FACT SHEET

The United States Environmental Protection Agency (EPA)
Proposes To Reissue
A National Pollutant Discharge Elimination System (NPDES) Permit to:

The City of Riggins
PO Box 249
Riggins, Idaho 83549

NPDES Permit Number: ID-0020931

Public Notice Start Date: June 26, 2012
Public Notice Expiration Date: July 26, 2012

Technical Contact: John Drabek, 206-553-8257, drabek.john@epa.gov
1-800-424-4372 ext. 3-8257 (within Region 10)
drabek.john@epa.gov

The EPA Proposes To Reissue NPDES Permit

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

This Fact Sheet includes:

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

State Certification for Facilities that Discharge to State Waters

The EPA will request that the Idaho Department of Environmental Quality (IDEQ) certify the NPDES permit for this facility, under Section 401 of the Clean Water Act. Comments regarding the certification should be directed to:

Idaho Department of Environmental Quality
Lewiston Regional Office
1118 F Street
Lewiston, Idaho 83501
ph: (208) 799-4370
fx: (208) 799-3451
toll-free: (877) 541-3304

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 Region 10's Director for the Office of Water and Watersheds will make a final decision regarding permit reissuance. 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 comments are received, the EPA will address the comments and issue the permit. In such a case, the permit will become effective at least 30 days after the issuance date unless an appeal is submitted to the Environmental Appeals Board within 30 days.

Documents are Available for Review.

The draft permit and fact sheet are posted on the Region 10 website at http://yosemite.epa.gov/r10/WATER.NSF/NPDES+Permits/DraftPermitsID Copies may also be requested by writing to the EPA at the Seattle address below, by e-mailing washington.audrey@epa.gov, or by calling Audrey Washington at 206-553-0523 or (800) 424-4372 ext 0523 (within Alaska, Idaho, Oregon, & Washington). Copies may also be inspected and copied at the offices below between 8:30 a.m. and 4:00 P.M., Monday through Friday, except federal holidays. In Seattle, visitors report to the 12th floor Public Information Center.

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, OWW-130
Seattle, Washington 98101
(206) 553-0523 or
Toll Free 1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

EPA Idaho Operations Office
1435 North Orchard Street
Boise, Idaho 83706
(208) 378-5746

IDEQ
Lewiston Regional Office
1118 F Street
Lewiston, ID 83501
ph: (208) 799-4370
fx: (208) 799-3451
toll-free: (877) 541-3304

For technical questions regarding the permit or fact sheet, contact John Drabek at the phone number or e-mail address at the top of this fact sheet. Those with impaired hearing or speech may contact a TDD operator at 1-800-833-6384 and ask to be connected to the appropriate phone number. Persons with disabilities may request additional services by contacting John Drabek.

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I. APPLICANT

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

Facility Name: City of Riggins Wastewater Treatment Plant

Mailing Address: P.O. Box 249, Riggins, Idaho 83549

Facility Address: 1210 North Street, Riggins, Idaho 83549

Contact: Charles Amell, Public Works Superintendent, (208) 628 - 3752

II. FACILITY INFORMATION

A. Facility Description

The City of Riggins (City) owns, operates and has maintenance responsibility for a facility that treats domestic sewage that is primarily from local residents and commercial establishments through a separated sanitary sewer system. There are no significant industrial users.

The wastewater treatment plant employs activated sludge digestion and secondary clarification. Influent enters through a grit chamber where grit and sediment settle. Primary treatment consists of grinding or screening of flow that bypasses the grinder. The facility provides secondary treatment via a complete-mix activated sludge process. Components consist of an aeration basin, aerobic digester, secondary clarifier and sludge storage tank. Disinfection is by chlorination in a contact chamber prior to discharge.

Solids in the clarifier settle to the bottom where they are pumped back to the aeration basin. Solids from the aerobic digester can be sent either to 4 sand drying beds where the water is filtered and returned to the aeration basin, or diverted to the sludge loading docks, where biosolids are hauled by truck to land application sites or deposited in a Subtitle D landfill. The facility serves a population of about 400 and has a design flow rate of 0.105 mgd.

The City estimates that inflow and infiltration are negligible. To address inflow and infiltration the City replaces sewer collection lines whenever funding is available.

Permit History

The facility's previous permit became effective on November 24, 2003 and expired on November 24, 2008. The EPA received a complete application for permit reissuance on June 2, 2008. Since the permit was not reissued before the expiration date of November 24, 2008 and since the City submitted a timely application, the permit was administratively extended pursuant to 40 CFR 122.6.

B. Compliance History

A review of the Discharge Monitoring Reports (DMRs) from January 2003 to October 2011 found the following violations of effluent limits:

pH

A violation of the instantaneous minimum of 6.5, at 6.3 in August 2004

Total Suspended Solids

A violation of the monthly average loading limit of 26 lb/day, at 887 in June 2009

A violation of the weekly average loading limit of 39 lb/day, at 887 in June 2009

Both of these reported values may have been misprints, since the reported concentration values for June 2009 were 14 mg/L, which corresponds to 12 lb/day.

III. RECEIVING WATER

The treated effluent from the City of Riggins wastewater treatment facility is discharged continuously to the Salmon River at approximate river mile 85, downstream of the confluence with Little Salmon River. The outfall is located at latitude 45° 25' 58" N and longitude 116° 18' 41" W.

A. Low Flow Conditions

The *Technical Support Document for Water Quality-Based Toxics Control* (hereafter referred to as the TSD) (EPA, 1991) and the Idaho Water Quality Standards (WQS) recommend the flow conditions for use in calculating water quality-based effluent limits (WQBELs) using steady-state modeling. The TSD and the Idaho WQS state that WQBELs intended to protect aquatic life uses should be based on the lowest seven-day average flow rate expected to occur once every ten years (7Q10) for chronic criteria and the lowest one-day average flow rate expected to occur once every ten years (1Q10) for acute criteria.

Because the chronic criterion for ammonia is a 30-day average concentration not to be exceeded more than once every three years, EPA has used the 30B3 for the chronic ammonia criterion instead of the 7Q10. The 30B3 is a biologically-based flow rate designed to ensure an excursion frequency of no more than once every three years for a 30-day average flow rate. For human health criteria, the Idaho water quality standards recommend the 30Q5 flow rate for non-carcinogens, and the harmonic mean flow rate for carcinogens.

The 1Q10, 7Q10, 30B3, 30Q5 and harmonic mean flow rates of Salmon River are 1710 cfs, 2240 cfs, 2620 cfs, 2930 cfs and 5480 cfs, respectively. These calculations used flow data from the USGS station 133317000, Salmon River near White Bird, Idaho, which is downstream of the City of Riggins outfall and the confluence with the Little Salmon River Creek. This is the USGS station on the Salmon River closest to the City of Riggins outfall. Other USGS stations with current stream flow information were upstream of the confluence of the Salmon River and the Little Salmon River by 100 river miles or more, and therefore less relevant to flows near the City of Riggins outfall. The period of record for these calculations was 1983 to 2011.

B. Water Quality Standards

Overview

Section 301(b)(1)(C) of the Clean Water Act (CWA) requires the development of limitations in permits necessary to meet water quality standards. Federal regulations at 40 CFR 122.4(d) require that the conditions in NPDES permits ensure compliance with the water quality standards of all affected States. A State's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria and an anti-degradation policy.

The use classification system designates the beneficial uses that each water body is expected to achieve, such as drinking water supply, contact recreation, and aquatic life. The numeric and narrative water quality criteria are the criteria deemed necessary by the State to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

Designated Beneficial Uses

This facility discharges to the Salmon River in the Lower Salmon Subbasin, Salmon River - Little Salmon River to Slate Creek, HUC 17060209, S-11. At the point of discharge, the Salmon River is protected for the following designated uses (IDAPA 58.01.02.130.11):

- cold water aquatic life
- primary contact recreation
- domestic water supply

In addition, the Idaho Water Quality Standards state that all waters of the State of Idaho are protected for industrial and agricultural water supply (Section 100.03.b and c.), wildlife habitats (100.04) and aesthetics (100.05).

Surface Water Quality Criteria

The criteria are found in the following sections of the Idaho Water Quality Standards:

- The narrative criteria applicable to all surface waters of the State are found at IDAPA 58.01.02.200 (General Surface Water Quality Criteria).

- The numeric criteria for toxic substances for the protection of aquatic life and primary contact recreation are found at IDAPA 58.01.02.210 (Numeric Criteria for Toxic Substances for Waters Designated for Aquatic Life, Recreation, or Domestic Water Supply Use).

- Additional numeric criteria necessary for the protection of aquatic life can be found at IDAPA 58.01.02.250 (Surface Water Quality Criteria for Aquatic Life Use Designations).

- Numeric criteria necessary for the protection of recreation uses can be found at IDAPA 58.01.02.251 (Surface Water Quality Criteria for Recreation Use Designations).

- Water quality criteria for agricultural water supply can be found in the EPA's *Water Quality Criteria 1972*, also referred to as the "Blue Book" (EPA R3-73-033) (See IDAPA 58.01.02.252.02)

The numeric and narrative water quality criteria applicable to the Salmon River at the point of discharge are provided in Appendix B of this fact sheet.

Antidegradation

The IDEQ has completed an antidegradation review which is included in the draft 401 certification for this permit. See Appendix C for the State's draft 401 water quality certification. The EPA has reviewed this antidegradation review and finds that it is consistent with the State's 401 certification requirements 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.

C. Water Quality Limited Waters

Section 303(d) of the Clean Water Act (CWA) requires states to develop a Total Maximum Daily Load (TMDL) management plan for water bodies determined to be water quality limited segments. A TMDL is a detailed analysis of the water body to determine its assimilative capacity. The assimilative capacity is the loading of a pollutant that a water body can assimilate without causing or contributing to a violation of water quality standards. Once the assimilative capacity of the water body has been determined, the TMDL will allocate that capacity among point and non-point pollutant sources, taking into account natural background levels and a margin of safety. Allocations for non-point sources are known as "load allocations" (LAs). The allocations for point sources, known as "waste load allocations" (WLAs), are implemented through effluent limitations in NPDES permits. Effluent limitations for point sources must be consistent with applicable TMDL allocations.

In the State of Idaho's 2010 Integrated Report Section 5 (section 303(d)) the Salmon River in the Lower Salmon Subbasin is not listed for any pollutant.

IV. EFFLUENT LIMITATIONS

A. Basis for Permit Effluent Limits

In general, the CWA requires that the limits for a particular pollutant be the more stringent of either technology-based effluent 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 of a waterbody are being met and they may be more stringent than technology-based effluent limits. The basis for the proposed effluent limits in the draft permit is in Appendix B.

B. Proposed Effluent Limitations

The following summarizes the proposed effluent limitations that are in the draft permit:

There must be no discharge of any floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the receiving water.

Table 2 below presents the proposed effluent limits for 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), *Escherichia coli (E. coli)*, pH, total residual chlorine and the minimum percent removal requirements for BOD_5 and TSS.

Table 2
Effluent Limitations

Parameters	Average Monthly Limit	Average Weekly Limit	Minimum Percent Removal[1]	Daily Maximum Limit
BOD_5	30 mg/L	45 mg/L	85%	--
	26 lbs/day[2]	39 lbs/day[2]		--
TSS	30 mg/L	45 mg/L	85%	--
	26 lbs/day[2]	39 lbs/day[2]		--
E. coli Bacteria	126 colonies /100mL[3]	--	--	406 colonies /100mL[4]
Total Residual Chlorine[2]	0.5 mg/L	0.75 mg/L		
	0.44 lb/day	0.66 lb/day		
pH	6.5 – 9.0 standard units			

1. Percent removal is calculated using the following equation: ((influent - effluent) / influent) x 100, this limit applies to the average monthly values.
2. Loading is calculated by multiplying the concentration in mg/L by the design flow of 0.105 mgd and a conversion factor of 8.34 lbs/gallon.
3. The monthly average for *E. coli* is the geometric mean of all samples taken during the month, based on a minimum of five samples, taken every 3-5 days within a calendar month.
4. Instantaneous maximum limit

These proposed effluent limitations are identical to the existing Riggins effluent limitations. Refer to Appendix B for the derivation of the effluent limits.

V. MONITORING REQUIREMENTS

A. Basis for Effluent and Surface Water Monitoring Requirements

Section 308 of the CWA and federal regulation 40 CFR §122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring is also required to characterize the effluent to determine if additional effluent limitations are required and to monitor effluent impacts on receiving water quality.

B. Effluent Monitoring Requirements

1. Parameters

BOD_5, TSS, *E. coli*, Flow, pH and Total Residual Chlorine

The permit requires monitoring BOD_5, TSS, *E. coli*, flow, pH and total residual chlorine

to determine compliance with the effluent limits; it also requires monitoring of the influent for BOD_5 and TSS to calculate monthly removal rates.

Ammonia

Ammonia monitoring is necessary to generate data used in determining a reasonable potential for exceeding water quality standards. Ammonia effluent levels also provide an indication of the operational efficiency of the wastewater treatment plant. In the proposed permit, ammonia effluent sampling will once again be required once per month, but extended to the entire term of the permit. Appendix B indicates no reasonable potential to violate water quality standards for ammonia, so the proposed permit contains no effluent limits for ammonia.

2. Frequency

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. Permittees have the option of taking more frequent samples than are required under the permit. These samples can be used for averaging if they are conducted using the EPA approved test methods (generally found in 40 CFR §136) and if the Minimum Levels (MLs) are less than the effluent limits.

Table 3 presents the effluent monitoring requirements for the permittee in the draft permit. Each of the effluent monitoring requirements from the previous permit was evaluated to determine whether the requirements should be continued, updated or eliminated. The monitoring frequency is identical to the previous permit.

The sampling location must be after the last treatment unit and prior to discharge to the receiving water. If no discharge occurs during the reporting period, "no discharge" shall be reported on the DMR.

Table 3
Effluent Monitoring Requirements

Parameter	Unit	Sample Location	Sample Frequency	Sample Type
Flow	mgd	Effluent	Continuous	Recording
BOD_5	mg/L	Influent and Effluent[1]	1/month	8-hour composite
	lbs/day	Effluent	1/month	Calculation
	% Removal	---	1/month	Calculation
TSS	mg/L	Influent and Effluent[1]	1/month	8-hour composite
	lbs/day	Effluent	1/month	Calculation
	% Removal	---	1/month	Calculation
pH	standard units	Effluent	1/week	Grab
E.coli	colonies/100 ml	Effluent	5/month	Grab

Table 3
Effluent Monitoring Requirements

Parameter	Unit	Sample Location	Sample Frequency	Sample Type
Total Residual Chlorine	mg/L	Effluent	1/week	Grab
Total Ammonia as N^2	mg/L	Effluent	1/month	Grab
NPDES Application Form 2A Effluent Testing Data	mg/L	Effluent	3x/5 years	See footnote 3

1. Influent and effluent composite samples shall be collected during the same 8-hour period.
2. Monitoring shall be conducted once per month during the full term of the permit.
3. For Effluent Testing Data, in accordance with instructions in NPDES Application Form 2A, Part B.6.

C. Surface Water Monitoring

The permittee provided no surface water monitoring data to support the application for renewal and allow calculations to determine whether there was reasonable potential to exceed water quality standards. Therefore, surface water monitoring data are required under the proposed permit, and will be used in reasonable potential determinations for the next permit cycle. Surface water monitoring data requirements will be incorporated into the prepared DMR sheets that EPA sends to the permittee.

1. Surface water monitoring must start 90 days after the effective date of the permit and continue until 12 quarterly samples are obtained and the results reported for each pollutant. The program must meet the following requirements. Monitoring stations must be established in the Salmon River, above the influence of the facility's discharge.
2. The permittee must seek approval of the surface water monitoring stations from IDEQ.
3. A failure to obtain IDEQ approval of surface water monitoring stations does not relieve the permittee of the surface water monitoring requirements of this permit.
4. To the extent practicable, surface water sample collection must occur on the same day as effluent sample collection.
5. All ambient samples must be grab samples.
6. Samples must be analyzed for the parameters listed in Table 4, and must achieve minimum levels (MLs) that are equivalent to or less than those listed. The permittee may request different MLs. The request must be in writing and must be approved by the EPA.

Table 4: Surface Water Monitoring Requirements			
Parameter	Units	Upstream Sampling Frequency	ML
Temperature	°C	Quarterly	0.1
pH	Standard Units	Quarterly	0.1
Total Ammonia as N	mg/L	Quarterly	0.10
Quarterly monitoring must occur once during each of the following quarters: January – March, April – June, July – September, and October - December			

7. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part II.B., "Quality Assurance Plan".
8. Surface water monitoring results must be reported on the DMR.

VI. SLUDGE (BIOSOLIDS) REQUIREMENTS

The EPA Region 10 separates wastewater and sludge permitting. Under the CWA, the EPA has the authority to issue separate sludge-only permits for the purposes of regulating biosolids. The EPA may issue a sludge-only permit to each facility at a later date, as appropriate.

In the absence of a sludge-only permit, sludge management and disposal activities at each facility continue to be subject to the national sewage sludge standards at 40 CFR Part 503 and any requirements of the State's biosolids program. Since the 40 CFR Part 503 regulations are self-implementing, the permittees must comply with them whether or not a permit has been issued.

VII. OTHER PERMIT CONDITIONS

A. Quality Assurance Plan Implementation

The federal regulation at 40 CFR §122.41(e) requires the permittee to develop procedures to ensure that the monitoring data submitted to the EPA are accurate and to explain data anomalies if they occur. The permittee is required to develop or update and implement a Quality Assurance Plan within 90 days of the effective date of the final permit. The Quality Assurance Plan shall consist of standard operating procedures that the permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis and data reporting. The plan shall be retained on site and be made available to the EPA and IDEQ upon request.

B. Operation and Maintenance Plan Implementation

The permit requires the Permittee to properly operate and maintain all facilities and systems of treatment and control. Proper operation and maintenance is essential to meeting discharge limits, monitoring requirements, and all other permit requirements at all times. The Permittee is required to develop and implement an operation and maintenance plan for its facility within 180 days of the effective date of the final permit. The plan shall be retained on site

and made available to the EPA and IDEQ upon request. Any changes occurring in the operation of the plant shall be reflected within the Operation and Maintenance plan.

C. Sanitary Sewer Overflows and Proper Operation and Maintenance

Untreated or partially treated discharges from separate sanitary sewer systems are referred to as sanitary sewer overflows (SSOs). SSOs may present serious risks of human exposure when released to certain areas, such as streets, private property, basements, and receiving waters used for drinking water, fishing and shellfishing, or contact recreation. Untreated sewage contains pathogens and other pollutants, which are toxic. SSOs are not authorized under this permit. Pursuant to the NPDES regulations, discharges from separate sanitary sewer systems authorized by NPDES permits must meet effluent limitations that are based upon secondary treatment. Further, discharges must meet any more stringent effluent limitations that are established to meet the EPA-approved state water quality standards.

The permit contains language to address SSO reporting and public notice and operation and maintenance of the collection system. The permit requires that the permittee identify SSO occurrences and their causes. In addition, the permit establishes reporting, record keeping and third party notification of SSOs. Finally, the permit requires proper operation and maintenance of the collection system. The following specific permit conditions apply:

Immediate Reporting – The permittee is required to notify the EPA of an SSO within 24 hours of the time the permittee becomes aware of the overflow. (See 40 CFR 122.41(l)(6))

Written Reports – The permittee is required to provide the EPA a written report within five days of the time it became aware of any overflow that is subject to the immediate reporting provision. (See 40 CFR 122.41(l)(6)(i)).

Third Party Notice – The permit requires that the permittee establish a process to notify specified third parties of SSOs that may endanger health due to likelihood of human exposure or of unanticipated bypasses and upsets that exceed any effluent limitation in the permit or that may endanger health due to a likelihood of human exposure. The permittee is required to develop, in consultation with appropriate authorities at the local, county, and/or state level, a plan that describes how, under various overflow (and unanticipated bypass and upset) scenarios, the public, as well as other entities, would be notified of overflows that may endanger health. The plan should identify all overflows that would be reported, to whom, and the specific information that would be reported. The plan should include a description of lines of communication and the identities of responsible officials. (See 40 CFR 122.41(l)(6)).

Record Keeping – The permittee is required to keep records of SSOs. The permittee must retain the reports submitted to the EPA and other appropriate reports that could include work orders associated with investigation of system problems related to a SSO, that describes the steps taken or planned to reduce, eliminate and prevent reoccurrence of the SSO. (See 40 CFR 122.41(j)).

Proper Operation and Maintenance – The permit requires proper operation and maintenance of the collection system. (See 40 CFR 122.41(d) and (e)). SSOs may be indicative of improper operation and maintenance of the collection system. The permittee may consider the development and implementation of a capacity, management, operation and maintenance (CMOM) program.

The permittee may refer to Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems (EPA 305-B-05-002). This guide identifies some of the criteria used by the EPA inspectors to evaluate a collection system's management, operation and maintenance program activities. Owners/operators can review their own systems against the checklist (Chapter 3) to reduce the occurrence of sewer overflows and improve or maintain compliance.

D. Electronic Submission of Discharge Monitoring Reports

The draft permit includes new provisions to allow the permittee the option to submit Discharge Monitoring Report (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. NetDMR allows participants to discontinue mailing in paper forms under 40 CFR § 122.41 and § 403.12. The permittee may use NetDMR after requesting and receiving permission from EPA Region 10.

Under NetDMR, all reports required under the permit are submitted to EPA as an electronic attachment to the DMR. Once a permittee begins submitting reports using NetDMR, it is no longer required to submit paper copies of DMRs or other reports to EPA and IDEQ.

EPA encourages permittees to sign up for NetDMR, and currently conducts free training on the use of NetDMR. Further information about NetDMR, including upcoming trainings and contacts, is provided on the following website: http://www.epa.gov/netdmr.

E. Standard Permit Provisions

Sections III, IV, and V of the draft permit contain standard regulatory language that must be included in all NPDES permits. Because they are based on federal regulations, they cannot be challenged in the context of an individual NPDES permit action. 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 the National Oceanic and Atmospheric Administration Fisheries (NOAA) and the U.S. Fish and Wildlife Service (USFWS) if their actions could adversely affect any threatened or endangered species.

There are no listed species in the vicinity of the discharge, based on the NOAA website. Therefore, EPA concludes discharges from the facility will have no effect on any listed species under the jurisdiction of NOAA.

Based on the USFWS website, Idaho County contains threatened Bull Trout in the location of the Riggins WWTP discharge. The EPA determines that the discharges from the City's WWTP will have no effect on listed species. The basis of the determination is that the Salmon River is not impaired, that effluent limits are the more stringent of technology-based or water-quality based values and that the design flow of the City of Riggins WWTP was 0.105 mgd, compared to typical river flows of 1000 mgd or more.

B. Essential Fish Habitat

Essential fish habitat (EFH) includes 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 National Marine Fisheries Service when a proposed discharge has the potential to adversely affect (reduce quality and/or quantity of) EFH. The EFH regulations define an adverse effect as any impact which reduces quality or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Based on the USFWS website, Idaho County contains critical habitat for the threatened fish species Bull Trout. The EPA determines that the discharges from the City's WWTP will have no effect on Bull Trout habitat for the same reasons as stated in Section VIII.A. Those reasons are the Salmon River is not impaired, that effluent limits are the more stringent of technology-based or water-quality based values and that the design flow of the City of Riggins WWTP was 0.105 mgd, compared to typical river flows of 1000 mgd or more.

State Certification

Section 401 of the CWA requires the EPA to seek State certification before issuing a final permit. As a part of the certification, the State may require more stringent permit conditions or additional monitoring requirements to ensure that the permit complies with State water quality standards.

C. Permit Expiration

The permit will expire five years from the effective date of the permit.

IX. DEFINITIONS AND ACRONYMS

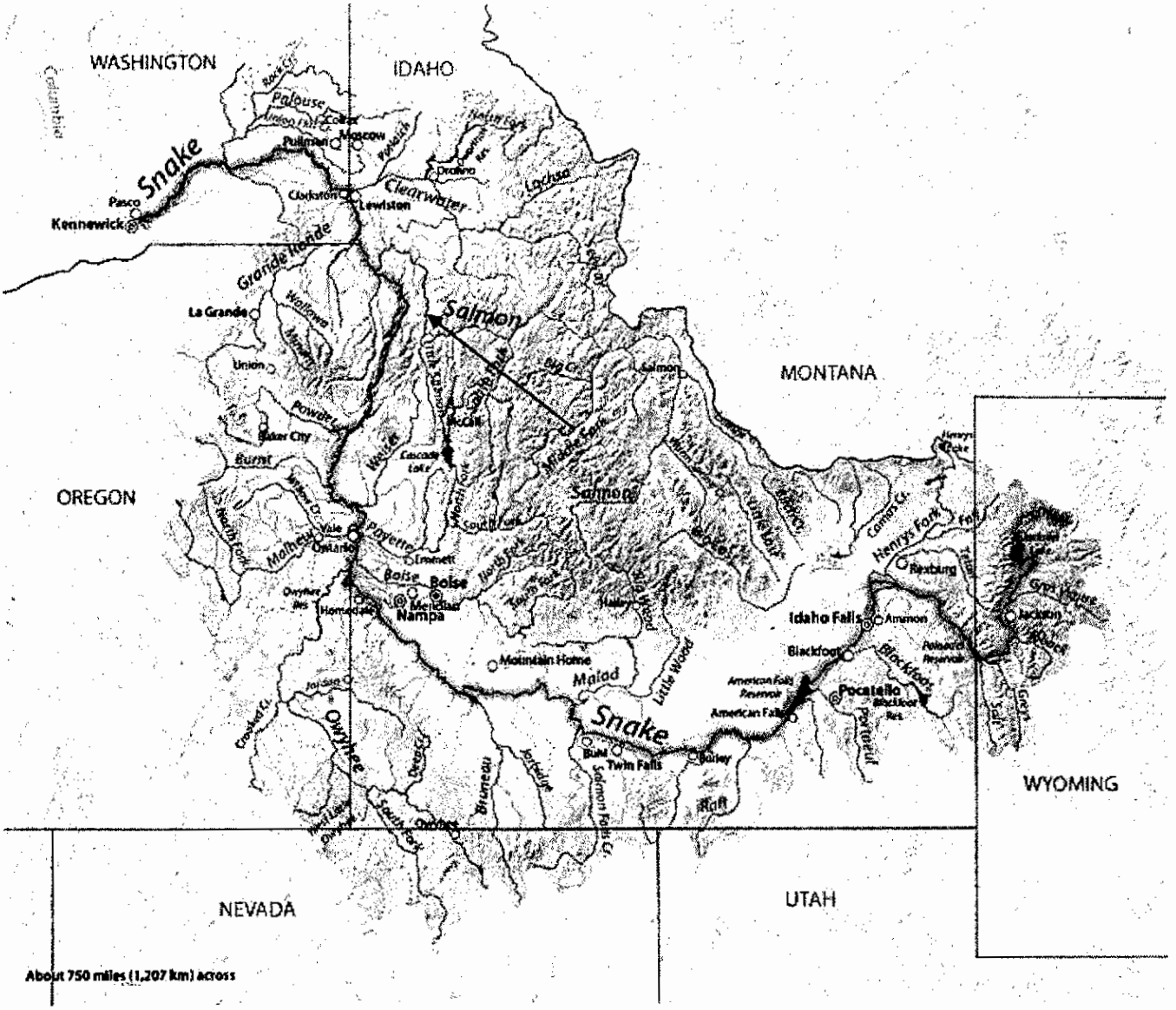
1Q10	1 day, 10 year low flow
7Q10	7 day, 10 year low flow
AML	Average Monthly Limit
BOD_5	Biochemical oxygen demand, five-day
°C	Degrees Celsius
cfs	Cubic feet per second
CFR	Code of Federal Regulations
CV	Coefficient of Variation
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
lbs/day	Pounds per day
LTA	Long Term Average
mg/L	Milligrams per liter
ml	milliliters

µg/L	Micrograms per liter
mgd	Million gallons per day
MDL	Maximum Daily Limit or Method Detection Limit (depending on the context)
NOAA	National Oceanographic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OWW	Office of Water and Watersheds
O&M	Operations and maintenance
POTW	Publicly owned treatment works
QAP	Quality assurance plan
RP	Reasonable Potential
RPM	Reasonable Potential Multiplier
s.u.	Standard Units
TMDL	Total Maximum Daily Load
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document (EPA, 1991)
TSS	Total suspended solids
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UV	Ultraviolet radiation
WLA	Wasteload allocation
WQBEL	Water quality-based effluent limit
WWTP	Wastewater treatment plant

X. REFERENCES

1. City of Riggins, ID, NPDES permit, effective November 24, 2003 to November 24, 2008.
2. Idaho Administrative Procedures Act (IDAPA), 2006. Section 58, Water Quality Standards and Wastewater Treatment Requirements. Idaho Department of Environmental Quality Rules, Title 01, Chapter 02.
3. U.S. EPA, 1973. *Water Quality Criteria 1972* (EPA R3-73-033).
4. EPA. 1991. Technical Support Document for Water Quality-based Toxics Control. US Environmental Protection Agency, Office of Water, EPA/505/2-90-001.
5. EPA, 2010. U.S. EPA NPDES Permit Writer's Manual, US Environmental Protection Agency, Office of Wastewater Management, EPA-833-K-10-001.
6. U.S. EPA, March 2003, Biological Evaluation for Issuance of a NPDES Permit for the Riggins Wastewater Treatment Plant, Riggins, Idaho.

Appendix A – Location Map



Appendix B – Basis for Effluent Limitations

The following discussion explains in more detail the statutory and regulatory basis for the technology and water quality-based effluent limits in the draft permit. Part A discusses technology-based effluent limits, Part B discusses water quality-based effluent limits in general and Part C discusses facility specific water quality-based effluent limits.

A. Technology-Based Effluent Limits

The CWA requires POTWs to meet requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level, referred to as "secondary treatment," which all POTWs were required to meet by July 1, 1977. The EPA has developed and promulgated "secondary treatment" effluent limitations, which are found in 40 CFR 133.102. These technology-based effluent limits apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by application of secondary treatment in terms of BOD_5, TSS and pH. The federally promulgated secondary treatment effluent limits are listed in Table B-1.

Table B-1: Secondary Treatment Effluent Limits (40 CFR 133.102)

Parameter	Average Monthly Limit	Average Weekly Limit	Range
BOD_5	30 mg/L	45 mg/L	---
TSS	30 mg/L	45 mg/L	---
Removal Rates for BOD_5 and TSS	85% (minimum)	---	---
pH	---	---	6.0 - 9.0 s.u.

Mass-based Limits

The federal regulations at 40 CFR §122.45(b) and (f) require that POTW limitations to be expressed as mass-based limits using the design flow of the facility. The mass-based limits, expressed in lbs/day, are calculated as follows based on the design flow:

Mass-based limit (lbs/day) = concentration limit (mg/L) × design flow (mgd) × 8.34

The mass limits for BOD_5 and TSS are calculated as follows:

Average Monthly Limit = 30 mg/L × 0.105 mgd × 8.34 = 26 lbs/day

Average Weekly Limit = 45 mg/L × 0.105 mgd × 8.34 = 39 lbs/day

Chlorine

Chlorine is often used to disinfect municipal wastewater prior to discharge. The Water Pollution Control Federation's *Chlorination of Wastewater* (1976) states that a properly designed and maintained wastewater treatment facility can achieve adequate disinfection if a 0.5 mg/L chlorine residual is maintained after 15 minutes of contact time. A treatment plant that provides adequate chlorination contact time can meet the 0.5 mg/L limit on a monthly average basis. The average weekly limit is expressed as 1.5 times the average monthly limit or in this case 0.75 mg/L. The technology based limits for total residual chlorine are 0.5 mg/L average monthly and 0.75 mg/l average weekly.

Finally, since the federal regulations at 40 CFR 122.45 (b) and (f) require limitations for POTWs to be expressed as mass based limits using the design flow of the facility, mass based limits are calculated as follows:

Monthly average limit = 0.5 mg/L x 0.105 mgd x 8.34 = 0.44 lbs/day

Weekly average limit = 0.75 mg/L x 0.105 mgd x 8.34 = 0.66 lbs/day

B. Water Quality-Based Effluent Limits

Statutory Basis for Water Quality-Based 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. Federal regulations at 40 CFR 122.4(d) prohibit the issuance of an NPDES permit that does not ensure compliance with the water quality standards of all affected States.

The NPDES regulation 40 CFR §122.44(d)(1), implementing Section 301 (b)(1)(C) of the CWA, 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/tribal water quality standard, including state/tribal narrative criteria for water quality.

The regulations require that this evaluation be made using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity (for toxicity), and where appropriate, dilution in the receiving water. The limits must be stringent enough to ensure that water quality standards are met and must be consistent with any available wasteload allocation.

Reasonable Potential Analysis

When evaluating the effluent to determine if water quality-based effluent limits based on chemical specific numeric criteria are needed, a projection of the receiving water concentration downstream of where the effluent enters the receiving water for each pollutant of concern is made. The chemical-specific concentration of the effluent and receiving water and, if appropriate, the dilution available from the receiving water are factors used to project the receiving water concentration. If the projected concentration of the receiving water exceeds the

numeric criterion for a limited parameter, then there is a reasonable potential that the discharge may cause or contribute to an excursion above the applicable water quality standard, and a water quality-based effluent limit is required.

Sometimes it is appropriate to allow a small volume of receiving water to provide dilution of the effluent; these volumes are called mixing zones. Mixing zone allowances will increase the allowable mass loadings of the pollutant to the water body and decrease treatment requirements. Mixing zones can be used only when there is adequate receiving water flow volume and the concentration of the pollutant of concern in the receiving water is below the numeric criterion necessary to protect the designated uses of the water body. Mixing zones must be authorized by the State. The IDEQ's draft certification proposes to authorize a mixing zone of 25 percent of the receiving water for the following parameters: ammonia and total residual chlorine. This results in an acute dilution ratio of 2,620 to 1, a chronic dilution ratio of 3,440 to 1 and a chronic dilution ratio for ammonia of 4,020 to 1.

Qe = maximum effluent flow = 0.105 mgd = 0.163 CFS

1Q10 = upstream low flow = 1710 CFS

$$\text{Acute dilution ratio} = \frac{0.163 + 1710(0.25)}{0.163} = 2620$$

7Q10 = upstream low flow = 2240 CFS

$$\text{Chronic dilution ratio} = \frac{0.163 + 2240(0.25)}{0.163} = 3440$$

For ammonia

30B3 = 2620 CFS

$$\text{Chronic dilution ratio} = \frac{0.163 + 2620(0.25)}{0.163} = 4020$$

If IDEQ does not grant the mixing zones in its final certification of this permit, the water quality-based effluent limits will be re-calculated such that the criteria are met before the effluent is discharged to the receiving water.

Procedures for Deriving Water Quality-based Effluent Limits

The first step in developing a water quality-based effluent limit is to develop a wasteload allocation (WLA) for the pollutant. A wasteload allocation is the concentration or loading of a pollutant that the permittee may discharge without causing or contributing to an exceedance of water quality standards in the receiving water.

In cases where a mixing zone is not authorized, either because the receiving water already exceeds the criterion, the receiving water flow is too low to provide dilution, or the State does not authorize one, the criterion becomes the WLA. Establishing the criterion as the wasteload allocation ensures that the permittee will not cause or contribute to an exceedance of the criterion. The following discussion details the specific water quality-based effluent limits in the draft permit.

C. Facility-Specific Water Quality-based Limits

Once the WLA has been developed, the EPA applies the statistical permit limit derivation approach described in Chapter 5 of the TSD to obtain daily maximum and monthly average permit limits. This approach takes into account effluent variability (using the CV), sampling frequency and the difference in time frames between the monthly average and daily maximum limits.

The daily maximum limit is based on the CV of the data and the probability basis, while the monthly average limit is dependent on these two variables and the monitoring frequency. As recommended in the TSD, the EPA used a probability basis of 95 percent for monthly average limit calculation and 99 percent for the daily maximum limit calculation.

Floating, Suspended or Submerged Matter/Oil and Grease

The Idaho Water Quality Standards (IDAPA 58.01.02.200.05) require surface waters of the State to be free from floating, suspended or submerged matter of any kind in concentrations causing nuisance or objectionable conditions that may impair designated beneficial uses. A narrative condition is proposed for the draft permit that states there must be no discharge of floating solids or visible foam or oil and grease other than trace amounts.

pH

The Idaho Water Quality Standards (IDAPA 58.01.02.250.01.a) require surface waters of the State to have a pH value within the range of 6.5 - 9.5 standard units. It is anticipated that mixing zones will not be authorized for the water quality-based criterion for pH. Therefore, this criterion must be met when the effluent is discharged to the receiving water. The technology-based effluent limits for pH are 6.0 - 9.0 standard units. To ensure that both water quality-based requirements and technology-based requirements are met, the draft permit incorporates the more stringent lower limit of the water quality standards (6.5 standard units) and the more stringent upper limit of the technology-based limits (9.0 standard units).

Ammonia, Total (as Nitrogen)

The Idaho Water Quality Standards contain criteria for the protection of aquatic life from the toxic effects of ammonia (IDAPA 58.01.02.250.01.d.). The water quality standards apply the criteria for early life stages to water bodies (IDAPA 58.01.02.250.01.d.(3)). The criteria are dependent on pH and temperature, because the fraction of ammonia present as the toxic, un-ionized form increases with increasing pH and temperature. Therefore, the criteria become more stringent as pH and temperature increase. Fresh water ammonia criteria are calculated according to the equations in Table B-3.

Table B-3 Water Quality Criteria for Ammonia

Acute Criterion	Chronic Criterion
$\frac{0.275}{1+10^{7.204-pH}}+\frac{39}{1+10^{pH-7.204}}$	$\left(\frac{0.0577}{1+10^{7.688-pH}}+\frac{2.487}{1+10^{pH-7.688}}\right)\times MIN\left(2.85,1.45\times10^{0.028\times(25-T)}\right)$

The acute and chronic criteria are derived from the annual 95th percentiles of pH and temperature. The permittee reported effluent data for ammonia for the year 2006. The permittee reported no surface water monitoring data. However, the U.S. Forest Service, Slate Creek Ranger Station, which is downstream on the Salmon River, did report surface water monitoring data approximately quarterly from March 2010 to October 2011. Only 5 sets of surface water monitoring data were provided, so the ammonia criteria will be derived from the maximum values below for each of pH and temperature. Since Slate Creek Station is downstream of the City of Riggins, this means that the reasonable potential determination will be conducted on a conservative basis (i.e., more protective of water quality standards).

95th Percentile (maximum) Ambient pH	8.4
95th Percentile (maximum) Ambient Temperature °C	16.0
Highest Background Ammonia mg/L	0.144
Highest Discharge Ammonia mg/L	0.5
Coefficient of Variation	1.34

The ammonia acute standard is 2.59 mg/L and the chronic standard is 1.17 mg/L. The reasonable potential analysis shows the facility's discharge does not have the potential to cause or contribute to an exceedance of the acute or chronic criteria, therefore, no effluent limits for ammonia are required.

Escherichia coli (E. coli) Bacteria

The Salmon River at the point of discharge is designated for primary contact recreation. Waters of the State of Idaho that are designated for recreation are not to contain *E. coli* bacteria in concentrations exceeding 126 organisms per 100 ml as a geometric mean based on a minimum of five samples taken every three to five days over a thirty day period (IDAPA 58.01.02.251.01.a). The proposed compliance monitoring schedule contains a monthly geometric mean effluent limit for *E. coli* of 126 organisms per 100 ml and a minimum sampling frequency of 5 grab samples per calendar month .

The Idaho Water Quality Standards also state that for primary contact recreation a single water sample that exceeds 406 organisms/100 ml indicates a likely exceedance of the geometric mean criterion, although it is not, in and of itself, a violation of water quality standards (IDAPA § 58.01.02.251.01.b.ii).

The goal of a water quality-based effluent limit is to ensure a low probability that water quality standards will be exceeded in the receiving water as a result of a discharge, while considering the variability of the pollutant in the effluent (EPA, 1991). Because a single sample value exceeding 406 organisms/100 ml may indicates an exceedance of the geometric mean criterion, the EPA has included an instantaneous (single grab sample) maximum effluent limit for *E. coli* of 406 organisms/ 100 ml, in addition to a monthly geometric mean limit of 126 organisms/100 ml, which directly implements the water quality criterion for *E. coli*. This will ensure that the discharge will have a low probability of exceeding the geometric mean criterion for *E. coli* and provide warning of and opportunity to avoid possible non-compliance with the geometric mean criterion.

Chlorine

Idaho water quality standards at IDAPA 58.01.02.210.01 establish a chlorine chronic aquatic life criterion of 11 µg/L and an acute aquatic life criterion 19 µg/L in the Salmon River. The City of Riggins does not have a reasonable potential to violate the water quality standards for chlorine in the Salmon. Therefore, water quality based effluent limits for chlorine are not required. However, the EPA will continue to include technology based limits of 0.5 mg/L average monthly and 0.75 mg/L average weekly derived for the proposed permit. The City of Riggins treatment system achieved this level of control, with no exceptions. The EPA will continue with the technology based monthly mass limit of 0.44 lbs/day and the weekly limit of 0.66 lbs/day. The City of Riggins treatment system achieved this level of control for loading, with no exceptions

REASONABLE POTENTIAL FOR AQUATIC LIFE

		State Water Quality Standard		Max concentration at edge of...										
Parameter	Ambient Conc. *Mg/L*	Acute *mg/L*	Chronic mg/L	Acute Mixing Zone *mg/L*	Chronic Mixing Zone *mg/L*	**LIMIT REQ'D?**	Effluent percentile value	*Pn*	Max effluent conc. measure *mg/L*	Coeff Variation *CV*	# of samples *n*	Multiplier	Acute Dil'n Factor	Chronic Dil'n Factor
Ammonia	0.144	2.59	1.17	0.145	0.145	NO	0.99	0.681	0.500	1.34	12	9.57	2620	4030
Total Residual Chlorine	0.00	0.019	0.011	0.0003	0.0002	NO	0.99	0.975	0.750	0.191	180	1.08	2620	3440

Appendix C –IDEQ Draft 401 Certification

Idaho Department of Environmental Quality

Draft §401 Water Quality Certification

May 7, 2012

NPDES Permit Number(s): City of Riggins Waste Water Treatment Plant; ID-002093-1

Receiving Water Body: Salmon River

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 1 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 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.05).
- Tier 2 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; 58.01.02.052.06).
- Tier 3 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; 58.01.02.052.07).

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). 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.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 City of Riggins Waste Water Treatment Plant discharges the following pollutants of concern: Biological Oxygen Demand, Total Suspended Solids, *E.coli* Bacteria, pH, Total Residual Chlorine, and Total Ammonia Nitrogen. Effluent limits have been developed for Biological Oxygen Demand, Total Suspended Solids, *E.coli* Bacteria, pH, and Total Residual Chlorine. No effluent limits are proposed for Total Ammonia Nitrogen.

Receiving Water Body Level of Protection

The City of Riggins Waste Water Treatment Plant discharges to the Salmon River assessment unit (AU) 17060209SL011_07 (Little Salmon River to Slate Creek). This AU has the following designated beneficial uses: cold water aquatic life, primary contact recreation, and domestic water supply. In addition, salmonid spawning has been documented as an existing beneficial use in the Lower Salmon River [1].

The Salmon River AU 17060209SL011_07 aquatic life, salmonid spawning, contact recreation, and water supply uses have not been assessed; therefore DEQ must determine the appropriate level of antidegradation protection on a case-by-case basis. Currently there is no data available regarding the support status of the aquatic life, salmonid spawning, contact recreation, and water supply uses in this AU and the collection of necessary data to determine the support status of these uses would take considerable time. As such, the applicant has agreed to consider the Salmon River high quality water for the beneficial uses listed above (per.comm). For the purposes of this antidegradation review, and to prevent further delays in the issuance of this certification, DEQ will provide Tier 2 protection, in addition to Tier 1, for the aquatic life, salmonid spawning, contact recreation, and water supply uses (Idaho Code § 39-3603(2)(b)).

DEQ will reevaluate the level of antidegradation protection afforded to this AU based on available information when preparing future 401 certifications for federally-permitted activities that may affect the AU.

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 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. In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS.

[1]Garcia, Aaron, S. Bradbury, Billy Arnsberg, S. Rocklage, P. Groves, "Fall Chinook Salmon Spawning Ground Surveys in the Snake River Basin Upriver of Lower Granite Dam", Project No. 1998-01003, 51 electronic pages, (BPA Report DOE/BP-00004700-2).

The numeric and narrative criteria in the WQS are set at levels that ensure protection of designated beneficial uses. The effluent limitations and associated requirements contained in the City of Riggins Waste Water Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS.

High-Quality Waters (Tier 2 Protection)

The Salmon River is considered high quality for cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply. As such, the water quality relevant to cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply uses of the Salmon River 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, salmon spawning, primary contact recreation, and domestic water supply uses of the Salmon River (IDAPA 58.01.02.052.04). The Biological Oxygen Demand, Total Suspended Solids, Total Residual Chlorine, pH, and Total Ammonia Nitrogen pollutants are relevant to aquatic life and salmonid spawning beneficial uses. The *E.coli* Bacteria is the only pollutant relevant to the contact recreation beneficial use. There are no discharged pollutants relevant to the domestic water supply beneficial use.

Effluent limits are set in the proposed and existing permit for Biological Oxygen Demand, Total Suspended Solids, Total Residual Chlorine, pH, and *E. coli* Bacteria pollutants. There is no effluent limit proposed for Total Ammonia Nitrogen. The fact sheet accompanying the proposed permit includes a reasonable potential to exceed analysis for the facility's discharge of Total Ammonia Nitrogen that shows the facility's discharge does not have the potential to cause or contribute to an exceedance of the acute of chronic criteria, and therefore, no effluent limits for ammonia are required.

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 (IDAPA 58.01.02.052.04.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 58.01.02.052.04.a.i), and the future discharge quality is based on the proposed permit limits (IDAPA 58.01.02.052.04.a.ii). For the City of Riggins Waste Water Treatment Plant permit, this means determining the permit's effect on water quality based upon the limits for Biological Oxygen Demand, Total Suspended Solids, Total Residual Chlorine, pH, and *E.Coli* Bacteria. 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.

Pollutant	Units	Current Permit			Proposed Permit			Change
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
Biochemical Oxygen Demand (BOD_5)	mg/L	30	45	—	30	45	—	No Change
	lb/day	26	39	—	26	39	—	
	% removal	85%	—	—	85%	—	—	
Total Suspended Solids (TSS)	mg/L	30	45	—	30	45	—	No Change
	lb/day	26	39	—	26	39	—	
	% removal	85%	—	—	85%	—	—	
pH	standard units	6.5–9.0 all times			6.5–9.0 all times			No Change
E. coli Bacteria	no./100 mL	126		406	126		406	No Change
Total Residual Chlorine	mg/L	0.5	0.75	—	0.5	0.75	—	No Change
	lb/day	0.44	0.66	—	0.44	0.66	—	
Total Ammonia Nitrogen	mg/L	—	—	Report	—	—	Report	No Change

The proposed permit limits for pollutants of concern in Table 1, Biochemical Oxygen Demand, Total Suspended Solids, pH, *E.Coli* Bacteria, and Total Residual Chlorine are the same as those in the current permit. Therefore, no adverse change in water quality and no degradation will result from the discharge of these pollutants.

Pollutants with No Limits

There is one pollutant of concern, Total Ammonia Nitrogen, relevant to Tier 2 protection of contact recreation that currently is not limited and for which the proposed permit also contains no limit (Table 1). For such pollutants, a change in water quality is determined by reviewing whether changes in production, treatment, or operation that will increase the discharge of these pollutants are likely (IDAPA 58.01.02.052.04.a.ii). The Total Ammonia Nitrogen effluent concentrations used in the facility's reasonable potential to exceed analysis for Total Ammonia Nitrogen in the facility's proposed permit were reported under the previous permit and are expected to be the same as in the current permit. There is no reason to believe this pollutant will be discharged in quantities greater than those discharged under the current permit. This conclusion is based upon the fact that there have been no changes in the design flow, influent quality, or treatment processes that would likely result in an increased discharge of this pollutant. Because the proposed permit does not allow for any increased water quality impact from this pollutant, DEQ has concluded that the proposed permit should not cause a lowering of water quality for the pollutant with no limit. As such, the proposed permit should maintain the existing high water quality in Salmon River.

Mixing Zones

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone that utilizes 25% of the critical flow volumes of Salmon River for Total Residual Chlorine and Total Ammonia Nitrogen.

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 regarding the actions taken in this certification should be directed to John Cardwell, Idaho Department of Environmental Quality, Lewiston Regional Office, (208) 799-4370, John.Cardwell@deq.idaho.gov.

DRAFT

Clayton Steele
Regional Administrator
Lewiston Regional Office