

## RESPONSE TO COMMENTS

**City of Preston Wastewater Treatment Plant  
NPDES Permit No. ID0020214  
January 26, 2017**

On November 9, 2016 the U.S. Environmental Protection Agency (EPA) issued a 30 day public notice for the reissuance of the City of Preston Wastewater Treatment Plant (WWTP) National Pollutant Discharge Elimination System (NPDES) Permit No. ID0020214. This Response to Comments provides a summary of the comments received and provides corresponding EPA responses to those comments.

The following changes to the permit were made as a result of the comments received during the public comment period:

- The surface water flow monitoring requirement frequency changed from Quarterly to 3x/week. This requirement is effective 3 months after the effective date of the permit.
- The Total Residual Chlorine Maximum Daily Limit of 18 µg/L and 0.18 lbs/day for effluent was removed.
- The Total Residual Chlorine Average Monthly Limit of 7 µg/L and 0.07 lbs/day for effluent was removed.

Comments were received from the following:

- Austin Hopkins, Conservation Assistant, Idaho Conservation League (ICL), comments received December 5, 2016
- Mark T. Owens, P.E., Preston City Engineer (Preston), comments received December 9, 2016

### **ICL Comment #1**

#### Low Flow Calculations

We are concerned over the selected low-flow values, and by extension the calculations that utilized the selected values, as they may not accurately represent true low-flow conditions for Worm Creek. Our concerns are based on the following information.

The City of Preston WWTP's quarterly flow monitoring data were used by the EPA to calculate critical low flow conditions for Worm Creek. Utilizing quarterly data is not consistent with the requirement to identify either the 7Q10 or 30Q5 low flow, as these values are based on lowest average value over a number of consecutive days. Thus, quarterly data lacks the resolution to identify critical low flow conditions.

In addition, Section III.A of the Fact Sheet states that much of Worm Creek is diverted for agricultural purposes during the irrigation season. It is unclear, based on this statement, whether Worm Creek ever runs dry due to withdrawals for agricultural use. If Worm Creek ever did run dry, its volume would consist entirely of effluent from this WWTP, thus no dilution would occur and the likelihood of exceeding water quality standards would increase. Further, it is unknown whether any quarterly flow samples have captured this decrease in flow due to irrigation. If sampling did not occur simultaneously with maximum withdrawal, the current low-flow conditions could be vastly overestimated.

Finally, pursuant to the EPA's Technical Support Document for Water Quality-Based Toxics Controls (TSD), low flow condition calculations must be based on flow rates expected to occur over the given recurrence interval (i.e. – 10 years). The EPA calculated low flow conditions based on historical data, which may not adequately reflect low-flows one can expect to occur as a result of climate change and drought. Recent scientific studies (e.g. – Sohrabi et al., 2012) have highlighted a decreasing precipitation trend and an increasing temperature trend throughout Idaho. The EPA should consider studies such as these when calculating low flow conditions as they directly influence the low-flows one would expect to occur throughout Idaho.

**Response:**

EPA recognizes the limitations of using quarterly flow monitoring data in order to establish low-flow conditions for a receiving water. EPA determined low-flows using the most recent 10 years of data collected by the facility. These were the only flow data available for the City of Preston WWTP's receiving water, Worm Creek.

EPA has guidelines outlined in the TSD and Technical Guidance Manual to estimate critical low-flows when receiving water flow data are poor. EPA estimated the 7Q10 and 30Q5 low-flow conditions using harmonic and arithmetic mean in the methods described on pg 89 of the TSD. EPA estimated the 1Q10 using the Technical Guidance Manual for Performing Wasteload Allocations, Book VI: Design Conditions Chapter 1: Stream Design Flow for Steady-State Modeling.

In order to insure more accurate flow data are available for the next permit term 3x/week flow monitoring has been added for the receiving water (see response to comment #5). Any changes in the receiving water low-flows for any reason, including climate change, will be captured through monitoring during the permit term, and used in the next permit's issuance.

In response to ICL's concern of the "extension of the calculations that utilized the selected values": No mixing zones were used in the reasonable potential calculations for metals; nor in the WQBEL calculations for ammonia. Therefore, the low-flow values had no impact on those results. EPA considers the calculated low-flows to be very low values (30Q5 of 0.87 cfs, 7Q10 of 0.49 cfs, and a 1Q10 of 0.56 cfs). A change in low-flow values for Worm Creek would have no effect on determining reasonable potential for the pollutants of concern or final limits for this permit issuance.

*No permit changes.*

**ICL Comment #2**

Industrial Pretreatment and Effluent Limitation

According to section II.A of the Fact Sheet, a plastics manufacturing facility discharges wastewater to the City of Preston WWTP. We are curious if this waste stream is causing the detectable concentrations of the metals antimony, arsenic, chromium, copper, nickel and zinc. The draft permit currently does not have effluent limits for these metals and only requires samples to be collected twice a year and reported on an annual basis.

In the event that these metals are associated with the plastics manufacturing facility or another industrial facility, it is unclear how the EPA will regulate pass through without the necessary permit limitations. The EPA should have included effluent limits for these metals along with the sampling and

reporting requirements currently included in the draft permit as they are necessary in order to distinguish when pass through is occurring.

**Response:**

Calculations for the permit showed no reasonable potential for the effluent to cause, or contribute to an excursion above water quality standards for the detectable metals in the effluent, which is the basis for including or not including WQBELs for the metals. Therefore, the permit does not include WQBELs for these metals. Twice per year effluent monitoring for the metals is required in the permit. Limitations will be evaluated using the collected data over the 5-year permit term if necessary.

The permit requires the City of Preston WWTP to develop and adopt a legally enforceable municipal code to apply and enforce pretreatment standards and requirements. This includes a prohibition on the introduction of pollutants that may cause pass through or interference.

*No permit changes.*

**ICL Comment #3**

Outdated Hardness Data

According to Table 4 of the Fact Sheet, hardness data for Worm Creek was collected from USGS gauging station site no. 10098800. Upon review of these data, it appears it was collected between September 1969 and May 1971. As hardness is an input parameter required for calculating water quality standards for a number of metals (IDAPA 58.01.02.210.02), it is critical to have accurate input data in order to achieve accurate metals criteria. We are pleased to see hardness included in the surface water monitoring requirements and feel it is prudent that the most recent hardness data is utilized when calculating water quality criteria for metals.

**Response:**

EPA used the most recent hardness data available from Worm Creek. EPA acknowledges the limitations in using older data. Hardness surface water monitoring has been included in the permit to collect up to date hardness data, which will be used in the development of limits for the next permit.

*No permit changes.*

**ICL Comment #4**

Compliance Schedule for Total Phosphorus

We are concerned over the proposed compliance schedule of 8.5 years for this facility to become compliant with Total Phosphorus (TP) limits. A TP TMDL target of 0.075 mg/L was established for Worm Creek in 2013. To remain consistent with this TMDL, the City of Preston WWTP was assigned a WLA of 0.48 lbs/day. However, the WWTP is not projected to meet these effluent concentrations for 8.5 years, resulting in the continued degradation of Worm Creek for close to a decade. While immediate compliance may not be a feasible option, we believe a shorter compliance schedule would be more appropriate.

For example, upon receiving this permit the WWTP will have 36 months to develop a facility plan to evaluate the options that would allow it to meet the new effluent limit. As the TMDL came into effect roughly 36 months ago back in 2013, we feel the time frame for this task is likely unnecessary as the

facility has presumably already had time to evaluate options and has identified its preferred choice. In light of this we believe the compliance schedule could be shortened by at least 36 months, though more timesaving measures may also be available.

**Response:**

Compliance schedules must have the permittee come into compliance with the final effluent limitation as soon as possible. The 8.5-year timeline in the compliance schedule is as soon as possible for the City of Preston WWTP. The length of the compliance schedule takes into account the type of pollutant, the facility's current loading of the pollutant, and the reductions that will be necessary in order to achieve compliance with the new limit. The new Total Phosphorus effluent limitations are a new limit which will require significant effort on behalf of the City of Preston WWTP to achieve compliance.

Although the TMDL was approved by EPA in 2006, this is the first permit where the TMDL WLA is being implemented in a NPDES permit for the WWTP. As such, the 36 months provided to develop a Facility Plan is necessary. The compliance schedule outlines discrete steps to achieve compliance with interim due dates and annual reports to facilitate progress towards meeting the final effluent limitation.

The permit includes an interim TP limit designed to hold the facility to its current discharge levels so that the discharge does not contribute to further degradation of the impaired water as the facility is working toward coming into compliance with its final effluent limit. The interim total phosphorus limit is effective on the permit effective date. Further, the Idaho DEQ included the compliance schedule in its final CWA 401 certification.

*No permit changes.*

**ICL Comment #5**

Surface Water Monitoring Requirements

As discussed in a previous comment, the current surface water flow monitoring does not seem to have a high enough resolution needed to calculate low-flow conditions. We feel continuous flow monitoring would be the optimal solution in order to appropriately calculate the necessary low-flow conditions.

Additionally, annual monitoring of metals has been added to this permit in order to calculate the assimilative capacity of the receiving water. We are pleased to see this condition, but are concerned that there does not appear to be a compliance schedule associated with this requirement. The assimilative capacity of Worm Creek should be immediately developed once a statistically defensible number of samples have been collected. In order to expedite this process, we believe an increase in sampling frequency from annually to quarterly would be appropriate.

**Response:**

EPA has evaluated the proposed permit's quarterly flow requirement for surface water monitoring and concurs it would not provide the resolution needed to establish low-flow conditions. The permit has been changed to include a requirement for 3x/week surface water flow monitoring, which will provide sufficient flow data to calculate critical low-flows in the receiving water. This monitoring requirement will take effect 3 months after the effective date of the permit.

EPA evaluated the current surface water metals monitoring requirements and believes annual sampling is sufficient for assessing background concentrations. The monitoring data will be used to assess reasonable potential and establish assimilative capacity for the next permit.

**Permit Changes:**

Surface Water Monitoring: flow monitoring requirement: frequency changed from Quarterly to 3x/week, effective 3 months after permit effective date.

**Preston Comment #1**

According to table 3-28 Load Analysis for Cub River and Worm Creek found in the 2006 Bear River/Malad River Subbasin Assessment and Total Maximum Daily Load Plan target percent reduction for total phosphorus is 86%. Currently as defined in the Table 1 of the draft permit the interim allowable average monthly loading is 13.6 lbs/day (1.36 mg/l @1.2 MGD) and the target or proposed permitted loading is 0.75 lbs/day (0.075 mg/l @ 1.2 MGD) which represents a reduction of 94.5%. The City is requesting that the 86% reduction factor would result in an allowable average monthly loading rate of a 1.9 lbs/day (0.19 mg/l @ 1.2 MGD). In our opinion it is not fair to cities such as Preston to bear the brunt of regulation because methodologies have not been developed to fairly distribute nutrient loading between point sources (quantifiable) and non-point sources (non-quantifiable).

**Response:**

Pursuant to 40 CFR 122.44(d)(1)(vii)(B), EPA must include a WQBEL consistent with the assumptions and requirements WLA. The TMDL sets a Waste Load Allocation (WLA) for Preston WWTP of 0.48 lbs/day TP expressed as an Annual Average, as outlined in Part III.E. of the Fact Sheet. The final TP limit is consistent with that WLA.

Table 3-28 in the 2006 TMDL is a load analysis of Worm Creek as a whole, not the specific point sources. Table 3-14 of the 2006 TMDL shows estimated percent reduction for the individual wastewater treatment plant. The table shows a 97% reduction for the Preston WWTP.

*No permit changes.*

**Preston Comment #2**

Similar to comment 1. Figure 11 of the TMDL addendum indicates that the Worm Creek total phosphorus concentration upstream of the WWTF far exceeds the total phosphorus target value for Bear River, 0.87 mg/L vs 0.075 mg/l. This suggests that other upstream sources of phosphorus may be the primary cause of impairment in this waterbody. We would argue that if upstream total phosphorus wasteload were to be reduced by 96%, (the amount proposed for the Preston WWTF in Table 13 of the TMDL Addendum) there may be some remaining assimilative capacity in the creek that could be allocated to the Preston WWTF. The resulting greater wasteload allocation could reduce the extent and hence costs of improvements to the WWTF. This would reduce the burden on the ratepayers who could be financially punished due to upstream sources of total phosphorus were not generated by these ratepayers.

**Response:**

Assimilative capacity is available only if the stream is currently meeting the water quality criteria target for that stream. Worm Creek does not currently meet its in stream water quality criteria for total phosphorus, and therefore has no assimilative capacity available. EPA is required to write permit limits that are consistent with the TMDL WLA. See response to Preston Comment #1.

*No permit changes.*

**Preston Comment #3**

Review of Fig 20 the Bear River/Malad River Subbasin Assessment and Total Maximum Daily Load Plan appears to show there is some assimilative capacity in Bear at Utah/Idaho border which could provide a more favorable total phosphorus limit if the point of discharge were to be relocated. If the City were to pursue this option – can the proposed limits be identified as an alternative in the permit.

**Response:**

If the City of Preston WWTP relocates the outfall the limits must be re-evaluated through a permit modification or during the next permit reissuance. An outfall located near the Utah and Idaho state border would need to meet Idaho and Utah water quality standards for the receiving water.

EPA can only include limits for outfalls which currently exist, or plan to be constructed in the near future. EPA cannot include limits for an outfall in the permit that does not exist, nor can EPA include limits for an outfall that is not part of the NPDES permit application.

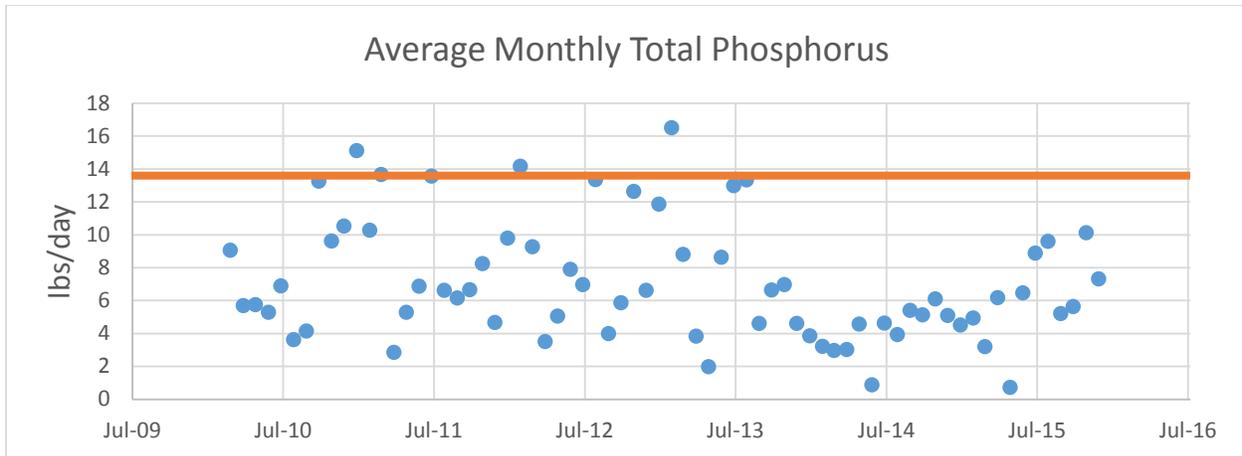
*No permit changes.*

**Preston Comment #4**

Preston City requests a three (3) year compliance period to meet the interim Total Phosphorus Limits. At this point in time the City is not 100% confident that our existing facility can reliably meet this limit. If there is an issue this would allow the City time to implement facility and operational upgrades that will allow the facility to positively removed phosphorus to the required levels. We respectfully request that compliance with the proposed interim total phosphorus limit be extended three (3) years beyond the date of permit issuance.

**Response:**

Interim total phosphorus limits are set in order to be achievable on the effective date of the permit. The interim total phosphorus limit was calculated based on DMR data submitted by the City of Preston WWTP for 01/31/2010 – 11/30/2015. The average monthly limit has been set equal to the 95<sup>th</sup> percentile of the average monthly reported values, 13.6 lbs/day total phosphorus. Figure 1 below shows the City of Preston WWTP's historical data (blue) compared to the proposed interim total phosphorus limit of 13.6 lbs/day (orange). Since mid-2013, the City of Preston WWTP has consistently met the proposed interim phosphorus limit. EPA believes the interim phosphorus limit will protect the receiving water from any increase in phosphorus loading from the City of Preston WWTP until the facility is able to meet the final water quality effluent limits for total phosphorus.



**Preston Comment #5**

The City requests that consideration for seasonally based effluent total phosphorus limits be considered. If there is evidence that much of the flow in Worm Creek does not reach the Cub/Bear River during the irrigation season (Part III.A Fact Sheet, pg 10) which is typically the most critical period for receiving waters. Consideration should be given to the actual total phosphorus load reaching the Cub River on a seasonal basis and permit limits derived from these values.

**Response:**

The permit limits must be consistent with the TMDL WLA. See response to Preston Comment #1. The TMDL WLA is an annual average applicable year round and does not set a seasonal WLA.

*No permit changes.*

**Preston Comment #6**

There is no USGS gauging station on Worm Creek. EPA has calculated low flow conditions using data collected by City of Preston WWTF personnel. Accuracy of this data should be considered. To verify the data additional more frequent QA/QC'd data should be acquired before implementing a limit. Worm Creek is effluent dominated, plant flow is more than critical low flow (7Q10) in creek. Since low flow conditions in the receiving water are instrumental in deriving WQBEL's, the City would request that further and more accurate low flow data for Worm Creek be established before determining WQBELS.

**Response:**

EPA acknowledges the City's concern with the lack of flow data and the City's interest in acquiring additional flow data. Therefore, the final permit includes more frequent monitoring (See Responses to ICL Comment #1 & ICL Comment #5).

**Permit Changes:**

Surface Water Monitoring: flow monitoring requirement: frequency changed from Quarterly to 3x/week, effective 3 months after permit effective date.

**Preston Comment #7**

Ammonia (pg 43 fact sheet): "A WQBEL for ammonia was calculated based on existing data and was calculated to be less stringent than current ammonia limits... a review of historical data from Preston WWTP total phosphorus from 2010-2015 demonstrated the facility is currently capable of meeting its

ammonia limits... because the permittee is currently meeting existing limits, these limits are being carried forward in the new permit.”

Preston typically meets their ammonia limit but they have exceeded in the past, see table below on pg 10 of fact sheet. Since there is not scientific basis for this ammonia limit we would request an increase to the WQBEL for ammonia.

**Response:**

The City of Preston WWTP had 3 concentration violations in 10 years, and 1 mass violation in 10 years. The City of Preston WWTP met its ammonia concentration limits 95% of the time (57 months out of 60) and mass limits 98.3% of the time (59 months out of 60). This demonstrates that the Preston WWTP can consistently meet this limit.

The ammonia limits are based on the previous permit, which were calculated consistent with the TSD. Daily receiving water flow data will allow the EPA to evaluate ammonia WQBEL again for the next permit term.

*No permit changes.*

**Preston Comment #8**

The City requests the total residual chlorine requirement be removed from the permit because the WWTP currently utilizes ultraviolet disinfection. The City has no plans to use chlorine disinfection in the future.

**Response:**

Chlorine limits have been removed from the permit as requested because the City of Preston WWTP states they will not be using chlorine disinfection in the future. This permit does not authorize the City of Preston WWTP to discharge chlorine to Worm Creek because the limit has been removed from the permit. In order to discharge chlorine in the future the City of Preston WWTP would need to submit a request to modify the permit.

**Permit Changes:**

Chlorine effluent limits and monitoring removed from the permit.

*References*

EPA. 1986. *Technical Guidance Manual for Performing Wasteload Allocations, Book VI: Design Conditions - Chapter 1: Stream Design Flow for Steady-State Modeling*. US Environmental Protection Agency, Office of Water Regulations and Standards, EPA/440/4-86-014.

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

IDEQ. 2013. *Bear River Basin: Addendum to the Bear River/Malad Subbasin Assessment and Total Maximum Daily Load Plan for HUCs 16010102, 16010201, 16010202, 16010204*. Pocatello Regional Office, Idaho Department of Environmental Quality.



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12/5/16

David Brick  
US EPA Region 10  
1200 Sixth Ave, OWW-130  
Seattle, WA 98101

Submitted via email: [brick.david@epamail.epa.gov](mailto:brick.david@epamail.epa.gov)

**RE: Idaho Conservation League comments on the proposed reissuance of NPDES permit for the City of Preston WWTP, Permit No.: ID0020214**

Dear Mr. Brick:

Thank you for the opportunity to comment on the City of Preston's WWTP NPDES permit renewal. Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting water quality.

Our detailed comments are attached following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or [ahopkins@idahoconservation.org](mailto:ahopkins@idahoconservation.org) if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,

A handwritten signature in black ink that reads "Austin Hopkins".

Austin Hopkins  
Conservation Assistant

*RE: Idaho Conservation League comments on the NPDES permit renewal for the City of Preston's WWTP, Permit No.: ID 0020214*

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### Low Flow Calculations

We are concerned over the selected low-flow values, and by extension the calculations that utilized the selected values, as they may not accurately represent true low-flow conditions for Worm Creek. Our concerns are based on the following information.

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In addition, Section III.A of the Fact Sheet states that much of Worm Creek is diverted for agricultural purposes during the irrigation season. It is unclear, based on this statement, whether Worm Creek ever runs dry due to withdrawals for agricultural use. If Worm Creek ever did run dry, its volume would consist entirely of effluent from this WWTP, thus no dilution would occur and the likelihood of exceeding water quality standards would increase. Further, it is unknown whether any quarterly flow samples have captured this decrease in flow due to irrigation. If sampling did not occur simultaneously with maximum withdrawal, the current low-flow conditions could be vastly overestimated.

Finally, pursuant to the EPA's Technical Support Document for Water Quality-Based Toxics Controls (TSD), low flow condition calculations must be based on flow rates expected to occur over the given recurrence interval (i.e. – 10 years). The EPA calculated low flow conditions based on historical data, which may not adequately reflect low-flows one can expect to occur as a result of climate change and drought. Recent scientific studies (e.g. – Sohrabi et al., 2012) have highlighted a decreasing precipitation trend and an increasing temperature trend throughout Idaho. The EPA should consider studies such as these when calculating low flow conditions as they directly influence the low flows one would expect to occur throughout Idaho.

### Industrial Pretreatment and Effluent Limitation

According to section II.A of the Fact Sheet, a plastics manufacturing facility discharges wastewater to the City of Preston WWTP. We are curious if this waste stream is causing the detectable concentrations of the metals antimony, arsenic, chromium, copper, nickel and zinc. The draft permit currently does not have effluent limits for these metals and only requires samples to be collected twice a year and reported on an annual basis.

In the event that these metals are associated with the plastics manufacturing facility or another industrial facility, it is unclear how the EPA will regulate pass through without the necessary permit limitations. The EPA should included effluent limits for these

*RE: Idaho Conservation League comments on the NPDES permit renewal for the City of Preston's WWTP, Permit No.: ID 0020214*

metals along with the sampling and reporting requirements currently included in the draft permit as they are necessary in order to distinguish when pass through is occurring.

#### Outdated Hardness Data

According to Table 4 of the Fact Sheet, hardness data for Worm Creek was collected from USGS gauging station site no. 10098800. Upon review of this data<sup>1</sup>, it appears it was collected between September 1969 and May 1971. As hardness is an input parameter required for calculating water quality standards for a number of metals (IDAPA 58.01.02.210.02), it is critical to have accurate input data in order to achieve accurate metals criteria. We are pleased to see hardness included in the surface water monitoring requirements and feel it is prudent that the most recent hardness data is utilized when calculating water quality criteria for metals.

#### Compliance Schedule for Total Phosphorus

We are concerned over the proposed compliance schedule of 8.5 years for this facility to become compliant with Total Phosphorus (TP) limits. A TP TMDL target of 0.075 mg/L was established for Worm Creek in 2013. To remain consistent with this TMDL, the City of Preston WWTP was assigned a WLA of 0.48 lbs/day. However, the WWTP is not projected to meet these effluent concentrations for 8.5 years, resulting in the continued degradation of Worm Creek for close to a decade. While immediate compliance may not be a feasible option, we believe a shorter compliance schedule would be more appropriate.

For example, upon receiving this permit the WWTP will have 36 months to develop a facility plan to evaluate the options that would allow it to meet the new effluent limit. As the TMDL came into effect roughly 36 months ago back in 2013, we feel the time frame for this task is likely unnecessary as the facility has presumably already had time to evaluate options and has identified its preferred choice. In light of this we believe the compliance schedule could be shortened by at least 36 months, though more timesaving measures may also be available.

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As discussed in a previous comment, the current surface water flow monitoring does not seem to have a high enough resolution needed to calculate low-flow conditions. We feel continuous flow monitoring would be the optimal solution in order to appropriately calculate the necessary low-flow conditions.

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<sup>1</sup> Data available online: [http://nwis.waterdata.usgs.gov/usa/nwis/qwdata/?site\\_no=10098800](http://nwis.waterdata.usgs.gov/usa/nwis/qwdata/?site_no=10098800)  
RE: Idaho Conservation League comments on the NPDES permit renewal for the City of Preston's WWTP, Permit No.: ID 0020214

Additionally, annual monitoring of metals has been added to this permit in order to calculate the assimilative capacity of the receiving water. We are pleased to see this condition, but are concerned that there does not appear to be a compliance schedule associated with this requirement. The assimilative capacity of Worm Creek should be immediately developed once a statistically defensible number of samples have been collected. In order to expedite this process, we believe an increase in sampling frequency from annually to quarterly would be appropriate.



*City of Preston*  
**70 West Oneida • Preston, Idaho 83263**  
**Office 208-852-1817 Fax 208-852-1820**

December 9, 2016

Michael J. Lidgard  
Manager – NPDES Permits Unit  
USEPA-Region 10  
1200 Sixth Ave., Suite 900  
Seattle, WA 98101-3140

Re: City of Preston Wastewater Treatment Plant – Draft NPDES Permit No. ID0020214

Dear Mr.Lidgard:

We have received and reviewed the draft permit and have the following comments.

Comment 1

According to table 3-28 Load Analysis for Cub River and Worm Creek found in the 2006 Bear River/Malad River Subbasin Assessment and Total Maximum Daily Load Plan target percent reduction for total phosphorous is 86%. Currently as defined in the Table 1 of the draft permit the interim allowable average monthly loading is 13.6 lbs/day (1.36 mg/l @1.2 MGD) and the target or proposed permitted loading is 0.75 lbs/day (0.075 mg/l @ 1.2 MGD) which represents a reduction of 94.5%. The City is requesting that the 86% reduction targeted reduction should be applied equally to both point and non-point sources. Applying an 86% reduction factor would result in an allowable average monthly loading rate of a 1.9 lbs/day (0.19 mg/l @ 1.2 MGD). In our opinion it is not fair to cities such as Preston to bear the brunt of regulation because methodologies have not been developed to fairly distribute nutrient loading between point sources (quantifiable) and non-point sources (non-quantifiable).

Comment 2

Similar to comment 1. Figure 11 of the TMDL addendum indicates that the Worm Creek total phosphorous concentration upstream of the WWTF far exceeds the total phosphorous target value for Bear River, 0.87 mg/L vs 0.075 mg/l. This suggests that other upstream sources of phosphorus may be the primary cause of impairment in this waterbody. We would argue that if upstream total phosphorous wasteload were to be reduced by 96%, (the amount proposed for the Preston WWTF in Table 13 of the TMDL Addendum) there may be some remaining assimilative capacity in the creek that could be allocated to the Preston WWTF. The resulting greater wasteload allocation could reduce the extent and hence costs of improvements to the

WWTF. This would reduce the burden on the ratepayers who could be financially punished due to upstream sources of total phosphorous were not generated by these ratepayers.

Comment 3

Review of Fig 20 the Bear River/Malad River Subbasin Assessment and Total Maximum Daily Load Plan appears to show there is some assimilative capacity in Bear at Utah/Idaho border which could provide a more favorable total phosphorous limit if the point of discharge were to be relocated. If the City were to pursue this option - can the proposed limits be identified as an alternative in the permit.

Comment 4

Preston City requests a three (3) year compliance period to meet the interim Total Phosphorus Limits. At this point in time the City is not 100% confident that our existing facility can reliably meet this limit. If there is an issue this would allow the City time to implement facility and operational upgrades that will allow the facility to positively remove phosphorus to the required levels. We respectfully request that compliance with the proposed interim total phosphorous limits be extended three (3) years beyond the date of permit issuance.

Comment 5

The City requests that consideration for seasonally based effluent total phosphorous limits be considered. There is evidence that much of the flow in Worm Creek does not reach the Cub/Bear River during the irrigation season (Part III.A Fact Sheet, pg 10) which is typically the most critical period for receiving waters. Consideration should be given to the actual total phosphorous load reaching the Cub River on a seasonal basis and permit limits derived from these values.

Comment 6

There is no USGS gauging station on Worm Creek. EPA has calculated low flow conditions using data collected by City of Preston WWTF personnel. Accurate is this data should be considered. To verify the data additional more frequent QA/QC'd data should be acquired before implementing a limit. Worm Creek is effluent dominated, plant flow is more than critical low flow (7Q10) in creek. Since low flow conditions in the receiving water are instrumental in deriving WQBEL's, the City would request that further and more accurate low flow data for Worm Creek be established before determining WQBELS.

Comment 7

Ammonia (pg 43 fact sheet): "A WQBEL for ammonia was calculated based on existing data and was calculated to be less stringent than current ammonia limits... a review of historical data

from Preston WWTP total phosphorous from 2010-2015 demonstrated the facility is currently capable of meeting its ammonia limits... because the permittee is currently meeting existing limits, these limits are being carried forward in the new permit.”

Preston typically meets their ammonia limit but they have exceeded in the past, see table below on pg 10 of fact sheet. Since there is not scientific basis for this ammonia limit we would request an increase to the WQBEL for ammonia.

**Table 2. Effluent Limit Violations from 2005 – 2015.**

Parameter	Limit	Units	Number of Instances
Solids, Total Suspended	Weekly Average	mg/L	3
BOD, 5-day	Monthly Average	mg/L	3
Nitrogen, Ammonia	Monthly Average	lb/day	1
Nitrogen, Ammonia	Monthly Average	mg/L	3
Oxygen, Dissolved	Daily Minimum	mg/L	6
pH	Instantaneous Minimum	SU	1

Comment 8

The City requests the total residual chlorine requirement be removed from the permit because the WWTP currently utilizes ultraviolet disinfection. The City has no plans to use chlorine disinfection in the future.

Sincerely;



Mark T. Owens, P.E.  
Preston City Engineer

cc:

Tom Hepworth – Idaho DEQ (by email)  
Lynn Van Every – Idaho DEQ (by email)  
David Brick – EPA Region 10 (by email)