# U.S. Environmental Protection Agency Region 10

# Response to Comments on the Draft NPDES Permit for the City of Elk River Wastewater Treatment Facility: Permit Number ID0020362 June 12, 2018

#### Background

On March 16, 2018, the United States Environmental Protection Agency Region 10 (EPA) issued a draft National Pollutant Discharge Elimination System (NPDES) permit for public review and comment for the wastewater treatment facility at the City of Elk River, Idaho (NPDES Permit Number ID0020362). The public comment period closed on April 16, 2018. The EPA received comments on the draft permit from the Idaho Conservation League (ICL) dated April 13, 2018, as shown below.

The EPA's response to the comments received are set forth below. The EPA has included each comment verbatim from the commenter. No changes were made to the permit as the result of comments received on the draft permit. However, in preparing the final permit the EPA corrected an error in the Schedule of Submissions (*See* Page 2 of Permit). The Schedule of Submissions is a summary of submittals required by the permit and is intended to serve as a reminder list for the permittee. The draft permit incorrectly listed Whole Effluent Toxicity (WET) Testing on the Schedule of Submission. Because WET testing was not required nor intended to be required in the Draft Permit or Final Permit, EPA removed WET reporting from the Schedule of Submissions.

# Comment #1:

# **Endangered Species Act Consultation**

The EPA identified the following threatened or endangered species through accessing websites maintained by the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS):

- Snake River Fall-run Steelhead (threatened)
- Snake River Spring/Summer-run Chinook Salmon (threatened)
- Snake River Sockeye Salmon (endangered)
- Snake River Steelhead (threatened)
- Bull Trout (threatened)

The EPA concludes their ESA assessment with the following statement:

"Based on the small and seasonal discharge of the facility, together with protective secondary treatment standards and compliance with the Idaho WQS, the EPA believes that compliance with

the draft permit would have no known measurable affect, therefore, there is NO EFFECT to the above Threatened and Endangered Species."

The above statement reflects the EPA's opinion on this matter, but that fails to satisfy the requirements of Section 7 of the ESA (Section 7). Section 7 requires the EPA to "request a consultation with the NMFS and USFWS." As presented, it does not appear that the EPA has requested such a consultation from either the NMFS or USFWS, and thus has yet to satisfy the requirements stipulated by Section 7.

Prior to reissuing this permit, the EPA must request such a consultation and provide sufficient time for the NMFS and USFWS to research and respond to the EPA's request. Along the same lines of reason as detailed above, the EPA must also consult with NOAA Fisheries regarding essential fish habitat in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

# Response #1

As explained in the Fact Sheet, the Elk River Wastewater Treatment Facility (facility) intermittently discharges between November 1<sup>st</sup> to July 31<sup>st</sup>. Given the small seasonal discharge combined with the effluent limits and conditions in the permit, the EPA has concluded that there will be no effect on endangered species. Fact Sheet at p. 26. When the EPA makes a finding of no effect, consultation with the Services is not required.

Similarly, for the same reasons, the EPA concluded that there will be no effect on EFH; therefore, consultation with NOAA Fisheries is not required.

No changes to the Final Permit resulted from this comment.

# Comment #2

# Backsliding on TRC Effluent Limits

Section V.E. of the Fact Sheet states that the draft permit includes less stringent chlorine limits than those in the previous permit. We question EPA's reasoning for this modification and believe that the chlorine standards cannot be allowed to regress in this manner.

The EPA's justification for relaxing the chlorine limits is that this change will not violate the existing water quality standards for chlorine and that Idaho provided a sufficient antidegradation review, thus satisfying the CWA requirements to allow backsliding. However, as stated on page 15 of the Fact Sheet, "the Clean Water Act requires that the effluent limits for a particular pollutant be the more stringent of either technology-based limits or water quality-based limits." Given that the previous permit had more stringent chlorine limits, it is evidently technologically feasible to attain those limits. On the basis of the requirements of 40 CFR 125.3(a), WQBELs are to be imposed when they provide more stringent effluent limitations (in the event that TBELs are not sufficient to protect water quality), which is clearly not the case here. To our knowledge, the provisions in 40 CFR 122.44(l) allowing for backsliding to occur under certain

conditions do not override the requirement that permits utilize the more stringent of either TBELs or WQBELs, as required by 40 CFR 125.3(a).

In its current form, the EPA's draft permit is in clear violation of the Clean Water Act because it establishes chlorine limits based on the less stringent WQBELs rather than the demonstrably more stringent TBELs. To comply with the CWA, the EPA must keep the previous chlorine limits.

We are particularly concerned about the proposed weakening of chlorine limits for the Elk River WWTP due to our concerns with the underlying analyses EPA is using to justify this proposed backsliding, as detailed in our comments below on low-flow calculations and IDEQ's antidegradation analysis.

# Response #2

The TRC effluent limits in the previous permit and the Draft Permit are water quality-based effluent limits; the limits were not technology-based effluent limits. For water quality-based effluent limits, the permitting authority may include a less stringent effluent limit in a subsequent permit if the permitting authority shows compliance with Clean Water Act Section 303(d)(4). As explained in the Fact Sheet, when a water body is in attainment, an effluent limit can be made less stringent if an adequate antidegradation analysis has been completed. Here, the EPA took into consideration new flow information which resulted in a less stringent effluent limit. The Idaho Department Environmental Quality (IDEQ) provided an antidegradation analysis for the permit. The EPA reviewed the antidegradation analysis and found that it was consistent with the State's antidegradation policy and implementation methods.

No Changes to the Final Permit resulted from this comment.

# Comment #3

#### **Low-Flow Calculations**

We are curious about the time window the EPA used when calculating low-flows using the USGS Streamstats Version 3.0 (Streamstats). Both the existing and proposed NPDES permit only authorize discharge during the months from November to June. As such, only observed or modeled flows during these months should be included in low-flow calculations. We ask that the EPA clarify which months were included in their Streamstats modeling efforts and potentially revise their calculations if modeled flows occurring outside the authorized discharge window were included in the analysis.

# Response #3

Low flow calculations from StreamStats Version 3.0 could only be estimated on an annual (12-month) basis. Since the authorized discharge period is included in the period in the StreamStats estimation, the calculation is representative and accurately estimates the low flows for the authorized discharge period.

No changes in the Final Permit resulted from this comment.

# Comment #4

# TRC Antidegradation Analysis

Tier II water bodies are defined in IDAPA 58.01.02.051.02 as "where the quality of the water exceeds levels necessary to support propagation of fish, shellfish and wildlife and recreation in and out of the water." Prior to approving activity or discharges into these waters, IDEQ must perform an antidegradation review to evaluate the effect of an activity or discharge on water quality through a Tier II analysis, as outlined in IDAPA

58.01.02.052.08. It's important to note that a Tier II analysis requires a high-degree of specificity in order to fully assess the chemical, physical, biological and other information regarding the water body.

Our concerns stem from DEQ's assertion that no degradation will result from the reissuance of this permit – which would include increased TRC effluent limits – despite a lack of supporting analyses substantiating this claim. Idaho's Antidegradation Rules require a series of assessments that must be followed, beginning with the identification of a waterbodies status. Elk Creek has been identified by IDEQ as a Tier II waterbody.

Once appropriately identified, the next step is to evaluate the effect of an activity or discharge on water quality, as required by IDAPA 58.01.02.052.06(a). The stated requirement of this section includes the following:

"Effect on water quality will be based on the calculated change in concentration in the receiving water as a result of a new or reissued permit or license." and;

"For a new permit or license, the calculated change will be the difference between the existing receiving water quality and water quality that would result from the activity or discharge as proposed in the new permit or license"

These rules explicitly require that the effect on water quality be calculated in some manner. As presented, IDEQ's 401 Certification does not include any such required calculation demonstrating the quantitative impact to water quality resulting from the increased TRC effluent limit. IDEQ asserts that the EPA's use of Streamstats to assign a nonzero low-flow negates potential changes in water quality. However, not only do we have concerns around low-flow calculations (see previous comment), this approach also solely reflects IDEQ's opinion. IDEQ's statement lacks calculated support validating this assertion, as required by IDAPA 58.01.02.052.06(a). The fact that IDEQ reached conclusions without providing details on these calculations concerns us, and we do not believe this approach satisfies the requirements of Idaho's Antidegradation Policy.

If, after appropriate quantitative analysis, it is demonstrated that degradation will occur as a result of this project, then IDEQ must determine whether or not that degradation is significant.

IDAPA 58.01.02.052.08(a)(i) defines significant degradation as "a cumulative decrease in assimilative capacity of more than ten percent (10%), from conditions of July 1, 2011, shall constitute significant degradation." Again, the determination of whether or not degradation is significant must be substantiated by appropriate analyses and or calculations, and should be included in the draft and final certification prepared by IDEQ and presented to the public. Neither the draft permit nor 401 Cert discusses the assimilative capacity of Elk Creek with regards to chlorine, thus it remains unanswered whether the 10% threshold has been exceeded.

If degradation is determined to be significant (i.e. – exceeds 10% of assimilative capacity), IDEQ must then perform a Tier II antidegradation analysis as required by IDAPA 58.01.02.052.08. Included in this analysis is the requirement that IDEQ review all point- and non-point discharges throughout the watershed to ensure they are achieving the highest statutory and regulatory requirements (IDAPA 58.01.02.052.08(b)).

Tier II waterbodies are becoming increasingly rare throughout our state, making it imperative that any work being proposed within a Tier II waterbody receives the upmost scrutiny and all necessary analyses are performed. There are a number of steps required to review work within a Tier II waterbody, and we are concerned that IDEQ has yet to satisfy all the requirements associated with certifying work within the Tier II waterbody Elk Creek.

The EPA's justification for allowing backsliding on TRC limits is reliant upon a complete and accurate antidegradation analysis from IDEQ. It would be inappropriate for the EPA to rely on the antidegradation analysis presented until such time that the aforementioned steps are completed, as required by Idaho's Antidegradation Policy. Once a full antidegradation analysis is completed, the EPA should review the assumptions made to justify backsliding to assess whether their justification remains appropriate for this scenario.

# Response #4

EPA was provided a CWA Section 401 Certification that this permitting action complies with Idaho's Antidegradation policy. IDEQ certified that it completed its antidegradation review in accordance with its implementation procedures.

This comment relates to IDEQ's 401 certification therefore IDEQ will respond to this comment. Pertaining to backsliding, please refer to the Response #2, above.

No Changes to the Final Permit resulted from this comment.

#### Comment #5

# **Monitoring Requirements**

The final permit issued to this facility should explicitly state that all monitoring, sampling, and reporting requirements would remain in effect throughout the life of this permit, including any

administrative extensions that may be granted. The current permit has been administratively extended for close to 10 years. Data necessary to evaluate permit reissuance must be collected throughout such time in order to accurately assess the impact future permit reissuances could have on the receiving water body.

# Response #5

The Final Permit requires that monitoring must take place during the duration of the permit. The permit continues to be effective even when it is administratively extended, and the facility is required to conduct monitoring during the permit duration. Therefore, should the permit become administratively extended again, the facility would still be required to continue monitoring until either the permit is terminated, or when a new permit is reissued, which would then include a new set of monitoring requirements.

No Changes to the Final Permit resulted from this comment.

#### Comment #6

# **IDEQ 2015 Inspection Report**

The IDEQ completed an inspection report in 2015 that detailed a number of concerns related to this facilities permit violations. Per the EPA's Fact Sheet, these concerns include:

- The adequate maintenance of the structure of the sewage lagoons;
- The poor housekeeping in the disinfection building;
- The adherence to the Quality Assurance Plan (QAP) and adequate maintenance of monitoring equipment;
- The proper reporting of loading information on the DMRs;
- The July 2015 DMR was not submitted.

EPA goes on to say that these documented concerns were not addressed in the Final 2016 Consent Agreement between EPA and the facility over the facilities alleged permit violations. In light of this, the EPA should address these concerns through the reissuance of this permit. Where applicable, the EPA should include permit conditions or compliance orders that target each of the above concerns identified by DEQ.

#### Response #6

The Final Permit contains provisions that will ensure that the concerns identified by IDEQ are addressed. The permit requires proper operation and maintenance (see Part II.A, page 9 of Final Permit), submittal of DMRs (see Part III.B, page 14 of Final Permit), and an updated Quality and Assurance Plan (see Part II.B, page 10 of Final Permit).

No Changes to the Final Permit resulted from this comment.



208.345.6933 • PO Box 844, Boise, ID 83702 • www.idahoconservation.org

4/13/18

Kai Shum US EPA Region 10 1200 Sixth Ave Seattle, WA 98101 Sujata Connell Idaho DEQ, Lewiston Regional Office 1118 F St. Lewiston, ID 835

Submitted via email: shum.kai@epa.gov and sujata.connell@deq.idaho.gov

# **RE:** Idaho Conservation League Comments on Draft NPDES and Accompanying 401 Certification for City of Elk River WWTP

Dear Mr. Shum and Ms. Connell

Thank you for the opportunity to comment on the draft NPDES permit and accompanying 401 Certification (hereinafter "401 Cert") for the City of Elk River WWTP

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 30,000 supporters, many of whom have a deep personal interest in protecting water quality and aquatic habitat throughout Idaho.

We thank you for the opportunity to review the proposed permit and ask that you please send us subsequent documents for this project. Our comments can be found following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or <a href="mailto:ahopkins@idahoconservation.org">ahopkins@idahoconservation.org</a> if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,

Austin Hopkins

Conservation Associate

#### **Endangered Species Act Consultation**

The EPA identified the following threatened or endangered species through accessing websites maintained by the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS):

- Snake River Fall-run Steelhead (threatened)
- Snake River Spring/Summer-run Chinook Salmon (threatened)
- Snake River Sockeye Salmon (endangered)
- Snake River Steelhead (threatened)
- Bull Trout (threatened)

The EPA concludes their ESA assessment with the following statement:

"Based on the small and seasonal discharge of the facility, together with protective secondary treatment standards and compliance with the Idaho WQS, the EPA believes that compliance with the draft permit would have no known measurable affect, therefore, there is NO EFFECT to the above Threatened and Endangered Species."

The above statement reflects the EPA's opinion on this matter, but that fails to satisfy the requirements of Section 7 of the ESA (Section 7). Section 7 requires the EPA to "request a consultation with the NMFS and USFWS." As presented, it does not appear that the EPA has requested such a consultation from either the NMFS or USFWS, and thus has yet to satisfy the requirements stipulated by Section 7.

Prior to reissuing this permit, the EPA must request such a consultation and provide sufficient time for the NMFS and USFWS to research and respond to the EPA's request. Along the same lines of reason as detailed above, the EPA must also consult with NOAA Fisheries regarding essential fish habitat in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

#### Backsliding on TRC Effluent Limits

Section V.E. of the Fact Sheet states that the draft permit includes less stringent chlorine limits than those in the previous permit. We question EPA's reasoning for this modification and believe that the chlorine standards cannot be allowed to regress in this manner.

The EPA's justification for relaxing the chlorine limits is that this change will not violate the existing water quality standards for chlorine and that Idaho provided a sufficient antidegradation review, thus satisfying the CWA requirements to allow backsliding. However, as stated on page 15 of the Fact Sheet, "the Clean Water Act requires that the effluent limits for a particular pollutant be the more stringent of either technology-based

limits or water quality-based limits." Given that the previous permit had more stringent chlorine limits, it is evidently technologically feasible to attain those limits. On the basis of the requirements of 40 CFR 125.3(a), WQBELs are to be imposed when they provide more stringent effluent limitations (in the event that TBELs are not sufficient to protect water quality), which is clearly not the case here. To our knowledge, the provisions in 40 CFR 122.44(l) allowing for backsliding to occur under certain conditions do not override the requirement that permits utilize the more stringent of either TBELs or WQBELs, as required by 40 CFR 125.3(a).

In its current form, the EPA's draft permit is in clear violation of the Clean Water Act because it establishes chlorine limits based on the less stringent WQBELs rather than the demonstrably more stringent TBELs. To comply with the CWA, the EPA must keep the previous chlorine limits.

We are particularly concerned about the proposed weakening of chlorine limits for the Elk River WWTP due to our concerns with the underlying analyses EPA is using to justify this proposed backsliding, as detailed in our comments below on low-flow calculations and IDEQ's antidegradation analysis.

# **Low-Flow Calculations**

We are curious about the time window the EPA used when calculating low-flows using the USGS Streamstats Version 3.0 (Streamstats). Both the existing and proposed NPDES permit only authorize discharge during the months from November to June. As such, only observed or modeled flows during these months should be included in low-flow calculations. We ask that the EPA clarify which months were included in their Streamstats modeling efforts and potentially revise their calculations if modeled flows occurring outside the authorized discharge window were included in the analysis.

#### TRC Antidegradation Analysis

Tier II water bodies are defined in IDAPA 58.01.02.051.02 as "where the quality of the water exceeds levels necessary to support propagation of fish, shellfish and wildlife and recreation in and out of the water." Prior to approving activity or discharges into these waters, IDEQ must perform an antidegradation review to evaluate the effect of an activity or discharge on water quality through a Tier II analysis, as outlined in IDAPA 58.01.02.052.08. It's important to note that a Tier II analysis requires a high-degree of specificity in order to fully assess the chemical, physical, biological and other information regarding the water body.

Our concerns stem from DEQ's assertion that no degradation will result from the reissuance of this permit – which would include increased TRC effluent limits – despite a

lack of supporting analyses substantiating this claim. Idaho's Antidegradation Rules require a series of assessments that must be followed, beginning with the identification of a waterbodies status. Elk Creek has been identified by IDEQ as a Tier II waterbody.

Once appropriately identified, the next step is to evaluate the effect of an activity or discharge on water quality, as required by IDAPA 58.01.02.052.06(a). The stated requirement of this section includes the following:

"Effect on water quality will be based on the calculated change in concentration in the receiving water as a result of a new or reissued permit or license." and;

"For a new permit or license, the calculated change will be the difference between the existing receiving water quality and water quality that would result from the activity or discharge as proposed in the new permit or license"

These rules explicitly require that the effect on water quality be calculated in some manner. As presented, IDEQ's 401 Certification does not include any such required calculation demonstrating the quantitative impact to water quality resulting from the increased TRC effluent limit. IDEQ asserts that the EPA's use of Streamstats to assign a nonzero low-flow negates potential changes in water quality. However, not only do we have concerns around low-flow calculations (see previous comment), this approach also solely reflects IDEQ's opinion. IDEQ's statement lacks calculated support validating this assertion, as required by IDAPA 58.01.02.052.06(a). The fact that IDEQ reached conclusions without providing details on these calculations concerns us, and we do not believe this approach satisfies the requirements of Idaho's Antidegradation Policy.

If, after appropriate quantitative analysis, it is demonstrated that degradation will occur as a result of this project, then IDEQ must determine whether or not that degradation is significant. IDAPA 58.01.02.052.08(a)(i) defines significant degradation as "a cumulative decrease in assimilative capacity of more than ten percent (10%), from conditions of July 1, 2011, shall constitute significant degradation." Again, the determination of whether or not degradation is significant must be substantiated by appropriate analyses and or calculations, and should be included in the draft and final certification prepared by IDEQ and presented to the public. Neither the draft permit nor 401 Cert discusses the assimilative capacity of Elk Creek with regards to chlorine, thus it remains unanswered whether the 10% threshold has been exceeded.

If degradation is determined to be significant (i.e. – exceeds 10% of assimilative capacity), IDEQ must then perform a Tier II antidegradation analysis as required by IDAPA 58.01.02.052.08. Included in this analysis is the requirement that IDEQ review all point- and non-point discharges throughout the watershed to ensure they are achieving the highest statutory and regulatory requirements (IDAPA 58.01.02.052.08(b)).

Tier II waterbodies are becoming increasingly rare throughout our state, making it imperative that any work being proposed within a Tier II waterbody receives the upmost scrutiny and all necessary analyses are performed. There are a number of steps required to review work within a Tier II waterbody, and we are concerned that IDEQ has yet to satisfy all the requirements associated with certifying work within the Tier II waterbody Elk Creek.

The EPA's justification for allowing backsliding on TRC limits is reliant upon a complete and accurate antidegradation analysis from IDEQ. It would be inappropriate for the EPA to rely on the antidegradation analysis presented until such time that the aforementioned steps are completed, as required by Idaho's Antidegradation Policy. Once a full antidegradation analysis is completed, the EPA should review the assumptions made to justify backsliding to assess whether their justification remains appropriate for this scenario.

# **Monitoring Requirements**

The final permit issued to this facility should explicitly state that all monitoring, sampling, and reporting requirements would remain in effect throughout the life of this permit, including any administrative extensions that may be granted. The current permit has been administratively extended for close to 10 years. Data necessary to evaluate permit reissuance must be collected throughout such time in order to accurately assess the impact future permit reissuances could have on the receiving water body.

# **IDEQ 2015 Inspection Report**

The IDEQ completed an inspection report in 2015 that detailed a number of concerns related to this facilities permit violations. Per the EPA's Fact Sheet, these concerns include:

- The adequate maintenance of the structure of the sewage lagoons;
- The poor housekeeping in the disinfection building;
- The adherence to the Quality Assurance Plan (QAP) and adequate maintenance of monitoring equipment;
- The proper reporting of loading information on the DMRs;
- The July 2015 DMR was not submitted.

EPA goes on to say that these documented concerns were not addressed in the Final 2016 Consent Agreement between EPA and the facility over the facilities alleged permit violations. In light of this, the EPA should address these concerns through the reissuance of this permit. Where applicable, the EPA should include permit conditions or compliance orders that target each of the above concerns identified by DEQ.