FACT SHEET

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

The City of Weippe
623 North Main Street
Weippe, Idaho 83553

NPDES Permit Number: ID0020354

Public Notice Start Date: June 26, 2014
Public Notice Expiration Date: July 25, 2014

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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 1st floor Public Information Center.

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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

A. General Information

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

Facility Name:	City of Weippe Wastewater Treatment Plant
Mailing Address:	623 N. Main Street, Weippe, Idaho 83553
Facility Address:	623 N. Main Street, Weippe, Idaho 83553
Contact:	Michael F. Edmonson, Maintenance Superintendent, (208) 435–4216

B. Permit History

The facility's current permit became effective on October 1, 2002 and expired on September 30, 2007. The EPA received a complete application for permit reissuance on April 26, 2007. Since the permit was not reissued before the expiration date of September 30, 2007 and since the City submitted a timely application, the permit was administratively extended pursuant to 40 CFR 122.6.

II. FACILITY INFORMATION

A. Treatment Plant Description

The City of Weippe (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 separate sanitary sewer system. The satellite community of Pleasant Acres also discharges to the treatment plant. There are no significant industrial users.

The wastewater treatment plant consists of three aerated lagoons in series, followed by chlorination. Primary treatment consists of screening. Disinfection is by chlorination in a contact chamber prior to discharge. Because of the minimum instream dilution requirement in the existing permit, the facility can typically only discharge during January through June each year.

The facility serves a population of about 488 and has a design flow rate of 0.536 mgd.

The City estimates that inflow and infiltration may be as high as 60 percent of yearly inflow. To address this situation, the City is considering main line repairs and manhole restoration, subject to the availability of grant funds.

B. Compliance History

A review of the Discharge Monitoring Reports (DMRs) from May 2008 to May 2013 found some violations of effluent limits:

Total Phosphorus

Violations of the monthly average concentration limit of 0.22 mg/L, at 0.51 in April 2009, and 1.5 in April 2011.

Violations of the weekly average concentration limit of 0.43 mg/L, at 0.51 in April 2009, and 1.5 in September 2011.

Violations of the monthly average loading limit of 1 lb/day, at 1.55 in April 2009, and 5.14 in April 2011.

A violation of the weekly average loading limit of 1.9 lb/day, at 5.14 in April 2011.

III. RECEIVING WATER

The treated effluent from the City of Weippe wastewater treatment facility is discharged intermittently to Jim Ford Creek. From the City, Jim Ford Creek flows approximately 16 miles downstream to the confluence with the Clearwater River at Orofino, Idaho. Downstream of the City, the Creek passes over a 65-foot waterfall and then flows through a steep basalt canyon. The Outfall from the City, which lies within the Clearwater Subbasin (HUC 17060306) C-35, is located at latitude 46° 22' 52" N and longitude 115° 56' 48" W and lies within Jim Ford Creek, source to Jim Ford Creek waterfall.

A. Low Flow Conditions

The low flow conditions of a water body are used to assess the need for and develop water quality based effluent limits. Jim Ford Creek flow is intermittent at the City of Weippe. It is characterized by low flows of about 2 cfs during the summer months increasing to about 50 cfs during the spring and fall. To ensure compliance with the minimum dilution requirements of the NPDES permit, the City uses an Idaho Department of Environmental Quality (IDEQ)-approved methodology to calculate upstream flow based on velocity and stream depth and width. During the months when the City discharged from May 2008 to May 2013, the average calculated upstream flow ranged from 42 to 87 cfs. The current permit allows the City of Weippe to discharge only when flow in Jim Ford Creek immediately upstream of Outfall 001 provides a minimum dilution of 50:1 on a daily basis.

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 Clearwater Subbasin, Jim Ford Creek, source to Jim Ford Creek waterfall (IDAPA 58.01.02.120.08, C-35) (HUC 17060306) . At the point of discharge, the Little Salmon River is protected for the following designated uses (IDAPA 58.01.02**.**120.08):

- cold water aquatic life
- primary contact recreation

In addition, the WQS 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 WQS:

- 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)

Antidegradation

The EPA is required under Section 301(b)(1)(C) of the Clean Water Act (CWA) and implementing regulations (40 CFR 122.4(d) and 122.44(d)) to establish conditions in NPDES permits that ensure compliance with State water quality standards, including antidegradation requirements. IDEQ has provided the EPA with an antidegradation analysis that complies with the State's antidegradation implementation procedures in the State's 401 certification. Comments on the 401 certification including the antidegradation review can be submitted to the IDEQ as set forth above (see State Certification in Appendix C).

C. Water Quality Limited Segment

Any waterbody for which the water quality does not or is not expected to meet, applicable water quality standards is defined as a "water quality limited segment."

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.

The State of Idaho's 2010 Integrated Water Quality Monitoring and Assessment Report (Integrated Report), designates Jim Ford Creek, source to mouth on the 303(d) list as impaired for sedimentation, temperature, bacteria, and nutrients. The TMDL for this watershed is *Jim Ford Creek Total Maximum Daily Load Management Plan*, jointly prepared by Idaho Division of Environmental Quality (IDEQ) and the Nez Perce Tribe, March 2000. The TMDL was approved by the EPA in June 2000. Details on the Wasteload Allocations that the TMDL document established are described in Appendix B.

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 are provided in Appendix B of this document.

B. Existing Effluent Limitations

The existing permit includes the following effluent limits and monitoring requirements:

Table 1: Effluent Limitations and Monitoring Requirements from the Existing Permit - Outfall 001						
Parameter	**Units**	**Monthly Avg.**	**Weekly Avg.**	**Instantaneous Maximum Limit**	**Sample Frequency**	**Sample Type**
Stream Flow, Upstream of Outfall	cfs	---	---	---	Daily	Calculation
Flow, Effluent	MGD	---	---	---	Continuous	Recording
Biochemical Oxygen Demand (BOD_5)	mg/l	45	65	---	Monthly	Grab
	lbs/day	153	230	---		
Total Suspended Solids (TSS)	mg/l	70	105	---	Monthly	Grab
	lbs/day	153	230	---		
E. coli Bacteria[1]	colonies/ 100 ml	126	---	406	Weekly	Grab
pH	Standard units	6.5 – 9.0			5/week (Mon-Fri)	Grab
Total Phosphorus, April 1-July 31	mg/l	0.22	0.43	---	Monthly	Grab
	lbs/day	1.0	1.9	---		
Total Residual Chlorine	mg/l	0.32	---	0.97	5/week (Mon-Fri)	Grab
	lbs/day	1.43	---	4.33		

[1] The average monthly *E. coli* counts must not exceed a geometric mean of 126/100ml based on a minimum of one sample per week over a thirty day period.

Minimum Dilution Requirement: The permittee may only discharge when the flow in Jim Ford Creek immediately upstream of Outfall 001 provides a minimum 50:1 dilution on a daily basis. The permittee must either measure the upstream flow or calculate the flow by the currently applied, IDEQ-approved methodology. Upstream flows must be reported on monthly DMRs. Under the existing permit, percent removal for BOD_5 and TSS was only required to be reported. An effluent limitation was not established for percent removal.

C. Proposed Effluent Limitations

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

There shall be no discharge to Grasshopper Creek from the City of Weippe. This shall be confirmed by weekly inspections of the under drain.

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 phosphorus, 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%[1]	--
	134 lbs/day	201 lbs/day		--
TSS	30 mg/L	45 mg/L	85%[1]	--
	134 lbs/day[4]	201 lbs/day[4]		--
E. coli Bacteria	126 colonies /100mL[2]	--	--	406 colonies /100mL[3]
Total Residual Chlorine	0.32 mg/L	--	--	0.97 mg/L
	1.43 lbs/day	--	--	4.33 lbs/day
Total Phosphorus, Seasonal Limit	30 lbs/month[,5]		--	--
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. 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 3-7 days within a calendar month.
3. Instantaneous maximum limit, applicable to each grab sample without averaging. A violation must be reported within 24 hours.
4. Loading is calculated by multiplying the concentration (mg/L) by the flow (mgd) on the day sampling occurred and a conversion factor of 8.34.
5. Seasonal Average Limit for Total Phosphorus (TP)

   a) The seasonal average TP load from April 1 through July 31must not exceed 30 lb/month.
   b) The seasonal average TP load must be calculated as the average of the monthly loads from April 1 through July 31.
   Monthly loading is calculated by multiplying the average concentration (mg/L) for the month by the total flow (mgd) for the month and a conversion factor of 8.34.
   The seasonal average load is calculated by the sum of the monthly loads divided by four.
   c) The seasonal average TP load must be reported on the July DMR, regardless of whether a discharge of pollutants occurs during the month of July. Monthly loads must be reported on the DMRs in the month following the monitoring period.

Minimum Dilution Requirement: The permittee may only discharge when the flow in Jim Ford Creek immediately upstream of Outfall 001 provides a minimum 50:1 dilution on a daily basis. The permittee must either measure the upstream flow or calculate the flow by the currently applied, IDEQ-approved methodology. Upstream flows must be reported on monthly DMRs.

Discharges to Grasshopper Creek are prohibited. Inspections of the drainage pipe outfall to Grasshopper Creek are added.

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 may also be required to characterize the effluent to determine if additional effluent limitations are required and to monitor effluent impacts on receiving water quality.

The permit also requires the permittee to perform effluent monitoring required by the NPDES Form 2A application, so that these data will be available when the permittee applies for a renewal of its NPDES permit.

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. Permittees have 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.

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

The permit requires monitoring BOD_5, TSS, *E. coli*, total phosphorus, 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. The proposed permit requires ammonia effluent sampling once per month. (See Appendix B)

Table 3 presents the effluent monitoring requirements for the permittee in the draft 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/week	Grab
	lbs/day	Influent and Effluent[1]	1/week	Calculation

Table 3: Effluent Monitoring Requirements				
Parameter	**Unit**	**Sample Location**	**Sample Frequency**	**Sample Type**
	% Removal	---	1/month	Calculation
TSS	mg/L	Influent and Effluent[1]	1/week	Grab
	lbs/day	Influent and Effluent[1]	1/week	Calculation
	% Removal	---	1/month	Calculation
pH	standard units	Effluent	5/week	Grab
E.coli	colonies/100 ml	Effluent	5/month	Grab
Total Residual Chlorine	mg/L	Effluent	1/week	Grab
Total Ammonia as N	mg/L	Effluent	1/month	Grab
Total Phosphorus April 1-July 31	mg/L	Effluent	1/week	Grab
	lbs/week		1/week	Calculation
Total Phosphorus August 1-March 31	mg/L	Effluent	1/month	Grab
	lbs/month		1/month	Calculation
NPDES Application Form 2A Effluent Testing Data	mg/L	Effluent	3x/5 years	See footnote 2
Dilution Ratio	---	---	Daily During Periods of Discharge	Calculated[3]

1. Influent and effluent composite samples shall be collected during the same 8-hour period.
2. For Effluent Testing Data, in accordance with instructions in NPDES Application Form 2A, Part B.6.
3. (Effluent Flow + Upstream Surface Water Flow)/Effluent Flow

Monitoring Changes from the Previous Permit

New monitoring is established for ammonia and total phosphorus, the latter during times outside the period April through July. Monitoring for TSS and BOD_5 is increased to weekly from monthly to ensure compliance with the weekly effluent limitations. Monitoring from August 1 to March 31 is required monthly to characterize the discharges for TP. Weekly inspections of the drain line to Grasshopper Creek are added.

C. Surface Water Monitoring

The existing permit did not require surface water monitoring for calculations to determine whether there was reasonable potential to exceed water quality standards for ammonia. Therefore, surface water monitoring is required under the proposed permit to be used in a reasonable potential determination for the next permit cycle.

1. Surface water monitoring must start 180 days after the effective date of the permit. The program must meet the following requirements:

2. Monitoring stations must be established in Jim Ford Creek, above the influence of the facility's discharge.
3. The permittee must seek approval of the surface water monitoring stations from IDEQ.
4. 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.
5. To the extent practicable, surface water monitoring should occur on days when the Weippe WWTP is discharging, and must occur on the same day as effluent sample collection.
6. All ambient samples must be grab samples.
7. 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
Stream Flow	cfs	Daily	---
Temperature	°C	Quarterly	0.2
pH	Standard Units	Quarterly	0.1
Total Ammonia as N	mg/L	Quarterly	0.10

1. Quarterly monitoring must occur once during each of the following quarters: January 1 – March 31, April 1 – June 30, August 15 – September 30 and October 1 – December 31. The second quarter is shortened since the facility generally does not discharge from July 1 to August 15.

8. 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".
9. 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.

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 requires that the permittee submit DMR data electronically using NetDMR within six months of the effective date of the permit. 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. 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.

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: http://www.epa.gov/netdmr. The permittee may use NetDMR after requesting and receiving permission from EPA Region 10.

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/REGULATORY REQUIREMENTS

A. Endangered Species Act

The Endangered Species Act requires federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA) and the U.S. Fish and Wildlife Service (FWS) if their actions could adversely affect any threatened or endangered species. The NOAA National Marine Fisheries Service, Northwest Regional Office, designates salmon and steelhead as threatened or endangered species in the Snake River Basin, which includes the Clearwater River Subbasin. However, Jim Ford Creek downstream of the City of Weippe passes over a 65-foot waterfall, and salmonid species are found only below the waterfall. Accordingly, Jim Ford Creek in the vicinity of the City of Weippe is not designated as protected for salmonid spawning.

Based on the USFW website, Clearwater County, the location of the City of Weippe WWTP discharge, contains the threatened fish species Bull Trout, but no other threatened or endangered aquatic species**.** Bull Trout are also a salmonid species, and are not expected to be found in Jim Ford Creek upstream of the waterfall. In May 2001, the EPA prepared a Biological Evaluation for NPDES Permits in the Lower Clearwater River Watershed, including the permit for the City of Weippe, and concluded that reissuance of the permit would have no effect on the listed threatened and endangered species. Permit limits and other requirements were protective of the listed species. In addition, the already existing barriers in Jim Ford Creek prevent salmonid occurrence in the vicinity of the City's discharge. This is supported by existing fisheries data, which show salmonids only below the current barriers and in the *Pacific Coast Salmon 5-Year Review of Essential Fish Habitat Final Report to the Pacific Fishery Management Council*
Revised May 25, 2011:

> "Exceptions in freshwater include cases in which certain man-made or naturally occurring barriers represent the current upstream extent of Pacific salmon access."

Further, Weippe does not generally discharge during the critical period of July 1 through August 15.

Therefore, the EPA determines, consistent with the biological evaluation, the discharges in the draft permit from the City's WWTP will have no effect on listed species.

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.

NOAA National Marine Fisheries Services, Northwest Regional Office, has designated EFH for salmonid species in HUC 1706030, the Clearwater Subbasin, except where dams or other

barriers indicate upstream extent. Jim Ford Creek downstream of the City of Weippe passes over a 65-foot waterfall, and salmonid species are found only below the waterfall. The biological evaluation stated Jim Ford Creek in the vicinity of the City of Weippe is not designated as protected for salmonid spawning, and is excluded as EFH. For the same reasons described in Section VIII.A above, the EPA concludes that issuance of this permit will have no effect on EFH.

C. 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.

D. 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
ºC	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

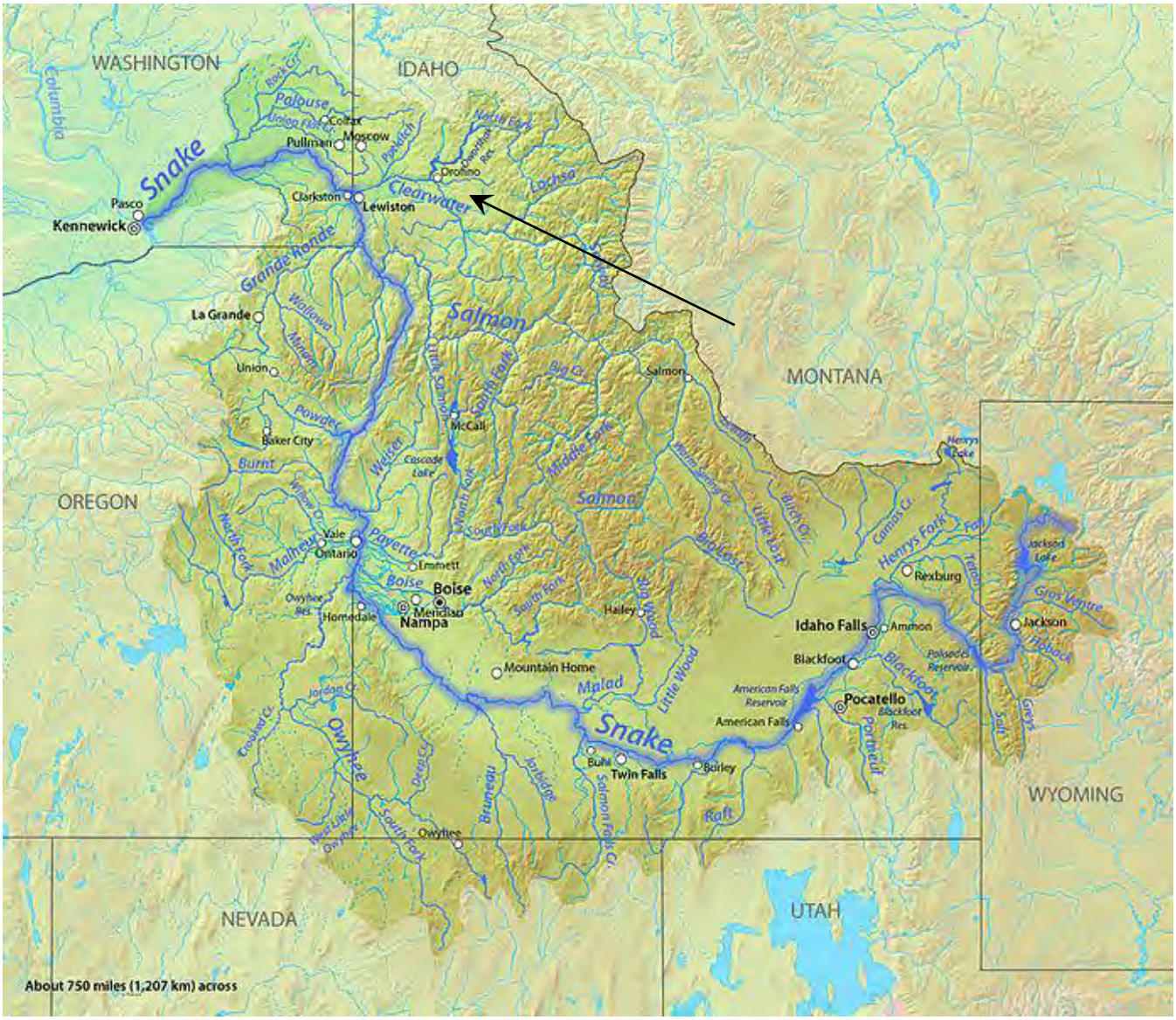
RPM	Reasonable Potential Multiplier
s.u.	Standard Units
TMDL	Total Maximum Daily Load
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document (EPA, 1991)
TSS	Total suspended solids
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UV	Ultraviolet radiation
WLA	Wasteload allocation
WQBEL	Water quality-based effluent limit
WWTP	Wastewater treatment plant

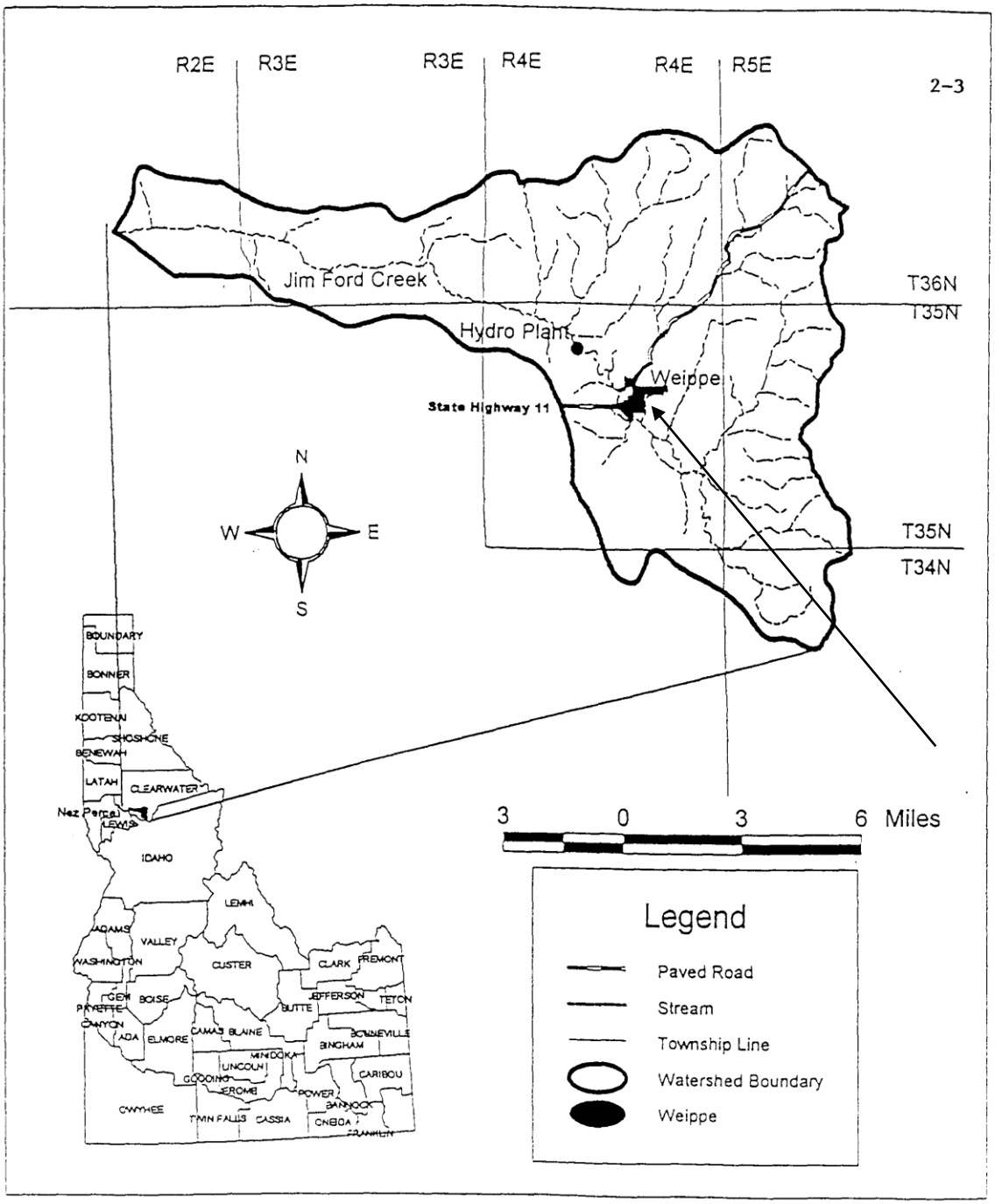
X. REFERENCES

1. City of Weippe, ID, NPDES permit, effective October 1, 2002 to September 30, 2007.
2. U.S. EPA, 1973. *Water Quality Criteria 1972* (EPA R3-73-033).
3. EPA. 1991. Technical Support Document for Water Quality-based Toxics Control. US Environmental Protection Agency, Office of Water, EPA/505/2-90-001.
4. EPA, 2010. U.S. EPA NPDES Permit Writer's Manual, US Environmental Protection Agency, Office of Wastewater Management, EPA-833-K-10-001.

Appendix A – Location Map

The arrow indicates the approximate position of the City's Outfall to Jim Ford Creek; the Creek is not designated on the map.





Location of the Jim Ford Creek Watershed, including Weippe, Idaho.
Figure Source, TMDL document, March 2000

Aerial view of Weippe WWTP; the blue balloon marks the Outfall position, at 46° 22’ 52” N, 115° 56’ 48” W. Image source: Google Earth

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. Monitoring data from May 2008 to May 2013 show that the City of Weippe can meet secondary treatment concentration limits for BOD_5, with no exceptions. Therefore, secondary treatment limits for BOD_5 will be required for this facility. 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.

The current permit TSS limits were in accordance with 40 CFR 133.103(c) and (IDAPA16.01.01.420.02.b.ii). These alternative state requirements (ASRs) for TSS were a monthly limit of 70 mg/L and a weekly limit of 105 mg/L. However, these limitations were never submitted to nor approved by EPA as ASRs. Therefore, they should not have been included in the previous permit. Additionally, the State of Idaho eliminated IDAPA16.01.01.420.02.b.ii.

On September 20, 1984, EPA revised the Secondary Treatment Regulations (40CFR 133.102) for facilities that use waste stabilization ponds as the principal process. These revisions established effluent limitations for Treatment Equivalent to Secondary Treatment (40 CFR 133.105). These provisions allow alternative limits for BOD_5 and TSS for such facilities, provided all three of the following criteria are met (40 CFR 133.101(g) and 40 CFR 133.105(d)):

(1) The BOD_5 and TSS effluent concentrations consistently achievable through proper operation and maintenance (§ 133.101(f)) of the treatment works exceed the minimum level of the effluent quality set forth in §§ 133.102(a) and (b).

The regulation at 133.101(f) defines effluent concentrations consistently achievable through proper operation and maintenance as the 95th percentile value for a given pollutant for the 30-day average effluent quality achieved by a treatment works in a period of at least two years and a 7-day average value equal to 1.5 times the value derived from that value.

Also, 40 CFR133.105(f) states:

"Furthermore, permitting authorities shall require more stringent limitations when adjusting permits if: (1) For existing facilities the permitting authority determines that the 30-day average and the 7- day average BOD_5 and TSS effluent values that could be achievable through proper operating and maintenance of the treatment work, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations"

(2) A trickling filter or waste stabilization pond (lagoon) is used as the principal process, and

(3) The treatment works provide significant biological treatment of municipal wastewater. The regulations at § 133.101(k) defines *significant biological treatment* as the use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of at least 65 percent removal of BOD_5.

Requirements for Treatment Equivalent to Secondary

The City of Weippe does not meet all three criteria for Treatment Equivalent to Secondary.

(1) Weippe does not meet the first criteria for treatment equivalent to secondary treatment. Weippe's BOD_5 and TSS effluent concentrations do not consistently exceed the minimum level of effluent quality set forth in § 133.102(a) and (b) shown in Table B-1.

Based on an analysis of past performance of the treatment works Weippe can achieve more stringent limitations than Treatment Equivalent to Secondary Treatment. An analysis of the monitoring data reported from 2009 to 2013 found the 95th percentile 30-day average effluent quality achieved by the treatment works for TSS was 19 mg/L. Therefore, the City of Weippe TSS effluent concentration does not exceed the minimum 30-day average of 30 mg/L.

The 7-day average TSS value is equal to:

1.5 x 19 mg/L = 29 mg/L

Therefore, Weippe does not exceed the minimum level of effluent quality for the 7-day average of 45 mg/L. The proposed permit will require secondary treatment concentration limits for TSS as shown in Table B-1.

An analysis of the monitoring data reported from 2009 to 2013 found the 95th

percentile 30-day average effluent quality achieved by the treatment works for BOD_5 was 14 mg/L.

The 7-day average TSS value is equal to:

1.5 x 14 mg/L = 21 mg/L

Therefore, Weippe does not exceed the effluent quality for the 30-day and 7-day average of 30 mg/L and 45 mg/L.

(2) Because a waste stabilization pond (lagoon) is used as the primary process, the facility does meet the second criteria.

(3) The facility does meet the third criteria.

Based on past performance over the last five years the facility does provide significant biological treatment. Over the last five years Weippe achieved a 30-day average of at least 65 percent of BOD_5. In fact the facility achieved removal of 85 percent during the last five years with one exception. Because the facility does not meet all of the criteria set forth in 40 CFR § 133.105, the facility does not qualify for Treatment Equivalent to Secondary Treatment and therefore, the technology-based limits for BOD_5 and TSS in the draft permit are based on Secondary Treatment as shown on Table B-1.

Consideration of Less Concentrated Influent to Substitute Mass Limits for Minimum TSS Removal

Based on past performance over the last five years Weippe has not been able to achieve the secondary 85 percent minimum TSS removal rate. Over the last five years, the 95th percentile value for removal (i.e., the lowest 5th percentile value) was a removal rate of 45 percent. Calculated removal data were submitted for 15 months of discharge over a five-year period. Weippe failed to achieve the removal rate of 85 percent five times or one third of the time. The response to comments for the existing permit provides a basis for substituting a mass loading limit for the percent removal requirements pursuant to 40 CFR § 133.103(d) *Less concentrated influent wastewater for separate sewers*. Analysis of the recent data indicates the facility does not qualify for this provision.

Treatment works that receive less concentrated wastes from separate sewer system can qualify to have their permit removal limits reduced or a percent loading limit for the percent removal requirements. However, 40 CFR § 133.103(d)(3) states the less concentrated wastewater cannot be the result of excessive inflow/infiltration (I/I).

"The Regional Administrator ….is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in …*133.102*(b)(3) [TSS 30-day average percent removal shall not be less that 85 percent]…provided that the permittee satisfactorily demonstrates that:

(1) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater,

(2) to meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, *and* (emphasis added)

(3) The less concentrated influent wastewater is not the result of excessive I/I. The determination of whether the less concentrated wastewater is the result of excessive I/I will use the definition of excessive I/I in 40 CFR 35.2005(b)(16) plus the additional criterion that inflow is nonexcessive if the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day."

The facility does not meet the third criteria, i.e., that the less concentrated influent wastewater is not the result of excessive I/I.

First, total flow to the facility exceeds 275 gallons per capita per day.

Average discharge = 0.33 mgd = 333,000 gallons per day (gpd)

Weippe population based on the application = 488.

Gallons per capita per day

$$\frac{333{,}000 \text{ gpd}}{488} = 682 \text{ gallons per capita per day}$$

682 gallons per capita per day is greater than 275 gallons per capita per day

The permit record further supports a conclusion of excessive I/I to the Weippe treatment plant.

1. The City in its application for renewal reported that I/I might represent up to 60 percent of the facility's annual flow.
2. The City reports in its renewal application that the plan for addressing I/I is the possibility of looking into mainline repairs and manhole restoration subject to the availability of grant funds.
3. In three instances Weippe reported *influent* concentrations less than the effluent limits during periods of low removal rates indicating high I/I.
    a. For March, 2011 Weippe reported a TSS removal rate of only 40 percent. However, the influent was reported at 20 mg/L and the effluent was 12 mg/L; in this case, the *influent* value was below the *effluent* monthly average concentration limit for secondary treatment of 30 mg/L.
    b. On March 31, 2013 Weippe reported a removal rate of 47 percent. However, the influent concentration was reported at 36 mg/L; in this case, the *influent* value was below the monthly average concentration limit for Treatment Equivalent to Secondary Treatment of 45 mg/L.
    c. In a third case Weippe reported a removal rate of 55 percent. In this case, the *influent* was 45 mg/L just at the *effluent* requirements for Treatment Equivalent to Secondary Treatment of 45 mg/L.
4. In a letter dated March 3, 2007 from Micheal Kasch, P.E., P.H., Project Manager and David Clark, P.E. Vice President, National Director Wastewater Project Principal, HDR Engineering, Inc. stated "the current challenges of I/I during the spring runoff…"
5. In a letter dated October 2, 2002 Ann Storrar, Water Planner and Jason Vangen, Utilities Supervisor, both of the Water Resources Division of the Nez Perce Tribe commenting on

> the Weippe NPDES permit stated most wastewater collection and treatment facilities have problems controlling inflow and infiltration. The Tribe stated reduction in the amount of inflow and infiltration could reduce operator time, quality of wastewater treated and overall operation expense while meeting percent removal requirements for BOD_5 and TSS. The Tribe also stated such control of I and I could greatly assist them in restoring beneficial uses and meeting Clean Water Act water quality goals.

Because the less concentrated influent wastewater is the result of excessive I/I Weippe does not qualify for a less stringent removal requirement. The Secondary Treatment Requirements for TSS removal in Table B-1 of 85 percent is therefore established.

Compliance Schedule

EPA's Permit Writers' Manual, September 2010, Section 9.1.3, Compliance Schedules, states that:

> "The NPDES regulations at § 122.47 allow permit writers to establish schedules of compliance to give permittees additional time to achieve compliance with the CWA and applicable regulations. Schedules developed under this provision must require compliance by the permittee *as soon as possible*, but may not extend the date for final compliance beyond compliance dates established by the CWA. Thus, compliance schedules in permits are not appropriate for every type of permit requirement. Specifically, a permit writer may not establish a compliance schedule in a permit for technology based effluent limitation (TBELs) because the statutory deadlines for meeting technology standards (i.e., secondary treatment standards and effluent guidelines) have passed."

The 85 percent TSS minimum removal rate is a TBEL and a compliance schedule cannot be established.

Mass-based Limits

The federal regulations at 40 CFR §122.45(b) and (f) require that POTW limitations 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 are calculated as follows:

Average Monthly Limit = 30 mg/L × 0.536 mgd × 8.34 = 134 lbs/day

Average Weekly Limit = 45 mg/L × 0.536 mgd × 8.34 = 201 lbs/day

The mass limits for TSS are calculated as follows:

Average Monthly Limit = 30 mg/L × 0.536 mgd × 8.34 = 134 lbs/day

Average Weekly Limit = 45 mg/L × 0.536 mgd × 8.34 = 201 lbs/day

Chlorine

Chlorine is often used to disinfect municipal wastewater discharges. 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 regulation at 40 CFR 122.45 (f) requires limitations 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 0.536 mgd x 8.34 = 2.2 lbs/day

Weekly average Limit = 0.75 mg/L x 0.536 mgd x 8.34 = 3.35 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) prohibits 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 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. This narrative includes criteria for water quality, and that the level of water quality to be achieved by limits on point sources, which is derived from and complies with all applicable water quality standards.

The regulations require the permitting authority to make this evaluation 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 the pollutant parameters in the effluent 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 criterion, the EPA projects the receiving water concentration (downstream of where the effluent enters the receiving water) for each pollutant of concern. The EPA uses the concentration of the pollutant in the effluent and receiving water and, if appropriate, the dilution available from the receiving water, to project the receiving water concentration. If the projected concentration of the pollutant in the receiving water exceeds the numeric criterion for that specific pollutant, then the discharge has the reasonable potential to cause or contribute to an excursion above the applicable water quality standard, and a water

quality-based effluent limit is required.

Sometimes it may be appropriate to allow a small area of the receiving water to provide dilution of the effluent. These areas are called mixing zones. Mixing zone allowances will increase the mass loadings of the pollutant to the water body and will decrease treatment requirements. Mixing zones can be used only when there is adequate receiving water flow volume and the concentration of the pollutant in the receiving water is less than the criterion necessary to protect the designated uses of the water body. As noted in Section III Part A, Jim Ford Creek flow is intermittent at the City of Weippe, with low flows of about 2 cfs during the summer months. Based on the mixing zone granted by IDEQ the current permit allows the City of Weippe to discharge only when flow in Jim Ford Creek immediately upstream of Outfall 001 provides a minimum ratio of 50:1 compared to discharge flow.

IDEQ performed a detailed mixing zone analysis for the Weippe POTW discharges. The mixing zone is defined as one quarter of the stream width for a maximum distance of 50 feet or until complete mix occurs within 50 feet of the outfall. The mixing zone analysis provided a 50:1 dilution ratio for Weippe discharges.

The *Technical Support Document for Water Quality-Based Toxics Control* (EPA, 1991) (TSD) and the WQS recommend the flow conditions for use in calculating water quality-based effluent limits (WQBELs) using steady-state modeling. The TSD and the WQS state that WQBELs intended to protect aquatic life uses should be based on the lowest expected flow rate and the design flow. Mixing zones must be authorized by the State. IDEQ's draft certification proposes to authorize a mixing zone dilution ratio of 50:1 for total residual chlorine.

Procedure 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. Wasteload allocations are determined in one of the following ways:

1. TMDL-Based Wasteload Allocation

   Where the receiving water quality does not meet water quality standards, the wasteload allocation is generally based on a TMDL developed by the State. A TMDL is a determination of the amount of a pollutant from point, non-point and natural background sources that may be discharged to a water body without causing the water body to exceed the criterion for that pollutant. Any loading above this capacity risks violating water quality standards.

   To ensure that these waters will come into compliance with water quality standards Section 303(d) of the CWA requires States to develop TMDLs for those water bodies that will not meet water quality standards even after the imposition of technology-based effluent limitations. The first step in establishing a TMDL is to determine the assimilative capacity (the loading of pollutant that a water body can assimilate without exceeding water quality standards). The next step is to divide the assimilative capacity into allocations for non-point sources (load allocations), point sources (wasteload allocations), natural background loadings and a margin of safety to account for any uncertainties.

Permit limitations are then developed for point sources that are consistent with the wasteload allocation for the point source.

The State of Idaho, Nez Perce Tribe, and the U.S. EPA jointly developed *Jim Ford Creek Total Maximum Daily Load Management Plan (IDEQ) , March 2000* (TMDL). This assessment reported that the area where the City of Weippe WWTP discharges in Jim Ford Creek from the source to the mouth, was impaired by sedimentation, bacteria, nutrients and temperature. EPA approved this TMDL in June 2000.

The TMDL document set the following load allocations for the City of Weippe:

a. For temperature, the City of Weippe generally does not discharge during the critical time period for the upper watershed (July 1 through August 15). Therefore, the City did not receive a wasteload allocation for temperature.

b. For phosphorus, no load reductions were required from point sources, and all required reductions were to be addressed through a Watershed Restoration Strategy. The TMDL document set an allocation of 30 lbs/month for Total Phosphorus for the City of Weippe over an averaging period (April-July), based on zero reduction of the City's existing discharge.

c. For bacteria, the TMDL provided Weippe a pathogen allocation of the existing permit limits. The existing *E.coli* permit limits are a monthly average of 126 colonies/100 ml and an instantaneous maximum limit of 406 colonies/100 ml. These limits are established with no change from the existing permit.

d. The City was required to eliminate an underdrain discharge of fecal coliform through a thin clay layer to Grasshopper Creek. Pursuant to this requirement a WLA for fecal coliform was set at 0 lbs/day for the underdrain. (See Summary - Water Quality-based Effluent Limits, Escherichia coli (*E. coli*) Bacteria)

2. Mixing zone based WLA

When the State authorizes a mixing zone for the discharge, the WLA is calculated by using a simple mass balance equation. The equation takes into account the available dilution provided by the mixing zone, and the background concentrations of the pollutant. The WLAs for Weippe were derived using a mixing zone.

3. Criterion as the Wasteload Allocation

In some cases a mixing zone cannot be authorized, either because the receiving water is already at, or exceeds, the criterion, the receiving water flow is too low to provide dilution, or the facility can achieve the effluent limit without a mixing zone. In such cases, the criterion becomes the wasteload allocation. Establishing the criterion as the wasteload allocation ensures that the effluent discharge will not contribute to an exceedance of the criteria.

Total Phosphorus

The TMDL provided a WLA for total phosphorus to Weippe of 30 lbs/month during the period April 1 through July 30. This was based on data from 1998, with the following loadings for Total Phosphorus by month: April, 48 lb; May, 18 lb; June, 24 lb; and July, 0 lb.

The permit must be consistent with the assumptions and requirements of any available wasteload allocations of the TMDL pursuant to 122.44(d)(1)(vii)(B). The TP limits in the existing permit are not consistent with the assumptions of the TMDL because: 1) The averaging period for the WLA was incorrectly interpreted to be monthly instead of seasonal. 2) The TP limits would require treatment. The TMDL stated that treatment would not be required to meet the WLA. 3) The existing permit incorporated concentration-based limits, which would require a substantial treatment process upgrade to meet.

Therefore, the limits in the draft permit are corrected to apply the WLA as a seasonal average and remove the concentration based effluent limits.

Averaging Period

The TMDL made clear that the averaging period during which the TMDL WLA applied was April 1 to July 31 when excess phosphorus was most likely to cause algal growth in Jim Ford Creek. The existing permit incorrectly applied the TMDL WLA over a monthly averaging period.

The following excerpts from the TMDL demonstrate that the averaging period for the WLA is April 1 through July 31. Page 3-22:

> "For nutrient load analysis the nutrient load capacity is calculated using the period of April through July for the following reasons: this is the critical algae growing period which coincides with low dissolved oxygen levels…nutrient loads are the highest during these months…." "This period is referred to as the averaging period. The averaging period is defined as the period of time used to estimate the existing nutrient load."

Page 1-4

> "The load capacities and existing loads were estimated by subwatershed in pounds per month during the months April through July…"

TMDL Required No Reductions from Point Sources

The TMDL required no reductions of TP from the Weippe WWTP.

Table 28 on page 3-23 of the TMDL provides an allocation of 30 lbs/month and no reductions:

Table 28. TMDL Loading Analysis Results for Total Phosphorous (units in pounds per month)

Subwatershed	Number of samples #	Load Capacity	Existing Load	Existing Waste Load	Non-point source Load Allocation	Waste Load Allocation	Non-point source Load Reduction	Non-point source % Reduction
Jim Ford Creek near mouth	43	1801	2353	none	1801	none	552	23
Winter Creek	14	161	113	none	161	none	0	0
downstream Weippe	40	593	737	30	563	30*	174	24
Grasshopper Creek	17	233	244	1.3	144	1.3 ^	12	5
upstream Weippe	18	534	793	none	331	none	259	33
Heywood Creek	13	161	238	none	100	none	77	32
Miles/Wilson Creeks	14	198	267	none	123	none	69	26

= used to calculate the 84th percentile nitrogen concentration over averaging period
* = Weippe WWTP
^ = THS WWTP (no reduction)

The TMDL on page 3-24 requires no reductions from the Weippe WWTP, which is one of two point sources in the watershed

> "Because the majority of the TP load to Jim Ford Creek is from non-point sources, there is no point source load reductions required by this TMDL."

The footnote to Table 29 on page 3-24 also states no reduction is required:

"* = Weippe WWTP (no reduction)

In addition, on page 3-25

> "For the two point sources contributing nutrients to Jim Ford Creek, no load reductions are required because, according to the available data, they do not contribute a substantial amount of TP."

In addition, on page 1-4

> "For this TMDL, the point source waste load allocations is [sic] at the existing measured nutrient load."

<u>Concentration Based Limits are Inconsistent with TMDL</u>

The TMDL waste load allocation does not include concentration limits for the City of Weippe. The concentration limits are not consistent with the TMDL. Further, TP concentration limits are not generally included as limits for facilities discharging to the Snake River.

Meeting the Concentration and Mass-Based Limits in the Existing Permit Would Require Treatment Plant Upgrades

The two days TP was monitored during the existing permit cycle resulted in seven effluent violations of the effluent limitations as shown in Table B-2.

Table B-2

Weippe WWTP Measured Total Phosphorus Load and Concentration Compared with Effluent Limits

Averaging Period	Existing Permit Limit	Reported Phosphorus in Effluent 4/30/09	Reported Phosphorus in Effluent 4/30/11
Monthly mg/L	0.22	0.51	1.5
Weekly, mg/L	0.43	0.51	1.5
Monthly , lbs/day	1.0	1.55	5.14
Weekly Limit, lbs/day	1.9	1.55	5.14

The monitoring data demonstrate that to meet the phosphorus effluent limitations additional treatment is required. The need for treatment was confirmed in a letter dated March 3, 2007 from Micheal Kasch, P.E., P.H., Project Manager and David Clark, P.E. Vice President, National Director Wastewater Project Principal, HDR Engineering, Inc. On page three of the attachment to the letter the engineering evaluation concluded the concentration limit of 0.22 mg/l in the permit cannot be met with the existing wastewater treatment facility. The evaluation concluded a substantial treatment process modification and upgrade to the treatment process would be required to attain an effluent phosphorous concentration of 0.22 mg/l (i.e. biological and/or chemical precipitation followed by effluent filtration). This conclusion also applies to the existing permit mass limit of 1.0 lb/day. The EPA agrees.

Limit in Draft Permit

The draft permit establishes a 30 lbs/month TP limit averaged over the "averaging period" of April 1 through July 30.

Anti-backsliding Provisions

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit. However CWA Section 303(d)(4) allows the establishment of a less stringent effluent limitation where the receiving water has been identified as not meeting applicable water quality standards if the permittee meets two conditions. First, the existing effluent limitation must have been based on a TMDL and second relaxing of the effluent limitation is only allowed if attainment of water quality standards will be ensured.

The first requirement to allow backsliding is satisfied because the existing phosphorus limitations are based on a TMDL.

The second requirement is satisfied since attainment of the water quality standards for phosphorus is not dependent on point source reductions, including the Weippe WWTP but rather reductions at non-point sources. These non-point source reductions such as erosion control, nutrient management plans for agricultural land and BMPs for forestry practices bordering water quality limited streams such as Jim Ford Creek will ensure compliance with the water quality standard for phosphorus in Jim Ford Creek.

The allocation is to ensure no increases from the existing load to Jim Ford Creek from the Weippe WWTP. Establishing an effluent limitation of 30 lbs/month limit averaged over the "averaging period" as expressed in the TMDL ensures no increases.

The draft 401 Certification states: "In sum, the effluent limitations and associated requirements contained in the City of Weippe Wastewater Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Jim Ford Creek Total Maximum Daily Load*.

To ensure compliance with the weekly TP effluent limitations, weekly sampling is required.

Summary - Water Quality-based Effluent Limits

The water quality based effluent limits in the draft permit are summarized below.

Floating, Suspended or Submerged Matter/Oil and Grease

As noted above, the TMDL did not establish wasteload allocations for oil and grease. The WQS (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 WQS (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 Fact Sheet for the existing permit did not include ammonia limits or monitoring because the Jim Ford Creek TMDL provided data indicating that ammonia levels above and below the Weippe Outfall were well within water quality standards. As a result, no data are available to perform a reasonable potential analysis for ammonia.

However, Weippe may cause or contribute to violations of the ammonia water quality standards even if background ammonia is within the ammonia standards. Rather than measure downstream concentration to determine impacts, procedures in the TSD and shown in Appendix B, Part B, Reasonable Potential Analysis, downstream ammonia concentrations are *projected* during critical

low stream flow and the measured maximum ammonia discharged. This projected concentration, taking into consideration any mixing zone, will provide greater assurance of compliance with the water quality standards during critical conditions than the limited grab samples of downstream concentrations in the TMDL.

The reasonable potential for Weippe to violate the water quality standards for ammonia will be determined in the next permit reissuance using the procedures in the TSD and the USEPA NPDES Permit Writers' Manual. These procedures are shown for chlorine in this Fact Sheet and are consistent with the methods used for ammonia reasonable potential at other POTWs in Idaho.

The water quality standards for ammonia are dependent on temperature and pH, maximum ammonia discharged and background ammonia. Therefore, the proposed permit requires monthly effluent monitoring for ammonia to determine the maximum discharge concentration, background ammonia and surface water monitoring for temperature and pH to calculate the ambient water quality standard for ammonia in Jim Ford Creek.

Escherichia coli (E. coli) Bacteria

Jim Ford Creek 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 seven days over a thirty day period (IDAPA 58.01.02.251.01.a).

Therefore, the proposed compliance monitoring contains a monthly geometric mean effluent limit for *E. coli* of 126 organisms per 100 ml and a minimum sampling frequency of five grab samples per calendar month . The WQS 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). Any single sample value that exceeds 406 organisms/100 ml may indicate an exceedance of the geometric mean criterion. The EPA has therefore 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.

In addition, an increase in the holding capacity of aeration Lagoon 1 resulted in a thinning of the clay seal along the bottom of the lagoon. A leak developed from a fresh water spring at the lagoon bottom. A drainpipe was installed under the aeration lagoon to provide drainage of the spring water. Outflow from the spring and possibly the wastewater occurs at a low rate (<0.01cfs) year round into Grasshopper Creek.

The TMDL stated on page 3-35:

"Although the underdrain was designed to convey ground water, it also conveys wastewater. As a part of the TMDL, the underdrain was evaluated as a source of pollutant load to Grasshopper Creek using the limited sampling conducted in 1999. Based on the available sampling data…the underdrain was determined to be a contributor of fecal coliform to Grasshopper Creek. …Because the City of Weippe will be eliminating the underdrain discharge from Grasshopper Creek a WLA of 0 lbs/day is set for the underdrain."

The existing permit at Part I.C, required that the permittee must eliminate the underdrain discharge from the aeration lagoons into Grasshopper Creek within two years of the effective date of the permit; and by September 1, 2003, must submit an Annual Report of Progress that outlined the progress made toward eliminating that discharge.

By letter of January 22, 2007, the EPA Region 10 Office of Compliance and Enforcement notified the City of Weippe that it was in violation of failing to submit an Annual Report. The City was required to determine if the drain has been properly sealed and is no longer discharging.

However, according to a letter in response from an attorney representing the city, "Concerning the underdrain situation, the City believes there is no discharge." [Letter from Edwin A. Litteneker, Lewiston ID, to Michael A. Bussell, Office of Compliance and Enforcement, received by U.S. EPA R10, March 27, 2007.]

To ensure consistency with the TMDL the draft permit prohibits discharge to Grasshopper Creek, and requires weekly inspections and reporting of flow from the underdrain discharge pipe to ensure no discharge. Alternatively, the Weippe can avoid weekly monitoring of flow by certifying that it has blocked any flow to Grasshopper Creek, and submitting a report to IDEQ and EPA Region 10 describing the actions taken to halt the flow.

Total Residual Chlorine

Total residual chlorine does not have a reasonable potential to violate the water quality standards. However, Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions prohibit the reissuance of an existing NPDES permit that contains effluent limitations less stringent than those established in the previous permit. These existing surface water quality based limits are more stringent than the technology-based limits. Therefore, the chlorine limitations are unchanged in the reissued permit.

REASONABLE POTENTIAL FOR AQUATIC LIFE

		State Water Quality Standard		Max concentration at edge of...										
	Ambient Conc.	Acute	Chronic	Acute Mixing Zone	Chronic Mixing Zone	**LIMIT REQ'D?**	Effluent percentile value	*Footnote A*	Max effluent conc. measure	Coeff Variation	# of samples	Multiplier	Acute Dil'n Factor	Chronic Dil'n Factor
Parameter	*Mg/L*	*mg/L*	mg/L	*mg/L*	*mg/L*			*Pn*	*mg/L*	*CV*	*n*			
Total Residual Chlorine	0.00	0.019	0.011	0.010	0.010	NO	0.99	0.858	0.330	0.35	30	1.53	50	50

A: The percentile represented by the highest reported concentration pn = (1 – effluent confidence level)^(1/n)

Appendix C – IDEQ Draft 401 Certification

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1118 F Street • Lewiston, Idaho 83501 • (208) 799-4370

C.L. "Butch" Otter, Governor
Curt Fransen, Director

June 18, 2014

Mr. Michael J. Lidgard
NPDES Permits Unit Manager
EPA Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Subject: DRAFT 401 Water Quality Certification for the Weippe Wastewater Treatment Plant, Permit # ID-0020354

Dear Mr. Lidgard:

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

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

Please contact me directly at (208) 799-4370 to discuss any questions or concerns regarding the content of this certification.

Sincerely,

John Cardwell
Regional Administrator
Lewiston Regional Office

c: John Drabek, EPA Region 10
Miranda Adams, DEQ State Office

Idaho Department of Environmental Quality

Draft §401 Water Quality Certification

June 18, 2014

NPDES Permit Number(s): City of Weippe Wastewater Treatment Plant NPDES Permit #ID-0020354

Receiving Water Body: Jim Ford 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.

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 58.01.02.052.07).
- 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; 58.01.02.052.08).
- 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; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier 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).

Pollutants of Concern

The City of Weippe Wastewater Treatment Plant discharges the following pollutants of concern: biochemical oxygen demand (BOD_5), total suspended solids (TSS), *Escherichia coli* (*E. coli*), pH, total phosphorus, total residual chlorine, and total ammonia-nitrogen. Effluent limits have been developed for BOD_5, TSS, *E. coli*, pH, total phosphorus, and total residual chlorine. No effluent limits are proposed for total ammonia-nitrogen.

Receiving Water Body Level of Protection

The City of Weippe Wastewater Treatment Plant discharges to Jim Ford Creek within the Clearwater Subbasin assessment unit (AU) ID17060306CL035_03 (Jim Ford Creek-source to Jim Ford Cr waterfall, 12.5mi). This AU has the following designated beneficial uses: cold water aquatic life and primary contact recreation. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

The cold water aquatic life and primary contact recreation uses in the Jim Ford Creek AU are not fully supported due to excess bacteria, nutrients, sedimentation/siltation, and temperature; also, physical substrate habitat alterations and flow regime alterations (2010 Integrated Report). As such, DEQ will provide Tier 1 protection only for the aquatic life use and the recreation beneficial use (IDAPA 58.01.02.051.01).

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, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure protection of designated beneficial uses. The effluent limitations and associated requirements contained in the City of Weippe Wastewater Treatment Plant permit are set at levels that ensure 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.

In the absence of a TMDL and depending upon the priority status for development of a TMDL, the WQS stipulate that either there be no further impairment of the designated or existing beneficial uses or that the total load of the impairing pollutant remains constant or decreases (IDAPA 58.01.02.055.04 and 58.01.02.055.05). Discharge permits must comply with these provisions of Idaho WQS.

The EPA-approved *Jim Ford Creek Total Maximum Daily Load* (March 2000) establishes wasteload allocations for bacteria and nutrients. These wasteload allocations are designed to ensure that Jim Ford Creek 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 City of Weippe Wastewater Treatment Plant permit are set at levels that comply with these wasteload allocations.

The proposed permit contains limits for pollutants of concern (Table 1, below) including BOD_5, TSS, *E. coli*, pH, total phosphorus, and total residual chlorine which are the same as, or more stringent than those in the current permit ("NC" or "D" in change column). Therefore, no adverse change in water quality and no degradation will result from the discharge of these pollutants.

Additionally, two new permit monitoring requirements are proposed for total phosphorus from August 1 – March 31, and ammonia-nitrogen. The new permit will require the City of Weippe Wastewater Treatment Plant to report monthly averages for total phosphorus from August 1 – March 31, and ammonia-nitrogen to be used for future wastewater characterization. The pollutant limits in the proposed permit reflect a maintenance or improvement in effluent and water quality from current conditions. Therefore, no adverse change in water quality and no degradation will occur with respect to the issuance of this permit.

In sum, the effluent limitations and associated requirements contained in the City of Weippe Wastewater Treatment Plant permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Jim Ford Creek Total Maximum Daily Load*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Jim Ford Creek in compliance with the Tier 1 provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

Table 1. Comparison of current and proposed permit limits for pollutants of concern.

Pollutant	Units	Current Permit			Proposed Permit			Change [a]
		Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	
Pollutants with limits in both the current and proposed permit								
Biochemical Oxygen Demand (BOD_5)	mg/L	45	65	—	30	45	—	D
	lb/day	153	230	—	134	201	—	
	% removal	—	—	—	≥85%	—	—	
TSS	mg/L	70	105	—	30	45	—	D
	lb/day	153	230	—	134	201	—	
	% removal	—	—	—	≥85%	—	—	
pH	standard units	6.5–9.0 all times			6.5–9.0 all times			NC
Total Phosphorus Seasonal Average, April 1 – July 31	mg/L	0.22	0.43	—	30 lbs/month			NC
	lbs/day	1.0	1.9					
E. coli	no./100 mL	126	—	406	126	—	406	NC
Total Residual Chlorine (final)	mg/L	0.32	—	0.97	0.32	—	0.97	NC
	lb/day	1.43	—	4.33	1.43	—	4.33	
Pollutants with new monitoring requirements in the proposed permit								
Total Phosphorus, August 1 – March 31	lbs/day	—	—	—	—	—	—	New
Total Ammonia-Nitrogen	mg/L	—	—	—	—	—	—	New

[a] NC = no change, I = increase, D = decrease.

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

Mixing Zones

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone that utilizes the critical flow volumes of Jim Ford Creek for total residual chlorine. However, Jim Ford Creek is intermittent at the discharge point and instead the permit provides a 50:1 minimum dilution requirement.

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 Sujata Connell, Lewiston Regional Office at 208-799-4370 or Sujata.Connell@deq.idaho.gov.

DRAFT

John Cardwell
Regional Administrator
Lewiston Regional Office