high elevation alpine habitat, its exposure to activities at Garden Creek Farms, which is in lower elevation riparian and aquatic habitat, is considered highly unlikely. Therefore, the EPA concludes that this permitting action will have no effect on any threatened or endangered species.

B. Essential Fish Habitat

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and

Management Act (January 21, 1999) requires the EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect EFH (i.e., reduce quality and/or quantity of EFH). A review of EFH habitat using the NOAA EFH Mapper website (<u>http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html</u>) on August 6, 2018, shows that there is no EFH habitat within the vicinity of Garden Creek Farms. Therefore, the EPA concludes that this permitting action will have no effect on EFH.

C. National Environmental Policy Act (NEPA)

At 42 U.S.C. § 4322, NEPA requires federal agencies to conduct an environmental review of their actions (including permitting activity) that may significantly affect the quality of the human environment. The EPA regulations which implement NEPA, at 40 CFR §122.29(c), clarify this requirement as it pertains to NPDES permitting actions as requiring NEPA environmental review for the issuance of an NPDES permit for new sources only.

New source performance standards (NSPS) for the concentrated aquatic animal production point source category went into effect on September 22, 2004 (40 CFR Part 451). New aquaculture facilities constructed after September 22, 2004, are new sources, as defined in 40 CFR §122.2, and §122.29. In addition, existing aquaculture operations may be considered new source facilities if planned upgrades or rehabilitation activities occur after September 22, 2004, and: (1) totally replace the process or production equipment that causes the discharge of pollutants at the existing facility; or (2) the new processes or production equipment are substantially independent of an existing facility at the same site. See 40 CFR §122.29(b). To qualify as a new source under 40 CFR Part 451, the new or expanded facility must produce 100,000 pounds or more of aquatic animals per year.

In accordance with Section 511(c)(1) of the CWA and 40 CFR Part 6, NPDES permit coverage for new sources is subject to the procedural provisions of the National Environmental Policy Act (NEPA) prior to final action on the permit. The EPA reviewed completed and planned facility upgrades for Garden Creek Farms and concluded it does not qualify as a new source.

D. State Certification

The EPA has requested that IDEQ certify the permit under CWA Section 401. The EPA cannot issue the permit until the State has granted or waived certification. As a result of the certification, the State may require more stringent permit conditions or additional monitoring requirements to ensure that the permit complies with water quality standards, or treatment standards established pursuant to any State law or regulation. The EPA will post IDEQ's 401 certification upon receipt the certification on the EPA's website: https://www.epa.gov/publicnotices/notices-search/field_program_or_statute/national-pollutant-discharge-elimination-system-npdes-252043/location/Idaho

E. Antidegradation

In addition to TBELs or WQBELs for pollutants that could cause or contribute to exceedances of numeric or narrative criteria, the EPA must consider the state's antidegradation policy, which is included in the state's CWA § 401 certification of the permit.

The IDEQ uses a water body-by-water body approach to implementing its 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 1 protection for that use, unless specific circumstances warranting Tier 2 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].

Because Warm Spring Creek is not fully supporting its presumed beneficial uses (see Section IV), it will be provided Tier 1 protection, which means the existing in stream water uses and level of water quality necessary to protect the existing uses is maintained [IDAPA 58.01.02.051.01]. The primary existing use of the receiving water is industrial and agricultural water supply, as it is almost entirely used for power generation and irrigation. The limitations and requirements contained in the draft permit will ensure compliance with the Idaho's narrative and numeric water quality criteria, which will maintain and protect existing uses and is consistent with Idaho's Tier 1 antidegradation policy requirements.

The IDEQ has completed an antidegradation review which is included in the draft 401 certification for this permit (Appendix B). The EPA has reviewed this antidegradation analysis and finds that it is consistent with the State's water quality standards and the State's antidegradation implementation procedures. Comments on the 401 certification including the antidegradation review can be submitted to the IDEQ as set forth above (see State Certification on Page 1 of this Fact Sheet).

F. Permit Expiration

The permit will expire five years from the effective date.

IX. References

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control*. US Environmental Protection Agency, Office of Water, EPA/505/2-90-001.

https://www3.epa.gov/npdes/pubs/owm0264.pdf

Water Pollution Control Federation. Subcommittee on Chlorination of Wastewater. *Chlorination of Wastewater*. Water Pollution Control Federation. Washington, D.C. 1976.

EPA. 2010. *NPDES Permit Writers' Manual*. Environmental Protection Agency, Office of Wastewater Management, EPA-833-K-10-001. September 2010. https://www3.epa.gov/npdes/pubs/pwm 2010.pdf

EPA, 2007. *EPA Model Pretreatment Ordinance*, Office of Wastewater Management/Permits Division, January 2007.

EPA, 2011. *Introduction to the National Pretreatment Program*, Office of Wastewater Management, EPA 833-B-11-011, June 2011.

EPA. 2014. Water Quality Standards Handbook Chapter 5: General Policies. Environmental Protection Agency. Office of Water. EPA 820-B-14-004. September 2014. https://www.epa.gov/sites/production/files/2014-09/documents/handbook-chapter5.pdf Idaho Department of Environmental Quality (IDEQ). 2016. Upper Salmon River Subbasin Assessment and TMDL: 2016 Addendum and Five-Year Review. September 2016. <u>http://www.deq.idaho.gov/media/60178658/upper-salmon-river-subbasin-assessment-tmdl-addendum-five-year-review-2016.pdf</u>



Appendix A. Facility Information

Figure 1. Aerial overview of Garden Creek Farms and the receiving water.

Appendix B. CWA 401 State Certification

(To be added upon receipt)



STATE OF IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

900 North Skyline, Suite B • Idaho Falls, ID 83402 • (208) 528-2650

C. L. "Butch" Otter, Governor John H. Tippets, Director

October 24, 2018

Mr. Michael Lidgard US EPA Region 10 Attn: OWW-191 1200 Sixth Avenue, Suite 900 Seattle, Washington 98101-3140

RE: DRAFT and Public Comment Period Notice, Water Quality Certification Garden Creek Farms (Permit # ID-0028533)

Dear Mr. Lidgard:

On August 30, 2018, the Idaho Department of Environmental Quality (DEQ) received the proposed draft National Pollutant Discharge Elimination System (NPDES) permit # ID-0028533 for the Garden Creek Farms aquaculture facility near Challis, Idaho. Enclosed, please find DEQ's draft Water Quality Certification (WQC) for the facility, along with the public comment information posted on DEQ's web page (found here: <u>http://www.deq.idaho.gov/news-public-comments-events/public-comment-opportunities/draft-401-certificationgarden-creek-farms-warm-springs-canal-and-warm-springs-creek-npdes-permit/</u>). DEQ is conducting a 30-day comment period for this WQC which will run from October 22 through November 21, 2018.

Please do not hesitate to contact me at 208.528.2650 or <u>troy.saffle@deq.idaho.gov</u> with questions or concerns about this WQC.

Thank you.

Sincerely,

Troy Saffle Regional WQ Manager Idaho Fall Regional Office

enclosure

c: Loren Moore, DEQ, TRIM reference Lisa Kusnierz, EPA Region 10, IOO



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

October 22, 2018

NPDES Permit Number(s): NPDES Permit # ID-0028533, Garden Creek Farms

Receiving Water Body: Warm Springs Canal and Warm Springs 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 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, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

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).

protection of existing and designated beneficial uses. The effluent limitations and associated requirements contained in the Garden Creek Farms permit are set at levels that reasonably assure compliance 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 *Upper Salmon Subbasin Assessment and TMDL: 2016 Addendum and Five-Year Review* (September 2016) establishes wasteload allocations for sediment; however, sediment is not a pollutant of concern for this facility. These wasteload allocations are designed to ensure the Warm Springs Canal (Outfall 001) and Warm Springs Creek (Outfall 002) will 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 effluent limitations and associated requirements contained in the Garden Creek Farms permit are set at levels that comply with these wasteload allocations.

In sum, the effluent limitations and associated requirements contained in the Garden Creek Farms permit are set at levels that reasonably assure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Upper Salmon Subbasin Assessment and TMDL: 2016 Addendum and Five-Year Review*. Therefore, DEQ has determined the permit will protect and maintain beneficial uses in the Warm Springs Canal (Outfall 001) and Warm Springs Creek (Outfall 002) in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

New Permit Limits for Pollutants Currently Discharged

This permit is considered a new permit for new discharges at Garden Creek farms and when new limits are proposed in a permit for pollutants in the discharge, the effect on water quality is based upon the current discharge quality and the proposed discharge quality resulting from the new limits. Current discharge quality for pollutants that are not currently limited is based upon available discharge quality data (IDAPA 58.01.02.052.06.a.i). Future discharge quality is based upon proposed permit limits (IDAPA 58.01.02.052.06.a.ii).

The proposed permit for Garden Creek Farms includes new limits for total phosphorus (TP) and TSS (Permit Table 1). The TSS and TP limits in the proposed permit are reasonably likely to result in a maintenance or improvement in water quality from current conditions. Therefore, no adverse change in water quality and no degradation will occur with respect to these pollutants.

High-Quality Waters (Tier II Protection)

Demonstration of the following milestones should be delivered to DEQ to provide reasonable assurance that the compliance schedule will be met.

| Due Date (End of Year) | Activity |
|------------------------|---|
| 1 | Feasibility Study |
| 2 | Design and construction of measures to reduce TSS. |
| 3 | Construction complete. Operation should demonstrate effluent limits |
| | are achieved. |

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 Troy Saffle, Idaho Falls Regional Office, 208.528.2650 or troy.saffle@deq.idaho.gov.

DRAFT

Eric Neher Regional Administrator Idaho Falls Regional Office 10/24/2018

Draft 401 Certification - Garden Creek Farms Warm Springs Canal and Warm Springs Creek NPDES Permit - Idaho Department of Envi...

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| & Issues | Farms Warm Springs Canal and Warm | Water Quality Manager | | |
| News & Public | Springs Creek NPDES Permit | Troy Saffle DEQ Idaho Falls Regional Office | | |
| Comments & Events | Accepting Comments from October 22, 2018 to November 21, 2018 | 900 N. Skyline Drive, Suite B Idaho Falls, ID 83402 | | |
| News Archives | Based on its review of the draft permit, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the | (208) 528-2650 troy.saffle@deq.idaho.gov | | |
| Public Comment Opportunities | conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of the Clean Water Act, the Idaho water quality standards, and other appropriate water | Related Documents | | |
| DEQ Calendar | quality requirements of state law. (NPDES Permit Application Number: ID- | Draft Certification | | |
| Air Quality | 0028533) | Fact Sheet | | |
| Water Quality | For more information about this permit, visit EPA's website at https://www.epa.gov/npdes-permits/proposed-wastewater-permit-garden- creek-farms-idaho | Permit Request | | |
| Waste Mgmt & Remediation | Public Comment Form | | | |
| INL Oversight | Fields marked with * are required. | | | |
| Permitting | Name * | | | |
| Pollution Prevention | Email * | | | |
| Assistance & Resources | Affiliation | | | |
| Laws, Rules, Etc. | Comments * | | | |

Thank you

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Glossary Acronyms Site Map Idaho.gov

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