



September 1, 2017

Colorado Parks and Wildlife Commission
Via email: dnr_cpwcommission@state.co.us

Dear Commissioners:

On behalf of Colorado Trout Unlimited and the Rocky Mountain Flycasters Chapter of Trout Unlimited ("TU"), we appreciate this opportunity to comment on the Final Draft Fish and Wildlife Mitigation and Enhancement Plans for the Northern Integrated Supply Project ("NISP"). TU is a non-profit conservation organization with approximately 150,000 members nationwide, 10,000 in Colorado, and more than 800 in the Rocky Mountain Flycasters chapter spanning Larimer and Weld Counties. These counties encompass the entire watershed of the Cache la Poudre River ("Poudre"). For more than three decades, TU members have been advocates for and on-the-ground volunteers committed to conserving, protecting, restoring and sustaining the Poudre and its watershed.

The state mitigation review process focuses specifically on a project's impacts to fish and wildlife and how they may be mitigated, and does not evaluate the need for a project nor require consideration of alternatives. Therefore, our statements of both support and concern with elements of this plan should not be construed as support or opposition of NISP itself; those issues will instead be addressed in the federal Clean Water Act permitting process. Limited time and resources do not allow us to complete independent technical review of all issues, and so we are relying on the expertise and professional judgment of Colorado Parks and Wildlife (CPW) staff. As permitting moves forward and further analysis is completed and disclosed on NISP-related issues (water quality, flushing flows, etc.), we may offer further comments and recommendations on mitigation through subsequent processes for federal permitting and state water quality 401 certification.

TU's mission is to conserve, protect, and restore coldwater fisheries and their watersheds. In line with that mission, our comments focus on the aquatic and riparian habitat on the Poudre from the planned point of diversion at the Poudre Valley Canal to the proposed Poudre River Intake and Pipeline in Fort Collins. By omission we are not suggesting that other elements of the Mitigation Plan are unimportant, only that they fall beyond our organizational scope.

Proposed conveyance refinement benefits Poudre base flows. We appreciate the Northern Colorado Water Conservancy District ("Northern") commitment to help improve the Poudre's base flow through Fort Collins by modifying its conveyance system to direct a portion of NISP deliveries through the river itself. The conveyance plan offers a good opportunity to improve low-flow habitat on this reach from current conditions.

Adaptive management program is a promising way to address uncertain or variable impacts, and should be not be sunset after 20 years. While some impacts can be predicted with good accuracy, others are more uncertain. Just as important, the effectiveness of different mitigation efforts may be uncertain as well. We therefore appreciate the inclusion of an adaptive

Trout Unlimited: America's Leading Coldwater Fisheries Conservation Organization
Colorado Office: 1536 Wynkoop St, Suite 320, Denver, CO 80202
PHONE: (303) 440-2937 EMAIL: dnickum@tu.org

management program in the Mitigation and Enhancement Plans. Similar collaboration through the west slope “Learning by Doing” partnership is already showing promising results, and we support bringing a similar collaborative approach to the Poudre. We were pleased to see ramping rates and flushing flows noted as elements of this program, given the likely need to evaluate and possibly adapt efforts to achieve their intended aims as efficiently and effectively as possible.

Having key stakeholder participation in adaptive management will be essential. We appreciate Northern indicating that it will involve environmental conservation organizations, county governments, and municipalities along the Poudre in the adaptive management program, in addition to CPW and Northern itself.

We also appreciate the clarification that baseline assessment work will be developed through the collaborative Adaptive Management committee. Launching the partnership effort from the very start will help get the adaptive management program off to a positive start.

We remain concerned, however, that the adaptive management program is planned to sunset rather than continue throughout the lifetime of the NISP project. The draft final plan has been amended to push the 20-year timeline out several years by starting the clock on that commitment at full build-out operations for NISP, but we continue to believe the adaptive management program should continue indefinitely, to deal with the ongoing impacts and issues surrounding project operations. While the \$5 million pledged by Northern for habitat improvement through this program will presumably be exhausted by that time, there may be continuing collaborative opportunities as well as operational considerations based on new information and changing river conditions – for example, with the flushing flow program. The cycle of monitoring, learning, and adjusting activity should be an ongoing part of the NISP project rather than terminating 20 years after build-out.

Modernizing diversion structures should improve Poudre conditions by enhancing connectivity. We support the proposal to modernize the Poudre Valley Canal diversion (and other facilities), and were pleased to see the project description adjusted to also address fish entrainment as a target benefit for this effort in addition to fish passage and sediment transport. We also commend the inclusion of the U.S. Fish and Wildlife Service fish passage program as a possible peer-review partner in helping to evaluate designs. TU is also mentioned as a peer-review partner in the draft final plan. While we are happy to assist with these projects where we can – engaging as stakeholders, providing volunteer manpower where needed, assisting in fundraising of matching dollars – we lack the in-house technical expertise to serve as appropriate peer-reviewers on the designs themselves.

Addition of ramping rates reduces risks to fish, but requires refinement. We were pleased to see ramping rates added to the draft final plan – limiting the speed with which flows will be changed on the river – as unconstrained changes could create significant impacts on aquatic life by denying them time to adjust to changing river levels and instead leaving fish stranded as water levels rapidly recede. The proposed ramping rate is 500 cfs over 24 hours. The implications of this will vary based on total flow: dropping 500 cfs from a river flowing at 700 cfs is significantly different than doing so on a river flowing at 3000 cfs. It is thus common for ramping rates to be staged at different rates across different flow levels. Our understanding is that the 500 cfs rate would be applied at peak flow periods in conjunction with the flushing flow bypass program. That may be protective, though we note that it would be beneficial to make a 500 cfs change in multiple increments – spreading that change out over the 24 hour period rather than simply dropping the 500 cfs instantaneously. We also recommend that ramping rates at lower flow

conditions be evaluated and established in a manner that protects fish and wildlife resources while being operationally practicable. Whether for higher or lower flow conditions, ramping rates and their effectiveness should be monitored and potentially adjusted through the adaptive management program.

Decision tree for flushing flow program represents a significant improvement, but likely will need adaptation over time. We appreciate the work by CPW staff and Northern Water to develop a decision-tree approach along the lines we previously recommended, which provides for recurring flushing flows at varying levels and frequencies depending on conditions. Importantly, the proposed program would provide for some level of flushing (albeit a lower flow and shorter duration) every three years, even in an extended period of lower storage and snowpack. Based on conversation with CPW staff, our understanding is that the various flows proposed achieve different functions on different reaches – for example, the 2200 cfs flow target would mobilize large, coarse gravel, important in maintaining spawning habitat and clean substrate for insect life. The 2800 cfs flow target would serve similar purpose and also result in some overbank flows. The 1600 cfs target would mobilize coarse gravels in some portions of the river while mobilizing smaller materials more broadly. We respect the expertise of CPW’s staff in developing these recommendations with Northern, but note that there is significant uncertainty about the effectiveness of the proposed flows over time. Furthermore, changes to the river channel and habitat – through investment of the funding under the adaptive management plan – may change the flow levels needed to achieve specific functions in the future. It may be possible to, with similar volumes of water, achieve more benefit with a lower flushing flow of longer duration – or conversely, it may be desirable to increase the peak flow volume even if at a shorter duration. In light of both scientific uncertainty and anticipated future changes in the river and its channel, we recommend that flushing flows be incorporated into the adaptive management program so that future adjustments can be made to achieve the most effective mitigation/enhancement.

Question of whether flushing flows count against Glade “fill” must be resolved. Several limitations on Northern’s flow commitments are included in the plan. Some (such as downstream conveyance releases being contingent on having a downstream demand to which that water can be delivered) are straightforward. However, we are deeply concerned by a limitation whereby Northern’s bypass commitments (e.g., for flushing flows) would not be required if such bypassed flows would count against Glade Reservoir’s fill – in other words, if by allowing water to which they would otherwise be entitled to bypass their diversion, Northern reduced their legal ability to fill Glade by that volume of water. We certainly understand the reasoning that would lead Northern to seek this exception – being asked to forego water completely as opposed to changing the timing of diversions would have dramatically different impacts on NISP and its yield. However, if bypasses will count against Glade’s fill, this provision would render the flushing flow program almost completely inoperable – outside perhaps of free river conditions on the Poudre (flows high enough where there is no water right call on the river). To understand and evaluate the proposed flushing flow program, the Commission must know whether this is or is not a fatal flaw. We would ask that Northern and CPW engage the Division of Water Resources and get a documented answer to the question of whether a legal means can be applied to allow for these bypasses without counting the bypassed water against Glade’s fill. This is a threshold question and should be answered prior to final decision being made on the plan. If such an answer cannot be obtained by the September 7 hearing, we urge Northern to grant a further extension for the plan’s consideration so that the Commission is not forced to make a decision on a flushing flow plan that may be inoperable.

In summary, we are pleased with the significant mitigation and enhancement measures that have been proposed and applaud the hard work by CPW staff and Northern in bringing the plan this far. We particularly appreciate the low flow benefits of the conveyance refinement proposal, the multiple ecological values of modernizing cross-channel diversion structures, the commitment to adaptive management (including significant funding for stream habitat improvement), as well as the more recent addition of a multi-tiered flushing flow proposal. We continue to believe, however, that the adaptive management program should remain in place throughout NISP's operating lifetime, that proposed ramping rates need further refinement, and that unanswered questions on the flushing flow program must be resolved to enable the Commission to make an informed final decision on this plan. Thank you for your consideration.

Sincerely,

David Nickum
Executive Director
Colorado Trout Unlimited

Coy Wylie
President
Rocky Mountain Flycasters Chapter