The following is an updated Flow Recommendation by the Restoration Administrator (RA) for remaining 2020 Restoration Flows pursuant to the January 2020 Restoration Flow Guidelines (RFG), as amended, and Exhibit B of the Settlement.

**Background**

The current conditionally approved Restoration Flow Recommendation (Recommendation) for 2020 is dated April 17, 2020 based on the Restoration Allocation (Allocation) from Reclamation dated April 14, 2020, which designates 2020 currently as a **Dry** Water Year Type with an Unimpaired Inflow hybrid forecast of 920 thousand acre-feet (TAF), and a current allocation of Restoration Flows of 211.123 TAF as measured at Gravelly Ford. The Allocation also specifies certain contractual and operational constraints on Restoration Flow releases for 2020.

Since the April 14, 2020 Allocation, additional forecast information plus the ASO flight data has improved the runoff forecast certainty. This updated Recommendation is in response to evolving runoff forecast information.

**Additional Considerations**

At this juncture, it appears that a substantial block of URF’s will be generated, even if the balance of the runoff year returns to a dryer condition. Thus, I feel confident in releasing an initial block of URF’s for disposition by the Program.

Additionally, as of today, a total of 16 returning spring-run Chinook salmon have been captured (primarily at the East Side Bypass control structure) and transported to Reach 1 of the Restoration Area. Despite high (for Chinook salmon) water temperatures, it is possible that additional spring-run adults may be moving into the Restoration Area.

As was the case earlier this year, key current seepage constraints that limit flows in the river channel include a limit of 850 cfs in Reach 3 (inclusive of both Restoration Flows and deliveries to Henry Miller Reclamation District), and an estimated total flow limit of about 290 cfs in Reach 4A.

**Recommendation for the Balance of Restoration Year 2020**

At this time, I am recommending an updated flow schedule for the balance of the year as shown in Table 1 (changes from the previous Recommendation are in red). I am recommending the increase of flows through the month of May to facilitate additional spring-run adult returns, and slightly increasing the recommended flows in July – September to provide cooler water temperatures in Reach 1.
With the current Allocation, this Recommendation produces approximately 58,000 acre-feet of Unreleased Restoration Flows (URF’s, actual amount depending on current accounting of Restoration Flow releases to date). **I am recommending the immediate release of 40 TAF of URF’s for disposition by the Program.** I will continue to hold back some URF’s from sale until at least the May Allocation if drier conditions return and substantially lower Allocation.

Table 1. Summary of Restoration Flow Recommendations for April 16, 2020 through February 28, 2021.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Friant Release</th>
<th>Buffer Flow Release</th>
<th>Restoration Flows at Gravelly Ford</th>
<th>Total Flow at Gravelly Ford*</th>
<th>Target Flow at Sack Dam</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 16 through April 29, 2020</td>
<td>As necessary</td>
<td>0 cfs</td>
<td>200 cfs</td>
<td>205 cfs</td>
<td>119 cfs</td>
</tr>
<tr>
<td>April 29 through May 28, 2020</td>
<td>As necessary</td>
<td>0 cfs</td>
<td>290 cfs</td>
<td>295 cfs</td>
<td>195 cfs</td>
</tr>
<tr>
<td>May 29 through June 30, 2020</td>
<td>As necessary</td>
<td>0 cfs</td>
<td>190 cfs</td>
<td>195 cfs</td>
<td>100 cfs</td>
</tr>
<tr>
<td>July 1 through July 31, 2020</td>
<td>As necessary</td>
<td>0 cfs</td>
<td>195 cfs</td>
<td>200 cfs</td>
<td>95 cfs</td>
</tr>
<tr>
<td>August 1 through September 30, 2020</td>
<td>As necessary</td>
<td>0 cfs</td>
<td>200 cfs</td>
<td>205 cfs</td>
<td>95 cfs</td>
</tr>
<tr>
<td>October 1 through October 31, 2020</td>
<td>As necessary</td>
<td>0 cfs</td>
<td>195 cfs</td>
<td>200 cfs</td>
<td>95 cfs</td>
</tr>
<tr>
<td>November 1 through November 20, 2020</td>
<td>As necessary, est. at 520 cfs</td>
<td>0 cfs</td>
<td>390 cfs</td>
<td>395 cfs</td>
<td>290 cfs</td>
</tr>
<tr>
<td>November 21 through December 31, 2020</td>
<td>Minimum of 350 cfs</td>
<td>0 cfs</td>
<td>230 cfs</td>
<td>235 cfs</td>
<td>138 cfs</td>
</tr>
<tr>
<td>January 1, 2021 through February 28, 2021</td>
<td>Minimum of 350 cfs</td>
<td>0 cfs</td>
<td>250 cfs</td>
<td>255 cfs</td>
<td>166 cfs</td>
</tr>
</tbody>
</table>

*Total Flow includes the minimum Holding Contract flows of 5 cfs required at Gravelly Ford*

Figures 1 and 2 below show the anticipated Flow Recommendation for this year at key locations in the Restoration Area.

**Additional Consultation**

I will continue to coordinate with the TAC, Program Office, and Implementing Agencies to monitor hydrologic conditions, fish population conditions, uncontrolled season releases, operational conditions, and other factors, and will update the Restoration Flow Recommendation as conditions change.
Figure 1 2020 Restoration Flows, First Half of Year

February 1, 2020-May 31, 2020 Dry Year Flow Recommendations

- Net RA Flow Recommendation at Friant Dam
- RA Flow Recommendation at Sack Dam (assumes 4 day travel time)
- Est. Actual Flow at Friant, R1 Hold Contr entered by hand

Estimated Actual Friant Flow ~ 350 - 480 cfs

Flow Bench Pulse with 2019 Rest. Flow

Dry Allocation Period

CH Allocation Period

Sack Dam Flow ~ 195 cfs

Recommended Friant Dam Release (cfs)

Date

Daily Average Water Temperature (F)
Figure 2  2020 Restoration Flows, Second Half of Year

June 1, 2020-November 30, 2020 Dry Year  Flow Recommendations

- Net RA Flow Recommendation at Friant Dam
- Est. Actual Flow at Friant, R1 Hold Contr entered by hand
- RA Flow Recommendation at Sack Dam (assumes 4 day travel time)

Sack Dam Flow ~ 95 cfs