TO: Colorado Water Conservation Board Members

FROM: Kaylea White, Senior Water Resource Specialist
       Pete Conovitz, Water Resource Specialist
       Stream and Lake Protection Section

DATE: January 24-25, 2022 Board Meeting

AGENDA ITEM: #18d. Proposed Renewable Temporary Lease of Water from Several Ditches for Instream Flow Use on Tomichi Creek, Water Division 4 (1st Meeting)

Staff Recommendation

No formal action is required at this time.

Pursuant to 37-83-105(2) C.R.S. (2020) and ISF Rule 6k(2), the Board will use a two-Board meeting process to review, consider public comment and approve or reject a proposal for a temporary renewable lease of water. The Board’s consideration of the lease at this meeting will initiate this process and begin a twenty day period in which any person may request the Board to hold a hearing on the proposed loan. The initial presentation of this proposal provides an opportunity for the Board and the public to identify questions or concerns that Staff will address at this or a subsequent meeting. After the second CWCB meeting, the Board may direct Staff to “move forward,” after which the Applicant shall file a request for approval of the lease with the Division of Water Resources (“DWR”), which will initiate a 60-day comment period for DWR’s review.

Introduction and Background

Peterson Ranch and the Colorado Water Trust (“CWT”) have proposed a renewable instream flow lease of water rights in four irrigation ditches located on Tomichi Creek in Gunnison County, Colorado. The leased water would be used to help meet existing decreed instream flow (“ISF”) rates on Tomichi Creek to preserve the natural environment to a reasonable degree. Peterson Ranch’s offer letter is attached as Exhibit A.

Under this proposal the lease would be renewable for up to 5 years in a 10-year period pursuant to section 37-83-105(2), C.R.S. (2020). The source of water for the instream flow lease would be water that has been historically used to irrigate the Peterson Ranch. The lease is proposed as a “split season” lease where the irrigation schedule on the ranch would be changed from one in which water is generally available for diversion during the entire irrigation season to one in which irrigation is curtailed for certain periods. Benefits to the Tomichi Creek ISF will occur as a result of instituting this split-season irrigation schedule.
The procedure for evaluating temporary leases of water is outlined under ISF Rule 6, which is followed here. Additional information on the proposal and the process and timeline concerning the acceptance of a temporary lease are provided below.

**Discussion**

ISF Rules 6e and 6f describe the Board’s evaluation process, including specific factors that the Board must consider in determining the appropriateness of an acquisition. Additional information that the Board may use to evaluate the proposed loan is included below:

1. **Amount and Source of Water Proposed for Lease**

   The water proposed for lease includes water rights decreed in four irrigation ditches that have historically irrigated the Peterson Ranch. Each water right has several priorities associated with it and the cumulative decreed amounts are shown in the table below.

<table>
<thead>
<tr>
<th>Water Right Name</th>
<th>Cumulative Decreed Amount (cfs)</th>
<th>Decree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louis Ditch</td>
<td>10.0</td>
<td>CA1602, CA2079</td>
</tr>
<tr>
<td></td>
<td></td>
<td>02CW2054A</td>
</tr>
<tr>
<td>Cain Borsum Ditch</td>
<td>22.0</td>
<td>CA1266, CA2079</td>
</tr>
<tr>
<td>McGowan Irrig. Ditch and</td>
<td>11.5</td>
<td>CA1266, CA2079</td>
</tr>
<tr>
<td>McGowan Irrig. Ditch Alt. Pt.</td>
<td></td>
<td>99CW0052, 02CW0254</td>
</tr>
</tbody>
</table>

   Historically these ditches have irrigated approximately 220 acres on the Peterson Ranch and the combined diversion amount for all ditches equals 43.5 cfs. The Peterson Ranch owns 100% of the water rights proposed for lease.

2. **Location of Use**

   The leased water would be used on Tomichi Creek, from the headgate of the Louis Ditch (uppermost irrigation ditch located on the Peterson Ranch) downstream to the confluence with Quartz Creek. The total length of creek that would benefit from the proposed lease is 7.25 river miles. A Location Map is attached as *Exhibit B*.

3. **Existing ISF Water Rights**

   The existing ISF water right that will benefit from this lease is described in Table 1 below:

   Tab 1. ISF water rights on Tomichi Creek

<table>
<thead>
<tr>
<th>CWCB Case No.</th>
<th>Stream</th>
<th>Segment</th>
<th>Appropriation Date</th>
<th>Segment Length</th>
<th>Amount (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Natural Flow Regime and Existing Environment

Tomichi Creek originates on the west side of the Continental Divide in the Collegiate Peak Mountains. From its source, the creek extends south and west approximately 72 miles to its confluence with the Gunnison River in Gunnison, CO. The total drainage basin includes 1,061 mi² and major tributaries include Agate Creek, Marshall Creek, Razor Creek, Quartz Creek and Cochetopa Creek. Upland areas within the drainage basin are largely sagebrush and forested lands while bottomlands along the creek are largely a patchwork of irrigated hay meadows, wetlands and riparian areas.

Tomichi Creek flows typically peak from snowmelt runoff around the end of May and reach baseflow conditions by July. There is limited storage in the Tomichi Creek watershed and significant agricultural water diversions occur throughout the irrigation season. Irrigation typically peaks in July before irrigators shut off in August to dry fields for haying. Limited irrigation resumes in September after harvest. Summer low flows and irrigation demand can result in low flows and dry up at certain locations. Delayed irrigation return flows do help maintain late summer and fall streamflows.

5. Proposed Method of Acquisition

Peterson Ranch and the CWT are proposing entering into a “5-in-10” lease agreement with CWCB where water could be made available for ISF use for a total of five years within a ten-year period. A draft agreement will be provided for the second Board meeting in March.

6. Proposed Use of the Leased Water

The water would be used to help meet existing decreed ISF rates on Tomichi Creek in order to preserve the natural environment to a reasonable degree. The lease is proposed as a split season and designed to target periods when Tomichi Creek is impacted by low flows. Under the proposed split season, diversions by the Peterson Ranch ditches would be shut off and the foregone diversions would be used for instream flow purposes for one or both of the following periods: June 24 through July 31 and from September 1 through September 30. During the remainder of the irrigation season, diversions would continue as they have historically occurred to maintain agricultural production.

The lease would likely be implemented in below average years when the stream would benefit from additional streamflow and the decreed ISF rates would unlikely be met. The lease would...
likely not be implemented in extremely dry years when the subject ditches could not divert due to a lack of physical and/or legal water availability.

7. Historical Use and Historic Return Flows

The historic irrigation season on the Peterson Ranch extends from April through October and is typically divided into two periods. The first irrigation period typically begins in the spring and continues until late July or early August prior to the single annual cutting of hay. The second period occurs after the hay cutting and extends until fall for pasture use during fall and winter. Prior to haying operations, diversions are curtailed and the fields are dried out for several weeks.

Historical patterns of historic return flows have been quantified by the applicant using a period of record from 1970 through 2020. Return flows (both direct surface returns and delayed subsurface returns) from the subject water rights accrue at various locations along Tomichi Creek both within and downstream of the Peterson Ranch Property. All return flows from the Peterson Ranch water rights return to Tomichi Creek above the Hannah J. Winters No. 2 Ditch (shown on Figure 1).

8. Location of Other Water Rights and Injury Potential

Numerous water rights divert downstream of the Peterson Ranch water rights and calls from downstream senior rights are possible in dry years. Calls from the Gunnison Tunnel and South Canal and Redlands Power Canal were active in 2002 and 2003. Local calls on Tomichi Creek are also possible. In 2002, calls were active from the Biebel Ditches Nos. 1 and 2 as well as the McCann Ditches Nos 1, 2 and 3. Other water rights of note that are located in the Tomichi Creek ISF segment include the Louis Sarrasin and Hanna J. Winters No. 2 Ditches. All return flows from the Peterson Ranch water rights accrue back to Tomichi Creek upstream of the Hannah J. Winters No. 2 Ditch.

The curtailment of diversions under a split season lease would reduce historic return flows later in the season and, in the event of a downstream call during the irrigation season, the replacement of historical return flow amounts may be required. The months in which replacement of historical return flows may be required in connection with the June 24 - July 31 lease are August, September and October. The months in which replacement of historical return flows may be required in connection with the September 1 - September 30 lease are October and November. Therefore water rights downstream of the subject ditches on Tomichi Creek and on the Gunnison River downstream of the Aspinall Unit have the potential to be affected by the proposed instream flow lease. Replacement for shortages to these water rights could possibly be provided by reductions in irrigation at the four ditches utilized as part of this lease. DWR’s approval of the proposed lease would require terms and conditions required to prevent injury to downstream water rights.

9. Effect of Proposed Acquisition on Any Relevant Interstate Compact Issue

The proposed loan would not negatively affect any interstate compact. The water rights will be used for instream flow purposes and will be available for use by others downstream of the instream flow reach.
10. **Effect on Maximum Utilization of Waters of the State and Availability for Downstream Use**

The leased water will promote maximum utilization of waters of the State by 1) being beneficially used for ISF purposes to better preserve the natural environment to a reasonable degree throughout the decreed ISF reach on Tomichi Creek, and 2) being made available for downstream use including diversion for consumptive use on Tomichi Creek below Quartz Creek (lower terminus of ISF segment) and on the Gunnison River.

11. **Administration**

Staff will consult with DWR to confirm that this loan will be administrable, so long as it is operated within the terms of DWR’s eventual approval.

12. **Cost of Proposed Lease**

Staff will recommend that the CWCB pay Peterson Ranches for the leased water using funds from the Construction Fund as authorized by section 37-60-123.7, C.R.S. (2016). CWCB Financial Policy 19, adopted by the Board in January 2009, governs expenditures of those funds, and expressly includes temporary leases in the list of items for which these funds can be spent.

Policy 19 requires staff to provide the Board with information on the financial aspects of the proposal. Also required under Policy 19 is additional biological information from CPW pertaining to the benefits to the natural environment. Staff will provide CPW’s additional biological information, as well as additional information on the financial aspects of this proposal, at the second Board meeting in March.

13. **Potential Benefits of the Proposed Lease**

The proposed lease would affect a segment of the Tomichi Creek ISF water right described in Table 1 above. The length of this segment is approximately 7.25 miles and extends from the headgate of the Louis Ditch (uppermost irrigation ditch headgate on the Peterson Ranch) downstream to the confluence with Quartz Creek (lower terminus of the ISF reach).

Under the proposed split season irrigation schedule, streamflow in Tomichi Creek would be increased during the June 24-30, July and September time periods. Streamflow increases would be greatest in June and July as the Peterson Ranch water rights historically diverted the highest amounts during these time periods. The amount of water added to the stream in any given month varies by location due to the variable locations where historic return flows accrue back to Tomichi Creek. Projected changes in streamflow at various locations within the affected ISF segment are shown in Table 2.

Because the curtailment of irrigation diversions in June, July and September will reduce the amount of return flows back to the stream in later months. If return flows are not replaced, streamflow within the affected ISF reach on Tomichi Creek would be reduced in August and October. Overall these reductions are small relative to the increases that the lease would provide in June and July. According to CPW, July has historically been a critical month for low flows and corresponding impacts to stream temperature, particularly during below average hydrologic year types. Therefore CPW’s assessment is that the benefits from the additional flows in June and July outweigh any potential injury.
to the ISF reach in August and September. CPW will provide its recommendation and biological assessment of the proposed lease at the second Board meeting in March.

<table>
<thead>
<tr>
<th>Location</th>
<th>June 24-30</th>
<th>July 1-31</th>
<th>August</th>
<th>September</th>
<th>October</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Louis Ditch</td>
<td>5</td>
<td>3.1</td>
<td>0</td>
<td>0.9</td>
<td>0</td>
</tr>
<tr>
<td>Above Cain Borsum Ditch</td>
<td>4</td>
<td>2.4</td>
<td>-0.1</td>
<td>0.7</td>
<td>0</td>
</tr>
<tr>
<td>Below Cain Borsum Ditch</td>
<td>16.4</td>
<td>9.2</td>
<td>-0.1</td>
<td>2.0</td>
<td>0</td>
</tr>
<tr>
<td>Above McGowan Irr. Ditch</td>
<td>7.5</td>
<td>3.2</td>
<td>-0.8</td>
<td>0.8</td>
<td>-0.3</td>
</tr>
<tr>
<td>Below McGowan Irr Ditch</td>
<td>15.8</td>
<td>8.4</td>
<td>-0.8</td>
<td>2.2</td>
<td>-0.3</td>
</tr>
<tr>
<td>Above McGowan Alt Pt. Ditch</td>
<td>15.8</td>
<td>8.3</td>
<td>-0.8</td>
<td>2.2</td>
<td>-0.3</td>
</tr>
<tr>
<td>Below McGowan Alt Pt. Ditch</td>
<td>18.9</td>
<td>10.1</td>
<td>-0.8</td>
<td>2.7</td>
<td>-0.3</td>
</tr>
<tr>
<td>Below all return flows</td>
<td>6.7</td>
<td>1.8</td>
<td>-1.5</td>
<td>0.7</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

**Table 2. Change in Streamflow Due to Split Season Irrigation Schedule (cfs)**

Procedure and Timeline for Temporary Lease Acquisition

ISF Rule 6k governs the Board’s procedures for acquiring water for ISF use under a temporary lease and requires a minimum of two Board meetings to allow for public input prior to taking final action on a proposed acquisition. The initial consideration of this proposal at this November meeting will initiate a 120-day period for the Board to consider the terms and conditions of the proposed acquisition. ISF Rule 6m(4) provides that any person may request the Board to hold a hearing on the proposed acquisition, and that such request must be filed within twenty days of the first meeting of the two-meeting process.

CWCB staff have provided written notice of this request for consideration and approval of a temporary lease to: (a) the substitute water supply plan (“SWSP”) notification list for the Water Division 4; and (b) the ISF mailing notification lists for Water Division 4; and although not explicitly required until an application is filed with DWR pursuant to 37-83-105(2)(b)(II) and ISF Rule 6k(2), Staff has also provided notice to “a registered agent of any ditch company, irrigation district, water users’ association, or other water supply or delivery entity within whose system the water rights fall.” Staff have also (d) published notice in the Gunnison Country Times recognizing its duty to coordinate with applicant to “make best efforts to publish notice in an appropriate legal newspaper of general circulation” in Gunnison County pursuant to Rule 6k(2)(f)iv.

At the March 2022 CWCB meeting (the 2nd meeting of the two-Board meeting process), if no hearing has been requested, Staff may recommend that the Board take action on this proposed lease. Specifically, the action would be to direct staff to move forward with the proposed renewable lease including authorizing staff to execute an agreement for the lease
of water and to take any administrative action necessary to put the leased water to ISF use (provided that the State Engineer determines that no injury will result from the proposed lease).

If the Board approves the proposed lease at the March 2022 meeting then the Applicant (CPW) will subsequently file its request to DWR to approve the temporary lease of water for ISF use. At the time of this request, CWCB will coordinate with CPW to provide notice to the same parties as described above pursuant to 37-83-105(2)(b)(II) and ISF rule 6k(2). Submitting the request to DWR will initiate a 60-day review and public comment period. DWR will have 10 days after the 60-day review period to approve or deny the loan request.

Attachments:
Exhibit A - Peterson Ranch offer letter
Exhibit B - Location Map
January 12, 2021

Rebecca Mitchell, Director
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

RE: Offer of Temporary Loan of Water for Instream Flow Use

Dear Director Mitchell:

The Peterson Ranch owns surface water rights on Tomichi Creek, tributary to the Gunnison River, in Water Division 4. Peterson Ranch would like to seek approval from the Colorado Division of Water Resources (DWR) of a temporary, renewable loan of water to the Colorado Water Conservation Board (CWCB) pursuant to section 37-83-105(2), C.R.S. (2020) to help maintain the CWCB’s decreed instream flow water rights on Tomichi Creek. The proposed loan will provide water to the CWCB for instream flow use to preserve the natural environment to a reasonable degree. This letter serves as Peterson Ranch’s formal offer of a loan of water to the CWCB pursuant to Instream Flow Rule 6(k) (2) (2021).

Foregoing diversions to the Louis Ditch (2800628), Cain Borsum Ditch (2800520), McGowan Irrigating Ditch (2801630) McGowan Irrigating Ditch Alternate Point (2801638) will supplement or meet the CWCB’s instream flow rights on Tomichi Creek when flows are below the decreed instream flow rates. The temporary loan will mitigate low flow impacts to Tomichi Creek, including high water temperatures, low dissolved oxygen, loss of habitat and connectivity, particularly in dry years.

Upon receiving your response to this offer, Peterson Ranch, the Colorado Water Trust (CWT) and CWCB staff will coordinate to request approval of a renewable loan from DWR and provide all required written notices. We are currently preparing the necessary information to submit this request to DWR. We look forward to working together to finalize and implement this loan benefitting the aquatic habitat in Tomichi Creek.

If you have any questions or concerns regarding this offer, please do not hesitate to reach out to Tony LaGreca, Project Manager for CWT, at

Sincerely,

Greg Peterson and Kathleen Curry

Owners, Razor Creek and Peterson Ranch
Exhibit B. January 24-25 CWCB Board Meeting
Agenda Item 18d. Proposed Renewable Lease of Water from Several Ditches for ISF Use on Tomichi Creek (Water Div 4)