

Sept. 6, 2022

To: U.S. EPA

Andrew Mutter: mutter.andrew@epa.gov
Karen McIntosh: McIntosh.Karen@epa.gov
Darcy O'Connor: [oconnor.darcy@epa.gov](mailto:connor.darcy@epa.gov)
KC Becker: Becker.KC@epa.gov
Jorianne Jernberg: jernberg.jorianne@epa.gov

Cc: Bill Eubanks: bill@eubankslegal.com (attorney representing Save The Poudre)
John Barth: barthlawoffice@gmail.com (attorney representing Save The Poudre)

RE: Save The Poudre comments on the NISP WIFIA "Letter of Interest", dated 12/15/2021

Dear U.S. Environmental Protection Agency,

We appreciate the phone call we had with you on 1/14/2022. We also appreciate your invitation for us to send you comments on the Northern Integrated Supply Project (NISP) WIFIA "letter of interest" ("letter"¹). From this letter, it appears that EPA put NISP on a "waiting list" for a \$484 million loan.

We have extreme concerns about the NISP letter, including that it contains false and misleading information. Further, in a few cases, we allege the NISP letter knowingly and willfully provides false information and false statements to the EPA.

Specifically, in Section C "Selection Criteria":

Question 7 asks: *"Will the project use new or innovative approaches to plan, design, manage, and/or implement the project?"*

We strongly disagree with the answer provided by NISP.

NISP is a massive above-ground dam and reservoir project, using 100-year old technology, designed to further drain the already degraded Cache la Poudre River through Fort Collins and downstream. New technology involving dramatically increased water conservation, water recycling, water-sharing agreements with farmers, or underground storage are not part of NISP.

¹ https://www.savethepoudre.org/wp-content/uploads/2022/09/NISP-GRC-LOI_2021.pdf

Question 8 asks: “Does the project protect the system, project specific asset, or community from extreme weather events such temperature, storms, floods, or sea level rise expected based on current conditions?”

We strongly disagree with the answer provided by NISP.

NISP will degrade the geomorphology of the Cache la Poudre River and increase flooding in the Cache la Poudre River in Fort Collins and Greeley.

About increased flooding in Fort Collins, see the City of Fort Collins FEIS comments (10/4/2018):

- “SECTION 3: Geomorphology-Related Comments”²
- “SECTION 6: Socioeconomic-Related Comments”³

About increased flooding in Greeley, see the City of Greeley’s SDEIS comments (9/2/2015):

- “Geomorphology” pages 18 – 19⁴.

Question 10 asks: “Does the project reduce greenhouse gas emissions?” The letter checked “no” and wrote “not applicable”. This is false information.

See Save The Poudre scientific analysis of greenhouse gas emissions estimated to be created by NISP⁵ which we sent to the U.S. Army Corps of Engineers on May 16, 2014.

Our calculations predict:

1. Embodied emissions from construction of the project – including fuel burned on site, concrete manufacturing and use, rock fill, and excavation in the construction of the project – would total at least 218,000 metric tons CO₂-equivalent, which is more than 5 metric tons CO₂-equivalent per acre-foot of water proposed to be yielded from the project.
2. Direct emissions from pumping water for the project’s proposed actions would range from at least 19,822 to 45,125 metric tons CO₂-equivalent per year, depending on the action selected and the operation of the project.

² <https://www.fcgov.com/nispreview/files/nisp-feis-comments-2018-10-4.pdf?1618443216>

³ <https://www.fcgov.com/nispreview/files/nisp-feis-comments-2018-10-4.pdf?1618443216>

⁴ <https://greeleygov.com/docs/default-source/Water/2015-9-2-nisp-comment-letter.pdf>

⁵ <STP-letter2-Corps-GHG-emissions-NISP-May-16-2014.pdf>

3. The project's proposed action and action alternatives would affect 1,700 acres of riparian associated wetlands in the Cache la Poudre Basin. Carbon in soils and wetland vegetation are a major sink for ecosystem carbon, and the loss of those wetlands would result in a major source of emissions to the atmosphere of at least 7,036 metric tons CO₂-equivalent per year.

4. Reservoirs in the American West are significant sources of greenhouse gases, and the combination of reservoirs constructed for the project, if built, are likely to emit thousands of metric tons CO₂-equivalent per year. Since 2014, when our comments were sent to the Army Corps, the science has advanced considerably to estimate these emissions. See Save The Colorado, Earthjustice, and Patagonia's petition to the U.S. EPA to add dams and reservoirs to the EPA's Greenhouse Gas Reporting Program⁶.

Question 12 asks, "Does the project address water quality concerns?" In response, Northern states, "...water quality concerns are fully address and fully mitigated."

Save the Poudre strongly disagrees. Save the Poudre provides the following background on the sad state of the Cache La Poudre River and how NISP will make water quality worse.

- A. The Cache la Poudre River is in crisis. The River is already over-appropriated. *Three Bells Ranch Associated v. Cache La Poudre Water Users Ass'n*, 758 P.2d 164, 166 (en banc Colo. 1988)⁷. As shown below, segments of the river near Fort Collins are often dry.



Photo: Save The Poudre, October 2009, near Lyons Park, LaPorte, CO.

⁶ <https://telltthedamtruth.com/>

⁷ <https://casetext.com/case/three-bells-v-cache-la-poudre>

B. The River has been seriously altered by heavy agricultural and urban water use since early settlement in the 1870's. "The human footprint continues to expand, placing additional pressure (or stresses) on the river ecosystem and the natural processes that sustain it." See City of Fort Collins "State of the Poudre River 2017" (SOPR)⁸. Extensive existing dam and diversion infrastructure, as well as proposed additional water development, such as the proposed Northern Integrated Supply Project, "have significantly altered the peak and base flows, the effects of which are exacerbated the further one travels downstream. Diversions also cause unnatural fluctuations in flow volume, which likely affects critical habitat and reproductive needs of fish and insects in the river." SOPR, page 4⁹.

C. Currently proposed water diversion and/or storage projects in the upper Cache la Poudre River watershed include NISP, the Halligan Reservoir expansion, the potential Seaman Reservoir expansion, and the Thornton Water Project (that would remove Cache la Poudre River water out of the watershed).

The towns and cities in the thirsty Denver metro area have exhausted the local water supplies in Clear Creek, Boulder Creek, the St. Vrain River and other watersheds. Now these metropolitans are moving north to grab water from the Cache la Poudre River. These water grabs are often accomplished by implementing a "buy and dry" strategy whereby these parched metro municipalities buy irrigated farms in the Cache la Poudre River watershed, convert the water to municipal use, and attempt to pipe it south into the metro area. Both NISP and the Thornton Water Project would take Cache la Poudre River water out of its natural watershed south to these metro communities. In some cases, as with NISP, the water developer has not even secured the water rights needed to fully build the water project, but still moved forward in acquiring necessary permits, including the State of Colorado 401 Certification.

D. In the Cache la Poudre River, "populations of native fish are [also] in sharp decline. These declines are most likely due to fragmented habitat and extended periods of extremely low base flows. Other stresses likely influencing fishery health include rapid fluctuation of flows...and altered water temperatures." SOPR, p. ii¹⁰. The flow regime in the Cache la Poudre River score poorly in all segments of the river "suggesting substantially-impaired functionality...[i]mpairment mainly arises from the effects of water management.". SOPR, p. 41¹¹.

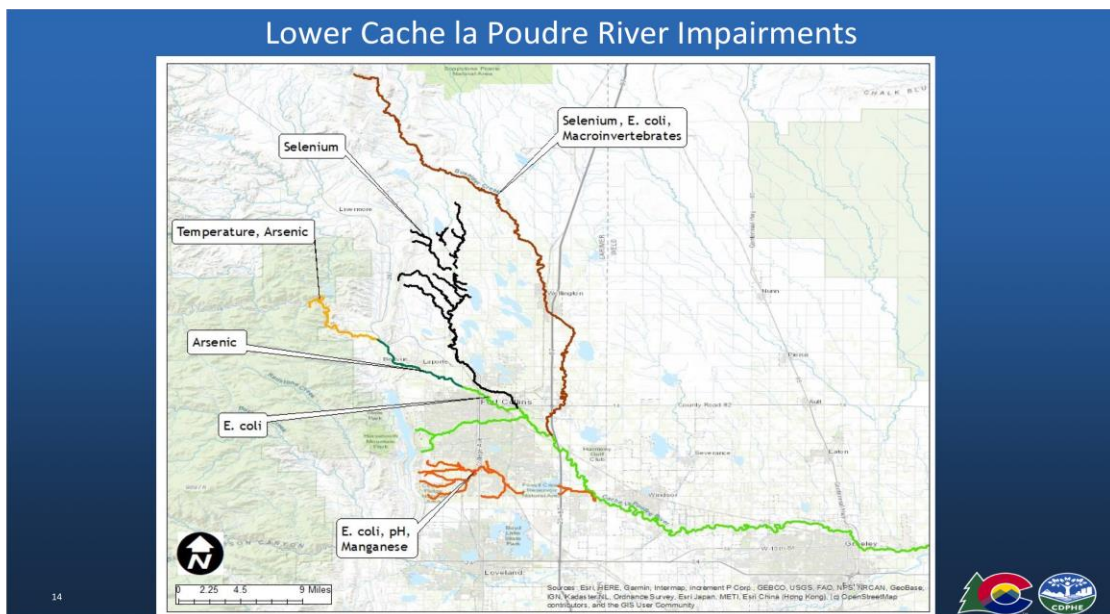
As shown below, the River also suffers from numerous existing water quality impairments, including e coli in the mainstem of the river flowing through Fort Collins.

⁸ <https://www.fcgov.com/poudrereportcard/pdf/sopr2016.pdf>

⁹ <https://www.fcgov.com/poudrereportcard/pdf/sopr2016.pdf>

¹⁰ <https://www.fcgov.com/poudrereportcard/pdf/sopr2016.pdf>

¹¹ <https://www.fcgov.com/poudrereportcard/pdf/sopr2016.pdf>



These water quality impairments will worsen if additional stream flow is removed from the River by NISP.

E. In 2014, a team of scientists published “An Ecological Response Model for the Cache la Poudre River Through Fort Collins”¹². The report concluded that “additional flow regime modification [such as from NISP] would further alter the structure and function of the Poudre River aquatic and riparian ecosystems due to multiple and interacting stressors.”

F. The City of Fort Collins Land Conservation and Stewardship Board (LCSB) noted, “NISP’s removal of water from the river will, quite simply, dehydrate our Natural Area’s ecological resources and degrade them...” Exhibit hereto, p. 1¹³. As such, the City’s LCSB opposed NISP based on ecological concerns.

G. Further, Save the Poudre participated in the NISP 401 Certification process. As noted in Save the Poudre’s April 22, 2019 Clean Water Act Section 401 Certification comment letter¹⁴, the following water quality concerns remain:

¹² https://www.fcgov.com/naturalareas/pdf/erm_report.pdf

¹³ <https://www.savethepoudre.org/wp-content/uploads/2020/06/200601NISPmemo.pdf>

¹⁴ [NISP-401-Certification-App-Comment-letter-STP-04-22-2019.pdf](https://www.savethepoudre.org/wp-content/uploads/2019/04/NISP-401-Certification-App-Comment-letter-STP-04-22-2019.pdf) (savethepoudre.org)

- Northern’s 401 Certification Application admits that “[w]ater diversions and releases...on the scale of the Proposed Action are likely to have environmental consequences...” including altered stream flow, pollutant concentrations, and heat balance. Northern’s Technical Report supporting the 401 Certification Application also admits that there are existing impairments and water quality issues for arsenic, temperature, E. coli., and selenium. The Technical Report also acknowledges “additional concerns about the internal release of phosphorus, iron, manganese, and arsenic brought on by low concentrations of dissolved oxygen in the hypolimnion” of the existing and proposed reservoirs.¹⁵
- Save the Poudre retained Lisa Buchanan of LRB Hydrology and Analytics to conduct a review of Northern’s 401 Certification Application and Technical Report for NISP. The Buchanan Report¹⁶ identifies significant deficiencies with Northern’s 401 Certification Application and anti-degradation review with respect to the project. These deficiencies include, but are not limited to Buchanan’s finding that:
 - The 401 Application fails to include focus locations where modeled water quality results are summarized in the 401 Application -- in the stretch of river between the Poudre River Intake and Boxelder Creek. Water quality model results focus on seven locations between the proposed Glade Reservoir outlet and the Greeley Gage. A focus location is not included in Segment 11 between the Lincoln Street Gage and Boxelder Gage to fully evaluate water quality impacts downstream of the MWRP and at the Timnath Inlet diversion structure. Hardness values of Poudre River water quality data, obtained from CDPHE for the time period 2008 to 2013, show that Segment 11 is comprised of three distinct subsections due to influence of Boxelder Creek at its downstream end and rapidly changing water quality in this Segment. This is important in the calculation of Table Value Standards (TVS) for hardness dependent metal standards, evaluation of the Baseline Available Increment (BAI), and assessment of potential significant water quality degradation.
 - Water quality data from reservoirs located near the proposed Upper Galeton Reservoir and from South Platte water near Kersey show low to no assimilative capacity of arsenic, nutrients, selenium, and iron. Information from these reservoirs also indicates that Upper Galeton Reservoir is likely to stratify for the summer months prompting release of contaminants in the

¹⁵ *Id.*

¹⁶ [Comments on the Application for 401 Certification of the Northern Integrated Supply Project \(savethepoudre.org\)](http://www.savethepoudre.org)

deoxygenated hypolimnion. The 401 Application states that water quality standards for many contaminants will likely be exceeded over the long term in Galeton Reservoir. However, the 401 Application fails to address the impact of these exceedances on surface water runoff or deep percolation to groundwater from farms included in the exchange program.

- The 401 Certification Permit Application does not address the risk of significant degradation of Poudre River water quality, particularly for metals and phosphorus which currently have low or no assimilative capacity in the Poudre River. If Glade Reservoir waters are re-introduced to the river from the hypolimnion of the reservoir, it could cause greater water quality degradation than was modeled and could cause significant degradation of the Poudre River for these pollutants. Based on data from Horsetooth Reservoir, it is likely that Glade Reservoir will stratify in late summer through October and cause release, particularly of arsenic, iron, manganese, and phosphorus caused by anoxic conditions in the lower levels of the reservoir.
- The 401 Application fails to evaluate the MWRP effluent data to identify which, and at what concentrations, emerging contaminants are present in the MWRP discharge. These parameters combined with summertime reduction in river flows caused by NISP would also affect water quality and potentially be deleterious to fish and macro-invertebrate populations downstream of the MWRP.
- The CDPHE 10-year Roadmap includes voluntary reduction in nutrient and selenium loads from agricultural lands. Monitoring of agricultural runoff will evaluate the effectiveness of Best Management Practices (BMPs) and determine if further nonpoint regulation is necessary from agricultural lands. The combination of the poor water quality anticipated in Upper Galeton Reservoir, the presence of emerging contaminants in South Platte water, and efforts required for the 10-year roadmap will likely prevent farmers from agreeing to exchange Upper Galeton water for their ditch water supply. Approximately 50 percent of the Glade Reservoir water supply is to come from exchanges to farms on the Larimer Weld and New Cache Canals. Water quality of storage in Upper Galeton Reservoir will likely hinder acquisition of the full 20,000 AF in exchanges needed to operate and fill Glade Reservoir. The 401 Permit Application fails to address this possibility and does not provide an alternate source of water for Glade Reservoir if exchanges with

agricultural entities on the Larimer Weld and New Cache Canals are insufficient.

- The Common Technical Platform (CTP) model and therefore water quality modeling in the 401 Application also fails to:
 - Evaluate impacts of different distributions of SPWCP exchanges into the Larimer Weld and New Cache Canals: exchange volumes depend on the land acreage of farms associated with each ditch that are willing to enter into an exchange contract with Northern Water – as yet to be determined.
 - Account for climate change impacts that likely will reduce annual flow and alter the monthly distribution of streamflow – altering historical daily flow patterns on which daily disaggregation of monthly flows and water quality models depend.
 - Omit outlier 1983 model output in calculation and comparison of monthly averages.

In addition, Save the Poudre raised the following legal issues in its administrative appeal of the 401 Certification. These issues were never substantively addressed:

- Northern’s 401 Certification application states, “Operations of NISP facilities would affect streamflow in the South Platte River downstream of the confluence of the Poudre River. The South Platte would not only be affected by diversions made to Glade Reservoir at the Poudre Valley Canal, but also by diversions made by the South Platte Water Conservation Project diversion structure, located just downstream of the confluence with the Poudre River.” The Division’s 401 Certification contains a finding that “the South Platte River is considered a non-impacted water body.” The Division performed no analysis of the South Platte River. The Division never applied the antidegradation requirements in Regulation 31.8 and its Policy in finding that “the South Platte River is considered a non-impacted water body.” The Division erred in the 401 Certification by determining that the Middle South Platte River Segment 1b was a “non-impacted waterbody.”

H. In addition and importantly, the City of Fort Collins determined that NISP would severely degrade the water quality of the Cache la Poudre River in Fort Collins and downstream. These degradations are detailed in the City of Fort

Collins' 10/4/2018 comments on the Final Environmental Impact Statement, pages 7 – 18¹⁷ titled "Water Quality Related Comments".

For these reasons, water quality concerns with NISP have not been fully addressed or mitigated.

Question 16 asks: *"Does the project protect water resources with exceptional recreational value or ecological importance?"*

In the answer, NISP describes how the stretch of the Poudre River in the canyon is protected. Our comments above describe how the Poudre River through Fort Collins and downstream of Fort Collins, including in Greeley, is further degraded by NISP.

Further, the Poudre River is a very active and important recreational amenity to the City of Fort Collins where thousands of visitor-days/year are counted. The City recently built a Whitewater Park in downtown Fort Collins that will be degraded by NISP's diversion of water reducing the number of days/year that the Park is usable by kayak and floatable for tubing.

Thank you for considering our comments about the false and misleading information in the NISP letter. We strongly believe that the EPA should **NOT** give a loan to NISP. It's the EPA's job to "protect" the environment, not further degrade the environment and our delicate river systems by supporting huge, exorbitant, destructive dam projects.

We are happy to discuss and answer any questions.



Gary Wockner, PhD, Director, Save The Poudre
Gary.wockner@savethepoudre.org
970-218-8310

¹⁷ <https://www.fcgov.com/nispreview/files/nisp-feis-comments-2018-10-4.pdf?1618443216>