COLORADO
Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

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Re: Northern Integrated Supply Project's Supplemental Draft Environmental Impact Statement Comments

Dear Mr. Urbanic,

Thank you for the opportunity to comment on the Northern Integrated Supply Project (NISP) Supplemental Draft Environmental Impact Statement (SDEIS). The Colorado Department of Public Health and Environment (CDPHE) intends to use the Final Environmental Impact Statement (FEIS) to identify potential water quality impacts and associated mitigation to offset these impacts in the 401 Water Quality Certification (401 Certification).

Since 2013, CDPHE has participated in the National Environmental Policy Act (NEPA) process on the Northern Integrated Supply Project (NISP) as a cooperating agency. In this capacity, we have invested considerable effort in reviewing and commenting on the content of the Environmental Impact Statement (EIS) at various stages of development. CDPHE has benefitted from the working relationship between the U.S. Army Corps of Engineers (Corps) and its consultants gaining insights into the technical development of the Supplemental Draft EIS (SDEIS) and by creating opportunities to shape the scope of the SDEIS and the Final EIS (FEIS) regarding water quality issues.

The purpose for our participation in the EIS process was to preview the information about water quality impacts in preparation for the process leading to issuance of the 401 Certification for Corps 404 Permit. CDPHE is required by Colorado statute (C.R.S., §25-8-302(1)(f)) to review federal licenses and permits under Section 401 of the Clean Water Act. Colorado Water Quality Control Commission Regulation No. 82 (5 CCR 1002-82) authorizes CDPHE to certify, conditionally certify or deny certification of federal licenses and it sets forth best management practices (BMPs) applicable to all certifications.

CDPHE issues a 401 Certification when it determines that there is reasonable assurance that both the construction and operation of the project will comply with state surface and groundwater water quality standards and requirements. If CDPHE concludes that the project will comply with the water quality standards and requirements *only* if one or more conditions are placed on the license or permit, then CDPHE will issue the certification with the necessary condition(s) included.

Conditions in the 401 Certification provide the Corps with a solid basis for requiring mitigation that will support, to the extent possible, attainment of water quality standards, including

antidegradation provisions. The water quality impacts and proposed mitigation described in the FEIS serve as a starting point for the 401 Certification process. However, the FEIS alone, may not be sufficient to identify all water quality impacts and support the development of all mitigation plans that should be included in conditions set by the 404 permit.

General Comments about Water Quality Impacts Identified in the SDEIS

The CDPHE is concerned with the current process and the resulting analyses and conclusions in the SDEIS and the FEIS. The results and conclusions in the SDEIS create an incomplete foundation that creates a high probability that the quantitative conclusions in the FEIS will conflict with the qualitative conclusions made in the SDEIS.

The SDEIS highlights water quality impacts from the standpoint of total environmental effects and for effects specific to the project itself. Although both perspectives are important for the EIS, CDPHE is focusing attention chiefly on the total environmental effects for the preferred alternative, plus reasonably foreseeable future actions (RFFAs), in anticipation of the 401 Certification process. Cumulative impacts to water quality impacts may include, but are not limited to:

1) temperature increases in the Cache la Poudre River,
2) changes to metals and nutrient concentrations in the Cache la Poudre River.

Additional Impact Analyses Required for 401 Certification

Because CDPHE has reviewed the SDEIS and has been working with the Corps, we are able to anticipate the additional impact analyses that will be required through the 401 Certification application, if not included in the FEIS. These additional analyses are driven in large part by regulatory elements, such as antidegradation review, specific to the 401 Certification process.

CDPHE finds three areas in the SDEIS that should be considered when developing the FEIS, including the importance of groundwater data in the analysis, the reliance on flow-concentration relationships and the handling of non-detects.

Groundwater Data

Return flows can add significantly to flow in the Cache la Poudre River (Poudre), especially east of I-25. Consequently, if instream flows are reduced through diversion, groundwater flows may wield greater influence over the resulting mixed concentrations. For example, if the selenium concentration in groundwater is higher than what is present in the surface flow, a reduction in surface flow would lead to an increase in selenium concentrations in the stream. It is CDPHE's view that even qualitative conclusions about water quality impacts cannot be made until the role of groundwater is included in the analysis.

Flow-Concentration Relationship

The analysis on water quality is based on the premise that underlying relationships between flow and concentration will have predictive value in a managed system. There are two concerns with relying on this premise. First, diversions change flow, and thus load, but not concentrations. Secondly the expectation for a simple flow-concentration relationship that is based on a two-component mixing model (i.e. base-flow and storm-flow), applies best in headwater streams. It is unlikely that this approach will work well in a highly managed system that receives inputs from many different sources.

Reliance on assumptions that impacts can be forecast from flow-concentration relationships, which do not apply to most constituents analyzed in the report, results in conclusions that there will be only "negligible impacts" to water quality. The conclusion of negligible effects

appeared frequently and it is a conclusion likely to be challenged when quantitative analyses are undertaken in the FEIS.

Non-Detects

Non-detectable results are common in water quality data, especially for metals and nutrients. A consistent and clearly explained approach is important and should be included in the analysis. The EIS should include details regarding the presentation and handling of non-detects. We recommend including clear documentation of the thresholds used for defining non-detects. We would prefer the method detection limit (MDL) to reporting or quantitation limits. The threshold should be stated in each table. We also recommend a clear identification of the approach used for handling situations where multiple detection limits (DLs) are present. There are formal approaches, but it is also possible to make simplifying assumptions by applying the highest value to all cases or restricting the usable data record to years in which a satisfactory DL is available. Lastly we recommend not substituting zeros for all DLs for the purpose of computing descriptive statistics or presenting flow-concentration relationships. Although CDPHE routinely substitutes zeroes for DLs as a part of assessment methodology for water quality assessment, the practical implications are clear and restricted. Graphs of time series and flow-concentration relationships are misleading when zeroes (or 0.001) are substituted for all values less than the DL; it is worse when multiple DLs are present.

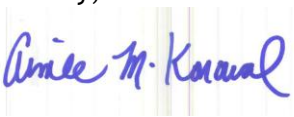
Conclusions

Additional analyses anticipated as part of the 401 Certification process may identify water quality impacts not yet considered for mitigation in the SDEIS or FEIS. If certified, the 401 Certification Application and supporting documentation will be submitted to the Corps, which will be incorporated in the final Corps 404 Permit to ensure that the permitted project will be protective of the state's water quality uses and standards.

We are optimistic that resolution of our comments will result in a scientifically strong FEIS that can be used in the assessment of impacts for the water quality 401 certification. We look forward to working with the U.S. Army Corps of Engineers EIS team in the future as questions arise and changes are made.

If you have any questions, please contact Aimee Konowal (aimee.konowal@state.co.us, 303-692-3530) of the Environmental Data Unit, Water Quality Control Division.

Sincerely,



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