The City of Thornton (“Thornton”) has offered to the Colorado Water Conservation Board a donation of a contractual interest in water to be used in the plan for augmentation to augment stream flows on the Cache la Poudre River (“Poudre Flows Plan”). Because this is one of the first offers of water to be used in the Poudre Flows Plan, the water rights offered by Thornton are referred to as “Seed Water Rights.” The water would be used to support the Poudre Flows Plan in the reach of river shown in Exhibit T1 as the “Thornton Seed Water Reach.” Both the Poudre Flows Plan and the use of the Thornton Seed Water Rights in the plan are subject to the requirements of the new stream flow augmentation statute, section 37-92-102(4.5) C.R.S.

Staff Recommendation

- Conclude that use of the water under the proposed Thornton seed water rights acquisition is appropriate to preserve and improve the natural environment of the Cache la Poudre River to a reasonable degree up to the flow rates recommended by Colorado Parks and Wildlife set forth in Table 1 herein, and would be best utilized by protecting the water through the specified segments of the Subject Reach, consistent with the terms and conditions in the underlying decrees, and consistent with terms and conditions in the ultimate augmentation plan decree;
- Accept the interests in water and authorize the CWCB Director to execute the seed water “Water Delivery Agreement” in a form substantially similar to the drafts attached to the board memos; and
- Direct Staff to work with the Attorney General’s Office and the Co-Applicants to include this seed water right in the water court application for “approval of a plan for augmentation to augment stream flows” in accordance with 37-92-102(4.5), the new statute governing the CWCB’s water court applications for plans for augmentation to augment stream flows.
Background
Thornton was one of the initial participants in the “Poudre Runs Through It” group and its FLOWS Committee, and has been an important partner in the Poudre Flows Plan effort for several years, since at least 2014. Thornton is a key partner and signatory to the Phase II MOA (Exhibit PF5 attached to the November 2020 board memo #23). Thornton has offered to CWCB a contractual interest in certain water rights to be used in the Poudre Flows Plan within the Thornton Seed Water Reach. The Thornton Seed Water Reach extends through the entire Poudre Flows augmented reach, a stream distance of approximately 55 miles. The offer letter, draft Water Delivery Agreement, and seed water letter report are attached as Exhibits T2, T3, and T4 to the November 2020 board memo #23.c.

The Board’s Water Acquisition Procedures
Rule 6 of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program (“ISF Rules”) sets forth the Board’s procedures for acquisition of water, water rights, or interests in water for instream flow purposes. Section 37-92-102(3), C.R.S. provides 120 days for the Board to determine any terms and conditions it will accept for the Water Delivery Agreement for water, water rights, or interests in water to preserve or improve the natural environment. ISF Rule 6 requires a minimum of two Board meetings to allow for public input prior to the Board taking final action on a proposed acquisition. Therefore, the Board’s initial consideration of Thornton’s offer at the November 2020 Board meeting initiated the 120-day time period for the Board to consider the proposal. Final action on the proposal can occur at this January 2021 Board meeting. ISF Rule 6m(4) provides that any person may request the Board to hold a hearing on the proposed acquisition, and that such a request must be filed within twenty days of this Board meeting. No such request was filed.

ISF Rules 6.e and 6.f require the Board to evaluate the appropriateness of an acquisition and determine how best to utilize the acquired water rights to preserve or improve the natural environment. The ISF Rules list several factors the Board may consider in its evaluation of acquisitions, which are addressed in this memo.

Pursuant to statute, Staff has requested recommendations from Colorado Parks and Wildlife (“CPW”), the U.S. Department of Agriculture, and the U.S. Department of Interior. Pursuant to ISF Rule 6m(1), Staff has provided notice of the proposed Poudre Plan and the proposed acquisition of an interest in the Seed Water Rights to all persons included on the appropriate ISF Subscription Mailing Lists and provided notice to the State Engineer’s Substitute Supply Plan Notification List. Staff has requested a biological analysis from CPW pursuant to Rule 6f(2). CPW will address the Board regarding this acquisition at the Board meeting. CPW’s written recommendation for this proposed acquisition is attached as Exhibit T5 to the November 2020 board memo #23.c.

Water Proposed for Acquisition
Thornton has offered to CWCB use of its previously changed and quantified water rights for use in the Poudre Flows Plan (“Subject Water Rights”). The Subject Water Rights are represented by some of Thornton’s water rights changed in Consolidated Cases No.
86CW401, 86CW402, 86CW403, and 87CW332 ("TNP Decree"). The specific water rights are shares in the Water Supply and Storage Company (WSSC Water Rights) and Jackson Ditch Company (JDC Water Rights) which were changed and quantified in the TNP Decree. All of the Subject Water Rights have been changed to municipal and augmentation use, but not all of the water rights have been converted from the original irrigation use to the new uses under the decrees. Once the water rights are converted under the decrees, then average annual deliveries to various locations of the Poudre River potentially available for the Poudre ISF Augmentation Plan total 2,268 acre-feet at rates up to 9.52 cfs, as further described in Thornton’s Seed Water Letter Report, attached as Exhibit T4 to the November 2020 board memo #23.c.

Existing Instream Flow Water Rights
CWCB does not currently hold any instream flow water rights in the Thornton Seed Water Reach of the Cache la Poudre River, or downstream of the Thornton Seed Water Reach on the South Platte River. CWCB’s appropriated instream flow water rights upstream of Thornton Seed Water Reach on the Cache la Poudre River will be unaffected by this plan.

Existing Natural Environment
The Thornton Seed Water Reach extends through the entire augmentation reach. The reach supports both native and non-native fish species, as well as macroinvertebrate and riparian communities. The Poudre River has undergone significant changes with a number of major agricultural, municipal, and industrial diversions representing a major anthropogenic change to the watershed. The Cache la Poudre is still a snowmelt-driven system, but water developments have significantly altered the natural flow regime resulting in severely depleted flow regime with multiple points of dry up. River flows fluctuate naturally on a diurnal and seasonal pattern, and are influenced by transbasin inflows, upstream reservoir operations, river diversions, and return flows from various uses. CPW describes the natural environment with more detail in its CPW Flow Quantification Report, (Exhibit PF3 to agenda item 23 memo).

The upper reaches of the Cache la Poudre River as it emerges from Poudre Canyon are typical cold water trout habitat supporting both rainbow and brown trout populations. As the river flows eastward through Fort Collins, the fishery transitions from one that is dominated by cold-water species to a more diverse cold water/cool water/warm water fishery. The transition zone provides important habitat for cold-water species seasonally coming down from the canyon, as well as plains species that move up from the low gradient plains zone. The Poudre River transition zone provides aquatic habitat conditions that support an array of species, including important native species with varying temperature and habitat preferences that can be unique to transition zones. This assemblage includes native minnow, sucker, and darter species, as well as the plains topminnow (Tier 1 Species of Greatest Conservation Need, CPW State Wildlife Action Plan (2015)). East of I-25, the fishery is mainly warm-water and is dominated by species in the darter, minnow, and sucker families.
Proposed Method of Acquisition

Under this proposal, the CWCB would acquire a contractual interest in Thornton’s direct flow water rights as shares in the WSSC system and the JDC Ditch. Each of the water rights have been changed and quantified in water court, are decreed for augmentation use, and are subject to volumetric limits. Thornton’s seed water right letter report describes each water right and the relevant quantification decree terms and conditions. See Exhibit T4 attached to the November 2020 board memo #23.c. A draft Water Delivery Agreement between Thornton and CWCB is attached as Exhibit T3 to the November 2020 board memo #23.c. Once the Board approves the proposed acquisition, the CWCB Director would sign the agreement and this interest in the water rights would be included in the water court application to be filed for the Poudre Flows Plan. The draft water court application is attached to the agenda item 23 memo as Exhibit PF6.

Under the Water Delivery Agreement, Thornton would deliver water for exclusive use by the CWCB to be used in the Poudre Flows Plan. A process would be put in place by the Poudre Flows Management Committee to notify the Division of Water Resources, CWCB, and the other Poudre Flows Partners that such deliveries are being made. The CWCB shall request administration to protect the delivered acquired water through the Thornton Seed Water Reach from diversion or exchange by other water users, in accordance with the terms and condition of the Poudre Flows Plan decree.

Proposed Use of the Acquired Water Rights

The CWCB would use the acquired water to preserve and improve the natural environment in the Cache la Poudre River to a reasonable degree by the delivery of water by Thornton at upstream locations to augment stream flows pursuant to the Poudre Flows Plan decree. Thornton proposes to make its WSSC and JDC Water Rights available to the Poudre Flows Plan by providing changed water rights decreed in Case No. 87CW332 to the upstream reaches of the Poudre River to meet downstream return flow obligations and decree stipulations. Some of Thornton’s Water Rights can be delivered to the Poudre River upstream of the Poudre Flows Plan reach’s upper terminus from locations such as Chambers Lake and Long Draw Reservoir to be protected from the upper terminus down to the confluence of the Poudre River with the South Platte River. The water will remain in the river from the points of delivery where it will preserve and improve the natural environment in the Thornton Seed Water Reach pursuant to the decreed Poudre Flows Plan.

The CWCB would request administration of the delivered water when necessary to help maintain stream flows in the Cache la Poudre River Segments A, B, C, D, E, and F, as these segments are described in the agenda item 23 memo. CWCB would protect water provided by Thornton at flow rates up to the CPW flow quantification recommendations rates as shown in Table 1 below.
Table 1. CPW Flow Quantification Seasonal Recommendations

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Up to 80</td>
<td>80 - 150</td>
<td>Up to 114</td>
<td>114 - 260</td>
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<td>B</td>
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<td>E</td>
<td>Up to 15</td>
<td>15 - 30</td>
<td>Up to 15</td>
<td>15 - 30</td>
</tr>
<tr>
<td>F</td>
<td>Up to 15</td>
<td>15 - 30</td>
<td>Up to 15</td>
<td>15 - 30</td>
</tr>
</tbody>
</table>

Historical Use and Historical Return Flows

As required by section 37-92-102(4.5), the augmentation water rights offered by Thornton have already been changed and quantified in water court. The change decrees quantified historical uses and set return flow obligations. The terms and conditions of the change case decrees will continue to apply to the use of these water rights in the Poudre Flows Plan.

Potential Benefits of this Proposed Acquisition

In addition to the numerous benefits of the Poudre Flows Plan described in the agenda item 18 memo, the Board’s acquisition and use of a contractual interest in the Subject Water Rights in the Poudre Flows Plan will contribute toward improving habitat connectivity in the over-appropriated Cache la Poudre River without injury to other water rights.

Location of Other Water Rights

There are many other water rights located on the Cache la Poudre River; however, they should not be affected by the protection of this previously quantified augmentation water to be delivered to and through the Thornton Seed Water Reach.

Potential Injury to Existing Rights

Any terms and conditions necessary to prevent injury to other water rights will be developed during the water court process for the Poudre Flows Plan, which will include consideration of these particular water rights to be used in the court-approved plan for augmentation. The CWCB, along with its co-applicants in the water court process will adhere to the specific statutory directions for the water rights to be used in the Poudre Flows Plan.

Stacking Evaluation

When water is available under the Water Delivery Agreement for use in the Poudre Flows Plan, the CWCB will be able to use the Subject Water Rights in addition to any other acquired water rights or interests in water available to the CWCB for augmentation of stream flows or other instream flow use, including any protected mitigation releases made pursuant to section 37-92-102(8), in this reach of the Cache la Poudre River up to the flow rates to meet the CPW flow recommendations to preserve and improve the natural environment, as approved by the Board.
Administrability

The Poudre Flows Partners have been, and will continue, coordinating with the State and Division Engineers regarding the administrability of the Poudre Flows Plan, for which this particular acquisition is an important component. Staff and the Poudre Flows Partners will continue conversation with the State and Division Engineers about using these specific water rights in the Poudre Flows Plan.

Maximum Utilization of the Waters of the State and Availability of the Delivered Water for Subsequent Use Downstream

This proposal will promote maximum utilization of the waters of the state because the augmentation water will not only be used in the Poudre Flows Plan to augment stream flows in the Cache la Poudre River, but also may be used for downstream beneficial purposes. Downstream of the Thornton Seed Water Reach, Thornton plans to leave some portion of this water in the river for reuse to meet return flow obligations or other stream obligations.

Effect of Proposed Acquisition on Any Relevant Interstate Compact Issue

The proposed acquisition should not negatively affect any interstate compact. The water rights will be used to augment stream flows and also be used for other beneficial uses downstream of the lower terminus of the Thornton Seed Water Reach. Historical return flows of the water rights will continue to be maintained. Additionally, the subject water rights and uses for the Poudre Flows Plan are located in Water District 3 and the South Platte River Compact primarily affects District 64 on the lower end of the South Platte River. Based upon the foregoing, it does not appear that this acquisition will raise any compact issues.

Costs to Complete the Transaction, and Other Associated Costs

There are various costs associated with completing this proposed acquisition, but no direct expenditures to purchase or lease an interest in these Seed Water Rights because Thornton will donate the interest in water to the CWCB. Financial contributions by Thornton and the other municipal Poudre Flows Partners along with Northern Water, and fundraising efforts by the Colorado Water Trust are significant and are expected to be sufficient to pay for CWT project support through the water court application process, and to pay for SWE’s engineering work. The CWCB’s indirect costs include Staff and Attorney General’s Office time dedicated to participation as a co-applicant in the water court proceeding, and participation in a management committee that will coordinate planning, recording, reporting, and guidance on day-to-day operations. The costs of physical modifications of any existing diversion structures on the stream, installation and maintenance of any additional stream gages, and any additional consultant work will be the responsibility of the Poudre Flows Partners, subject to agreement by the partners.

Exhibit

Exhibit T1: Seed Water Location Map
Note: Seed water reaches represent the reach between the uppermost point of introduction and lowermost point of withdrawal/use (not including potential leases of water further downstream).

Augmented Segments and Preserve/Improve Flow Rates (cfs)

<table>
<thead>
<tr>
<th>Segment</th>
<th>Description</th>
<th>Winter (Nov 1 - Mar 31)</th>
<th>Summer (Apr 1 - Oct 31)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Canyon Gage to Larimer and Weld Canal Diversion</td>
<td>Up to 80</td>
<td>80 - 150</td>
</tr>
<tr>
<td></td>
<td>Larimer and Weld Canal Diversion to Spring Creek Confluence</td>
<td>Up to 80</td>
<td>80 - 150</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Spring Creek Confluence to New Cache la Poudre Ditch Diversion</td>
<td>Up to 30</td>
<td>30 - 54</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>New Cache la Poudre Ditch Diversion to County Road 17 Crossing</td>
<td>Up to 10</td>
<td>10 - 40</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>County Road 17 Crossing to 59th Avenue Bridge</td>
<td>Up to 15</td>
<td>15 - 30</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>59th Avenue Bridge to South Platte River Confluence</td>
<td>Up to 15</td>
<td>15 - 30</td>
</tr>
</tbody>
</table>