

April 22, 2019

#### By email

(aimee.konowal@state.co.us)

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#### (scott.garncarz@state.co.us)

Scott Garncarz
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Colorado Department of Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Re: Submission of Public Comments and Request for Public Hearing on the Northern Integrated Supply Project Draft Section 401 Water Quality Certification.

Dear Ms. Konowal and Mr. Garncarz:

On behalf of the Save the Poudre, a non-profit organization dedicated to the protection of the waters and environment of the Cache La Poudre River, and its individual members including its members who work, reside, and recreate in the vicinity of the above-referenced proposed project, we are respectfully submitting written comments set forth below on the above-captioned application of the Northern Colorado Water Conservation District ("Northern") for a Clean Water Act ("CWA") Section 401, 33 U.S.C. § 1341, water quality certification ("401 Certification") for the proposed Northern Integrated Supply Project ("NISP"). Save the Poudre also hereby requests a public hearing in response to the Public Notice issued by the Colorado Department of Public Health and Environment ("CDPHE"), Water Quality Control Division (the "Division") in the Water Quality Information Bulletin dated March 1, 2019 and documented in the Division's letter to the Army Corps of Engineers ("Corps") the same day. The Division granted Save the Poudre until April 22, 2019 to submit written comments.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Exhibit 1 hereto (Email correspondence between the Division and Save the Poudre dated March 14, 2019 granting extension until April 22, 2019 to submit comments).

Save the Poudre respectfully requests that the Division deny Northern's 401 Certification Application for the proposed NISP pursuant to 5 COLO. CODE REGS. § 1002-82.5(A)(5) ("Regulation 82") because the proposed project, as currently configured, will not comply with applicable state water quality standards and requirements as discussed in detail below.

Save the Poudre also formally requests to be placed on the Division's mailing list to receive notice of actions taken by the Division in response to the 401 Certification Application pursuant to C.R.S. § 25-8-302(1)(e) and receive a written analysis of the Division's basis for certification, if granted, including all actions to prevent, reduce, or mitigate water quality impacts pursuant to 5 COLO. CODE REGS. § 1002-82.5(C)(1). Save the Poudre also requests that the Division extend the public comment period and leave the administrative record open, pending the determination by the U.S. Army Corp of Engineers ("Corps") to further supplement its Final Environmental Impact Statement ("FEIS"), extend its public comment period, and hold a public hearing. Finally, in the event the Division grants a conditional certification containing conditions to prevent, reduce or mitigate water quality impacts identified, Save the Poudre requests that the Division hold a public hearing to allow the Division to develop the mitigation conditions "in concert with commenters to the certification proceeding" pursuant to 5 COLO. CODE REGS. § 1002-82.5(A)(6).

Save the Poudre has previously submitted extensive comments on the Draft, Supplemental Draft, and Final Environmental Impact Statement ("DEIS," "SDEIS," and "FEIS" respectively) for the NISP proposal. These comment letters address existing and potential violations of water quality standards resulting from NISP. Save the Poudre attaches these documents to this comment letter and incorporates all arguments contained therein by reference.<sup>2</sup> The expert reports of Lisa Buchanan (Attachment A) and John Woodling (Attachment E) to Save The Poudre's October 4, 2018 FEIS comment letter address water quality issues and are particularly relevant to Northern's 401 Certification Application.

#### I. LEGAL BACKGROUND

Section 401 of the Clean Water Act states:

"[a]ny applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates...that any such discharge *will comply* with the applicable provisions of the sections 1311, 1312, 1313, 1316, and 1317 of this title...No license or permit shall be granted until the certification required by this section has been obtained or has been waived...No license or permit shall be granted if certification has been denied by the State..."

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<sup>&</sup>lt;sup>2</sup> Exhibit 2 (October 4, 2018 FEIS comment letter); Exhibit 3 (March 12, 2019 Request for Supplemental NEPA Review); and Exhibit 4 (September 3, 3015 Supplemental DEIS comment letter).

Similarly, the term "certification" is defined in the State regulations as, "... that determination by the Division that the Project *will comply* with the Basic Standards and Methodologies for Surface Water, Regulation No. 31 (5 CCR 1002-31), the Basic Standards for Ground Water, Regulation No. 41 (5 CCR 1002-41), surface and ground water classifications and water quality standards, and all other applicable water quality requirements for the affected waters. Such certification is subject to section 25-8-104, C.R.S." Regulation 82.2(5)(emphasis added).

The purpose of Section 401 is to ensure that "applicable water quality requirements will not be violated." 33 U.S.C. §1341(4). Under federal law, the Division has up to one year to issue a decision after receipt of a 401 certification application. *Id.* In this case, the NISP 401 certification application was submitted on January 31, 2019 and the Division has until January 30, 2020 to render its decision on the application.

II. THE PUBLIC COMMENT PERIOD SHOULD BE EXTENDED AND HELD IN ABEYANCE PENDING THE DETERMINATION OF THE CORPS TO FURTHER SUPPLEMENT THE FEIS AND EXTEND THE PUBLIC COMMENT PERIOD AND HOLD A PUBLIC HEARING ON THE CWA § 404 PERMIT APPLICATION FOR THE PROPOSED NISP.

The Corps provided the public with the opportunity to submit written comments on the FEIS for the CWA § 404 permit application for the proposed NISP. Save the Poudre submitted its comments to the Corps on the Draft Environmental Impact Statement, Supplemental Draft Environmental Impact Statement, and Final Environmental Impact Statement.<sup>3</sup>

Since the issuance of the FEIS, Northern announced a significant change in the way NISP would acquire and utilize the water rights upon which the Project is dependent. The FEIS is based on the premise that Northern's acquisition and implementation of water rights would be accomplished via water "trading" in which Northern would trade South Platte River water for cleaner Cache La Poudre River water. However, since the issuance of the FEIS, Northern announced a significant change in its acquisition and implementation of water rights called the "Water Secure" program. Under this new program, Northern, rather than pursuing exchanges with agricultural land owners, would have to purchase outright agricultural land to secure rights to 25,000 acre feet of water from willing sellers in the New Cache La Poudre Irrigating Company and the Larimer and Weld Irrigation Company ditch and reservoir systems in Weld County. It is anticipated that Northern would have to approximately 100 farms and that this would take 10 years to accomplish. This new program could fundamentally change how water from the South Platte and Cache La Poudre Rivers are utilized, thereby rendering useless the entire water quality analysis in the FEIS. In addition, the Water Secure program will significantly increase the cost of the NISP project, thereby requiring a new analysis of other less expensive alternatives through the NEPA process. Because of these fundamental changes

<sup>&</sup>lt;sup>3</sup> See footnote 2 above.

<sup>&</sup>lt;sup>4</sup> Article from the Fort Collins Coloradoan, April 1, 2019 attached hereto as Exhibit 5 and Press Release from Northern attached hereto as Exhibit 6.

in the acquisition and implementation of water rights upon which the NISP FEIS is based, Save the Poudre has requested that the FEIS be re-opened for an analysis of Northern's new water rights scheme. In summary, it would be arbitrary and capricious for the Division to proceed with a 401 certification decision relying on an FEIS water quality analysis that no longer represents how water will be acquired and utilized from the South Platte and Cache La Poudre Rivers. Instead, the Division should either deny the 401 Certification Application or hold the public comment period in abeyance and direct Northern and the Corps to conduct a new NEPA analysis based on the new Water Secure program for acquiring and implementing water rights for NISP.

Save the Poudre will also be asking the Corps to conduct a public hearing on its CWA Section 404 permit. Corps regulations at 33 C.F.R. § 327.4(c) articulate a strong presumption in favor of holding a public hearing and specifically provide that "[i]n case of doubt, a public hearing shall be held." 5 COLO. CODE REGS. § 1002-82.5(C)(4) provides that if the federal permitting agency (in this instance the Corps) determines that a public hearing or other action is needed to supplement the body of information for the application, the Division may delay the issuance of a certification decision until a time not later than sixty (60) days following the close of the administrative record. Save the Poudre respectfully requests that the Division stay issuance of the requested CWA § 401 certification and leave the Division's administrative record open under this provision until the Corps holds a public hearing on the CWA Section 404 permit. A public hearing would most likely "produce information relevant to the certification decision" as provided by Regulation 82.5(C)(4). Moreover, if the Corps grants an extension for additional comments, supplemental information will be received by the Corps which may assist the Division's CWA § 401 certification determination. The Division, therefore, should hold the issuance of the CWA § 401 certification process in abeyance and leave the administrative record open for additional comments until the Corps decides how to proceed on the FEIS supplementation request and public hearing issue.

In addition, Regulation 82 requires that the Division apply its Best Management Practices ("BMP") Policy to 401 certification applications.<sup>7</sup> The Division is process of developing a new BMP policy that will be finalized in the next several weeks.<sup>8</sup> The new policy will include updates to BMPs that could be applied to NISP. The Division should hold the draft 401 certification public comment period in abeyance until the BMP Policy is finalized and the public has the opportunity to comment on the policy and its application to NISP.

# III. IF A CONDITIONAL CERTIFICATION IS GRANTED, THE DIVISION SHOULD HOLD A PUBLIC HEARING TO ALLOW THE PUBLIC TO PARTICIPATE IN THE DEVELOPMENT OF MITIGATION PLANS

Assuming arguendo the Division grants a conditional certification containing conditions as

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<sup>&</sup>lt;sup>6</sup> Exhibit 3 hereto, Save the Poudre's letter dated March 12, 2019 requesting a new NEPA analysis of Water Secure Program.

<sup>&</sup>lt;sup>7</sup> Regulation 82.6(B).

<sup>&</sup>lt;sup>8</sup> Email correspondence between John Barth, attorney for Save the Poudre and Annette Quill, Colorado Attorney General's Office dated March 18, 2019 attached hereto as Exhibit 7.

to various means to prevent, reduce or mitigate water quality impacts identified, Save the Poudre respectfully requests that the Division hold a public hearing to allow the Division to develop the mitigation conditions "in concert with commenters to the certification proceeding" per 5 COLO. CODE REGS. § 1002-82.5(A)(6). Save the Poudre asserts that the 401 certification should be denied because the proposed Project will not comply with applicable water quality standards and requirements even with the development of mitigation plans. However, the Division has indicated in the draft certification that the Division intends to issue a conditional certification with the development of best management practices. There are numerous complex issues and pitfalls associated with developing mitigation plans for the proposed Project particularly in light of the Division's initial determination as set forth in the March 1, 2019 Draft 401 Water Quality Certification, which states that the proposed Project has "[p]otential long-term water quality impacts" and the "potential for significant degradation for one or more segments listed in this notice."

Colorado's 401 Certification Regulation contemplates that mitigation plans be developed with input from the public along with the applicable federal agencies pursuant to 5 COLO. CODE REGS. § 1002-82.5(A)(6). The best method of ensuring public engagement in the development of mitigation plans is to hold a public hearing in Fort Collins to receive comments from the affected and potentially aggrieved persons about the proposed Project and hold work group sessions in which interested members of the public may participate in the development of mitigation plans including clear and enforceable BMPs.

## IV. THE STATE 401 CERTIFICATION REGULATIONS ARE UNCONSTITUTIONALLY VAGUE ON THEIR FACE AND CANNOT BE APPLIED CONSISTENT WITH COMMON NOTIONS OF DUE PROCESS

As discussed below, the applicable State 401 certification regulations are unconstitutionally vague on their face and cannot be applied to this application in a manner consistent with common notions of due process.

Regulation 82.5(A)(1)(a) states,

"[f]or USACE 404 permits and FERC licenses, 'significance determinations' for reviewable waters under section 31.8(3)(c) shall be made with respect to the *net effect* of the new or *increased water quality impacts* of the proposed Project, taking into account *any environmental benefits* within the Project area, including any *water quality improvements*, or *mitigation measures* proposed to be implemented within the Project area." (emphasis added).

The terms "net effect", "increased water quality impacts", "any environmental benefits" "water quality improvements", and "mitigation measures" are not defined in Regulation 82 or the Colorado Water Quality Control Act.

Regulation 82.5(A)(3) also states,

"The Division may condition water quality certification on *adaptive management* to address changes in the Project's predicted impacts and/or future changes in applicable water quality classifications and standards.

Again, the term "adaptive management" is not defined in Regulation 82 or the Colorado Water Quality Control Act.

Because the above-referenced terms are undefined, neither the Colorado Water Quality Control Act ("CWQCA") nor Regulation 82 provide a predictable, repeatable, and objective administrative and/or quasi-judicial test or framework by which the Division, or the Colorado Water Quality Control Commission ("WQCC"), can determine whether a 401 Certification application should be approved without conditions, denied, or approved with conditions. Colorado's 401 Certification process under the CWQCA and Regulation 82 is facially unconstitutionally vague and provides the Division (and WQCC on appeal) with unfettered discretion to approve, deny, or approve with conditions a 401 Certification application. The controlling principle in a constitutional void for vagueness challenge is whether the questioned law:

"either forbids or requires the doing of an act in terms so vague that men of ordinary intelligence must necessarily guess as to its meaning and differ as to its application. Two basic interests underlie this principle. First, the interest in fair notice requires the law to be sufficiently definite to alert the populace to the nature of the proscribed conduct so that they may control their actions accordingly. Second, the interest in even-handed treatment requires that the law provide specific standards for those charged with its enforcement so that arbitrary and discriminatory application will be avoided.

People ex rel. City of Arvada v. Nissen, 650 P.2d 547, 550 (Colo. 1982) (citations omitted).

Both the CWQCA and Regulation 82 fails to provide specific standards so that arbitrary and discriminatory application will be avoided in processing 401 Certification applications. Instead, the CWQCA and Regulation 82 give unfettered discretion to the Division and WQCC.

In light of these facial deficiencies with the CWQCA and Regulation 82, the Division and WQCC may not "apply" these regulations to the NISP 401 Certification Application in a manner that complies with common notions of due process under the law. Thus, Save the Poudre also objects to the application of the CWQCA and Regulation 82, as written, to the NISP 401 Certification Application.

The NISP 401 Certification Application should be denied or held in abeyance until such time that the Commission revises Regulation 82 to provide definitions of the above-referenced terms including specific standards that ensure a predictable, repeatable, and objective administrative and/or quasi-judicial framework for processing 401 Certification applications.

### V. THE DIVISION SHOULD DENY THE CWA § 401 CERTIFICATION REQUEST FOR THE PROPOSED PROJECT.

Northern seeks a Corps permit under section 404 of the CWA, 33 U.S.C. § 1344, for discharges into waters of the United States relating to construction and operation of a water collection, storage, and conveyance system. As presently proposed, NISP would consist of miles of raw water pipelines that will cross jurisdictional waters of the United States, require new and/or modified irrigation intake diversion structures, and require the construction of two new reservoirs.

A CWA 401 certification from the Division is a condition precedent to the issuance of a CWA § 404 permit from the Corps to allow for the discharge into waters of the United States. Applicable state regulations at 5 COLO. CODE REGS. § 1002-82.5(A)(1) require the Division to consider the following criteria in determining whether to issue a CWA § 401 certification for the proposed Project:

- An antidegradation review under Regulation No. 21, COLO. CODE REGS. § 1002-21, section 21.16;
- Compliance with the Basic Standards and Methodologies for Surface Water Regulation No. 31, 5 COLO. CODE REGS. § 1002-31 and the Basic Standards for Ground Water Regulation No. 41, 5 COLO. CODE REGS. § 1002-41;
- Classifications and water quality standards assigned to the affected waters; Applicable effluent limitations or control regulations;
- Best management practices or "BMPs" as set forth in subsection 82.6(B), 5 COLO. CODE REGS. §1002-82.6(B);
- Stormwater discharge provisions;
- Public comments; and,
- Any project-specific conditions.

The Division may grant a CWA § 401 certification if the proposed project complies with all applicable requirements as set forth above. 5 COLO. CODE REGS. § 1002-82.5(A)(2). Alternatively, the Division must deny the application for CWA § 401 certification if the proposed project will not comply with all applicable requirements even with the application of conditions. 5 COLO. CODE REGS. § 1002-82.5(A)(5). Save the Poudre asserts that in light of the Regulation 82.5(A)(1) criteria, the Division should deny the CWA §401 certification of the permit for the proposed Project because NISP as presently configured will not comply with all applicable state water quality requirements even with the addition of conditions. Alternatively, Save the Poudre asserts that Northern's 401 Certification Application and anti-degradation analyses are fatally flawed and cannot be relied upon to serve as the basis for approval of the Application.

Save the Poudre asserts the following reasons as basis for the denial of the CWA § 401 certification request for NISP:

A. The Division Must Deny The CWA § 401 Certification Application Because The Proposed Project Will Not Comply With Colorado's Water Quality Standards for Surface Water Regulation No. 31, 5 COLO. CODE REGS. § 1002-31

State regulations at 5 COLO. CODE REGS. § 1002-31 require the Division to deny CWA § 401

certification application for the proposed Project because it will not comply with Colorado's numeric water quality standards. The Division may not allow discharges that cause non-attainment of a narrative water quality standard as contained in 5 COLO. CODE REGS. § 1002-31 including discharges that "are harmful to the beneficial uses or toxic to humans, animals, plants or aquatic life." 5 COLO. CODE REGS. § 1002-82.6(A)(17)(d).

Northern's 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 DO in the hypolimnion" of the existing and proposed reservoirs.

Save the Poudre retained Lisa Buchanan of LRB Hydrology and Analytics to conduct a critique of Northern's 401 Certification Application and Technical Report. The attached report of Lisa Buchanan 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:

• 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 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.<sup>12</sup>

The WQCD should deny the 401 Certification Application and direct Northern to analyze these potential exceedances on surface water and groundwater standards.

#### B. The 401 Application's Anti-Degradation Analysis is Deficient

Ms. Buchanan's critique of the 401 Certification Application also found significant deficiencies with Northern's anti-degradation analysis. These deficiencies include, but are not limited to:

<sup>&</sup>lt;sup>9</sup> Northern's Technical Report, p. 15.

<sup>&</sup>lt;sup>10</sup> *Id*.

<sup>&</sup>lt;sup>11</sup> *Id*.

<sup>&</sup>lt;sup>12</sup> Exhibit 8 hereto (Buchanan Report) p. 2.

- The 401 Application fails to include focus locations-locations where modeled water quality results are summarized in the 401 Application- in the stretch of river between the PRI 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. The Water Quality Control Division ("WQCD") should deny the 401 Certification Application and direct Northern to use representative hardness data, particularly in Segment 11, for hardness dependent water quality standards, and include additional water quality focus locations in the upper and middle sections of Segment 11 in its anti-degradation analysis. 13
- 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 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.<sup>14</sup>
- 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 reintroduced 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. Prior to approval by WQCD, the 401 Application needs to identify potential contaminant concentrations and anticipated frequency of discharges from the hypolimnion of Glade Reservoir and the impact to Poudre River water quality. 15

For the above-stated reasons, Northern's anti-degradation analysis is technically deficient. The WQCD should deny the 401 Certification Application and direct Northern to address the anti-

<sup>&</sup>lt;sup>13</sup> Exhibit 8 at p. 2.

<sup>&</sup>lt;sup>14</sup> *Id*.

<sup>&</sup>lt;sup>15</sup> *Id*.

degradation deficiencies identified in Ms. Buchanan's report.

### C. The 401 Application Contains Other Significant Technical Omissions and Deficiencies and Cannot Be Relied On To Issue a 401 Certification.

Ms. Buchanan's 401 Certification Application review also identified other significant technical omissions and deficiencies. A summary of these additional technical omissions and deficiencies is provided below:

- 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. Emerging contaminant compounds and concentrations in wastewater discharges from the MWRP and other wastewater plants on the Poudre River need to be evaluated along with potential instream impacts to fish and micro-invertebrate populations. <sup>16</sup>
- 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. Prior to WOCD approval of the 401 Application, Northern needs to identify farms and water volumes that would be exchanged for Galeton irrigation water – since this source of water is an important component of the project - and if sufficient farms are not amenable to exchange, what other source of water will be utilized instead. Northern needs to evaluate how high levels of nutrients and metals in Galeton Reservoir water would impact stream water quality - through both surface water runoff and groundwater discharges from farms - and specify what, if anything, it plans to do to assure farmers on properties amenable to the exchange that Upper Galeton Reservoir water will not impede their ability to reduce non-point nutrient and selenium loading to streams per state requirements in the 10-year Roadmap (2017 to 2027). 17
- The CTP model and therefore water quality modeling in the 401 Application also fails to:

<sup>17</sup> *Id*. at p. 3.

<sup>&</sup>lt;sup>16</sup> *Id*.

- 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.
- o Omit outlier 1983 model output in calculation and comparison of monthly averages. 18
- Additional CTP and water quality modeling needs to be conducted to evaluate potential scenarios of:
  - o Diversions to Glade Reservoir, for instance during fill, without additional demand.
  - o Refined conveyance system flows between Glade Reservoir and the PRI are reduced; for instance prior to the need for the full 40,000 AF additional water supply.<sup>19</sup>

All of these technical omissions and deficiencies need to be addressed before the WQCD can rely on Northern's 401 Certification Application to issue a certification. Accordingly, Save the Poudre requests that the WQCD deny Northern's 401 Certification Application and direct Northern to address these deficiencies.

D. Northern Has Not Proven That The Adverse Impacts Will Be Mitigated To Provide Reasonable Assurance Of Compliance With Water Quality Standards And Requirements.

Northern's 401 Certification Application fails to provide reasonable assurance that the numerous documented violations of water quality standards in the affected watershed segments will be fully mitigated. For example, Ms. Buchanan's review of the 401 Certification Application found:

• The modeling of the water quality impacts of NISP, Alternative 2M, depend entirely on assumptions made in the hydrologic model, the Common Technical Platform (CTP), and the projected water demands of the 15 NISP participants. The modeling of the refined conveyance system represents a best-case scenario as it reflects the full and consistent delivery of 40,000 AF to NISP participants. This presents a significantly more optimistic outcome than is expected in reality as the mitigation will not operate at the same level when participants utilize less water than the maximum, which is the expected case. Specifically, the CTP modeling of the refined conveyance system fails to:

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<sup>&</sup>lt;sup>18</sup> *Id.* at p. 4.

<sup>&</sup>lt;sup>19</sup> Exhibit 8, pp. 12 and 3 respectively.

- Account for the 20- to 30-year or greater period before the full additional demand of 40,000 AF is required by NISP Participants in even some years.
- Account for approximately one-fourth of the total demand that would not be delivered via the North Tier Pipeline or through the Poudre River Intake.
- o Adequately evaluate the daily, seasonal, and annual variation in water demand and therefore the expected variability in water deliveries to NISP Participants.
- An independent demand study also indicates that NISP participant additional demands may not reach 40,000 AF by 2060.<sup>20</sup>
- The 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 NISP – as yet to be determined.
  - Evaluate water quality impacts between the Poudre River Intake and Boxelder Creek several miles of the Poudre River that will not benefit from the refined conveyance system flows and reduce streamflow upstream of the MWRP.
  - Account for climate change impacts that likely will reduce annual flow and/or alter the monthly distribution of streamflow – altering historical daily flow patterns on which daily disaggregation of monthly flows and water quality models depend.
  - o Omit outlier 1983 model output in calculation and comparison of monthly averages. <sup>21</sup>

Further, the 401 Certification Application relies on an outdated Fish and Wildlife Mitigation and Enhancement Plan (FWMEP). More specifically, the 401 Water Quality Certification Technical Report (Technical Report) is reliant on the FWMEP, approved by the Colorado Wildlife Commission on September 7, 2017 and adopted by the Colorado Water Conservation Board on September 20, 2017. See Technical Report at 21, 33, and Appendix B. The FWMEP was prepared and adopted prior to the publication of the Final EIS and is based on project proposal that incorporated a Colorado-Big Thompson Project (C-BT) exchange to provide 10,000 acre-feet of water to some NISP participants. For example, the FWMEP states:

<u>Conveyance to the Participants will be made from Glade Reservoir via a Colorado-Big Thompson Project (C-BT) exchange</u>, Poudre River intake, and pipelines.

FWMEP at 5 (emphasis added).

<sup>21</sup> *Id.* at p. 4.

<sup>&</sup>lt;sup>20</sup> *Id.* at p. 3.

#### The FWMEP also states:

Due to locations of their existing and projected future demands and water supply infrastructure, some Participants require delivery of NISP yield from C-BT facilities to effectuate deliveries to their water supply systems. A C-BT exchange volume of 10,000 acrefeet per year would allow delivery for these participants, and would also fall within a volume that could be reliably delivered from C-BT facilities. The C-BT exchange would work by delivering up to 10,000 acre-feet per year of C-BT deliveries that are currently made to the Poudre River from Glade Reservoir instead. In exchange, the NISP exchange participants would be delivered 10,000 acre-feet of water from C-BT facilities. This exchange would require a conveyance contract and special use permit from the Bureau of Reclamation for this operation.

#### FWMEP at 8 (emphasis added).

The C-BT exchange was eliminated from the preferred alternative in the FEIS and is not considered in the proposal being considered in this certification process. The FEIS states:

Water quality analyses completed for the FEIS (Hydros 2018h; 2018i) indicated that Alternative 2M without C-BT exchanges had less effect on water quality and aquatic habitat in the Poudre River and in Horsetooth Reservoir than the Reclamation Action Option. <u>Based on the FEIS water quality analyses, the Corps eliminated the Reclamation Action Option, including the use of the Glade-to-Horsetooth Pipeline, in Alternative 2.</u> In Alternative 2, water would be conveyed to the Participants through the Carter Pipeline discussed in Section 2.7.5.2. Any further pursuit of a Reclamation contract for storage or conveyance of NISP water would require separate environmental compliance and federal agency approval.

#### FEIS 2-32 (emphasis added). Further, the FEIS also states:

The Reclamation Option and Glade Reservoir to Horsetooth Reservoir pipeline option were eliminated from Alternative 2M. Horsetooth Reservoir and <u>any exchanges with CBT water</u> are no longer in the Applicant's Preferred Alternative.

#### FEIS A-174 (emphasis added). The Technical Report admits that:

Operations of both Horsetooth Reservoir and Carter Lake would be not be modified under NISP operations, as the proposal for a C-BT exchange for delivery of NISP water to some NISP participants is not being carried forward at this time as part of the Proposed Action.

#### Technical Report at 62 (emphasis added).

The 401 Certification Application must not base its consideration of mitigation of the numerous and significant impact of NISP on the already outdated FWMEP that is based on the 10,000 acre-foot exchange that is no longer an element of the project proposal. Before considering certification for this project, the Division must critically evaluate the mitigation and enhancement measures proposed in the FWMEP, determine their efficacy, relevance, and appropriateness in light of this significant change to the project, and must independently determine to what extent, if any, the FWMEP mitigates the impacts of NISP. The WQCD should deny the 401 Certification Application

and direct Northern to address the above referenced deficiencies.

## E. Northern Water Has Not Proven That Water Quality Degradation Is Necessary To Accommodate Important Economic Or Social Development In The Area In Which The Waters Are Located.

In the draft application, Northern asserts that even if the Division finds that the Proposed Action will cause a net harm to the environment, the Division should grant a 401 certification:

Operation of the Proposed Action is likely to result in some water quality degradation not all of which is directly amenable to mitigation. The significant determination by the WQCD will reach a conclusion about the net effect of mitigation and enhancement measures on the environment. Should the WQCD conclude that these measures are not sufficient to yield net environmental benefit, it is Northern Water's view that "the degradation is necessary to accommodate important economic or social development in the area in which the waters are located."

Technical Report at 165 (emphasis added).

Although Northern does not specifically reference the regulation, this assertion appears to be based on the WQCC regulations which state:

An intermediate level of water quality protection applies to waters that have not been designated outstanding waters or use-protected waters. These waters shall be maintained and protected at their existing quality unless it is determined that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

5 CCR 1002-31.8(1)(b) (emphasis added).

Appropriately, the Division has requested public comment on both the economic or social development importance of the Proposed Action and the availability of alternatives that would result in the same or less degradation of state waters. Draft Conditional Certification at 2. STP and others have, throughout the Federal review of NISP, provided a preponderance of evidence that:

- NISP is not important for economic or social development because the water that it would drain from the Poudre River is not needed by the Northern Colorado communities that it is purportedly designed to serve; and,
- A variety of economically, environmentally, and technologically reasonable alternatives are available to provide these communities with the water that they may need in the future.

In short, the justification for NISP is fatally flawed and much of the water it proposes to supply is simply not needed. Further, even if the Division were to find that water that NISP proposes to supply were important for economic or social development, there are alternatives to the Proposed

Action that would result in less degradation of state waters. As the Proposed Action clearly fails to meet the simple standards of 5 CCR 1002-31.8, the Division must not provide a certification that allows for degradation of state waters.

STP herein attaches the NISP SDEIS and FEIS comment letters and attachments that address these points for the Division's review.<sup>24</sup> The documents highlighted below speak most directly to the Division's questions but are supported by the whole of our submission here.

#### LRB Demand Analysis

An expert analysis conducted by LRB Hydrology & Analytics ("LRB Demand Analysis," attached here as Attachment A of the Conservation Organizations' NISP FEIS comments, October 4, 2018), demonstrates that the water use intensity—i.e., the rate that water is used by each person within the service area—has steadily declined since 2000. See LRB Demand Analysis at Fig. 3. Despite this clear downward trend in water use intensity, the NISP FEIS projects future water use demands based on an average of past intensity, incorporating only currently planned conservation activities as a downward pressure on water use. See id. 11-13. Indeed, the NISP SDEIS's projections based on average historic water use intensity have proven to be substantially higher than the actual use for the periods for which data for comparison is available (2010 and 2015). See id. at Fig. 5. Further, the projections presented in the FEIS easily outstrip a simple linear extension of the recent water use record, ignoring the long-running downward trend in water use intensity. See id. at Fig. 5. In sum, the FEIS projections of future water demand fail to accurately reflect the changing nature of water use in the service area and Colorado in general, and substantially overstate the amount of water that the participants will need to meet their needs over the planning period.

#### Healthy Rivers Alternative

A large coalition of citizen and nonprofit groups prepared and submitted to the US Army Corps of Engineers the Healthy Rivers Alternative ("HRA," attached hereto and Exhibit 9, Appendix B07 of the Save the Poudre's NISP SDEIS comments, September 2015). The HRA is an economically, environmentally, and technologically reasonable portfolio of actions relying on conservation and more efficient use of existing water supplies that would provide water supply security to the NISP communities with less degradation of state waters, less expense to the communities, and less impact on ranches and farms in the region. After the Corps failed to adopt HRA as their preferred alternative, STP and others provided further support of its effectiveness in their comments on the NISP FEIS (Exhibit 2, comments on NISP FEIS at 15 – 16).

#### A Better Future for the Poudre River

Western Resource Advocates prepared a similar document outlining a portfolio of alternative actions to providing for the water supply security of the NISP communities, "A Better Future for the Poudre River" ("Better Future," attached here as Exhibit 10, Appendix E51 of the STP's NISP SDEIS comments, September 2015). Like HRA, Better Future provides a reasonable option to NISP that would result in less expense, less degradation of state waters, and less impact on agricultural communities. The Corps' failure to adequately consider HRA and Better Future is one of the most

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<sup>&</sup>lt;sup>24</sup> See footnote 2 above.

significant flaws of the NISP NEPA analysis process, as outlined in the STP and Conservation Organization comments on the NISP SDEIS and FEIS.

#### No Action Alternative

The Corps' NEPA analysis has contemplated a No Action Alternative that would lead to less degradation than the Proposed Action. Although STP asserts that the FEIS version of this alternative is not an appropriate "no action alternative" under NEPA, *see* Exhibit 2, at pp. 8 – 11, the consideration of the outlined alternative does demonstrate that there is a viable option that would not require NISP and its associated degradation of state waters. Throughout the review process, Northern and the Corps' have alleged that the No Action Alternative is less preferable than the Proposed Action due to its impacts on the local agricultural community; the recent purchase of agricultural land to supply water for NISP demonstrates that the Proposed Action itself will have similar if not worse impacts on ranchers and farmers.

Northern has urged the Division to ignore the significant degradation of state waters that will result from construction and operation of NISP because, it alleges, the Proposed Action "is necessary to accommodate important economic or social development in the area in which the waters are located." In reality, NISP is not needed, either for the present or future development of the Northern Colorado communities that it proposes to serve. Throughout its long permitting history, inflated claims have been made about the future water demand of the region and, although the more recent analyses have lowered the demand, it still overstates the true need. The water supply security of the NISP communities can be safely met through a combination of conservation, transfer, and other techniques that will result in no degradation of state waters. The Division must not grant a 401 certification for this significantly impactful project under the guise of "necessity" when no such need exists.

#### IV. CONCLUSION

In conclusion, pursuant to Regulation 82.5(C)(4), Save the Poudre respectfully requests that the Division extend the public comment period, hold the public record open, and delay issuing its certification decision pending the Corps' FEIS supplementation, issuance of the Record of Decision, public hearing, and closure of the administrative record on the CWA § 404 permit. If a conditional certification is granted, then the Save the Poudre requests that the Division provide for a public hearing on the proposed mitigation plan. Finally, Save the Poudre respectfully requests that the Division deny the CWA § 401 certification for the proposed Project because NISP will not comply with Colorado's Antidegradation Rule, will not comply with Colorado's Water Quality Standards, 5 COLO. CODE REGS. § 1002-31, and would cause or contribute to violations of Water Quality Standards at 5 COLO. CODE REGS. § 1002-32.

Pursuant to Regulation 82.5(C)(1), Save the Poudre requests that the Division provide to its written analysis of its basis for certification, including identification of the stream segments affected, the potential water quality impacts identified as a result of the Project, and the results of any actions under subsection 82.5(A)(6) to prevent, reduce or mitigate water quality impacts associated with the exercise of water rights.

Thank you for your consideration of Save the Poudre's comments. Please contact me if you have any questions regarding these comments or if we may be of assistance.

Respectfully submitted,

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