Analysis of Resolution 21-2020
Wintertime Bypass Flow at Milner

Kresta Davis, Senior Manager, Idaho Power
Idaho Water Resource Board
Aquifer Stabilization Committee, December 11, 2020
Resolution 21-2020

- 200 cfs will be not be diverted above Milner for recharge from Dec 1, 2020 through Feb 15, 2021, resulting in approximately 30,800 AF of forgone recharge

- If the IWRB does not reach 250,000 AF of recharge during the 2021/2021 recharge season, Idaho Power Company will provide an acre-ft to acre-ft replacement of the shortfall from its American Falls Recharge storage, up to a maximum of 4,258 AF
Resolution 21-2020
Mitigation Volume

• As stated in the IWRB’s resolution, if 2020/2021 managed recharge is less than 250,000 AF, then Idaho Power would provide water from the company’s American Falls storage to the IWRB for recharge. Specifically, the mitigation proposed is intended to reflect an *amount equal to the Blackfoot to Minidoka reach gain* not realized by passing 30,800 AF past Milner.

• The IWRB requested that Idaho Power model the impacts of the forgone recharge on the Blackfoot to Minidoka reach gains and determine the mitigation volume associated with the proposed resolution.
Resolution 21-2020
200 CFS Bypass Flow Analysis

- ESPAM 2.1
- The modeling was completed to assess the impacts of a 200 cfs bypass flow at Milner Dam from December 1 through February 15
- The modeling assumes the reduction in recharge would occur at the Wilson Canyon and Milepost 31 recharge sites and in part of the Milner Gooding Canal
Resolution 21-2020

200 CFS Bypass Flow Analysis

Locations of Applied Impact

- The recharge impact for Wilson Canyon was applied to ESPAM cell 68:37
- The recharge impact for Mile Post 31 was applied to ESPAM cell 61:41
- The recharge impact for the Milner Gooding Canal was applied evenly over the length of the canal
Resolution 21-2020
200 CFS Bypass Flow Analysis

**Amount of Applied Impact**

<table>
<thead>
<tr>
<th>Location</th>
<th>December</th>
<th>January</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milepost 31 (cfs)</td>
<td>125</td>
<td>125</td>
<td>63</td>
</tr>
<tr>
<td>Wilson Canyon (cfs)</td>
<td>50</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Milner Gooding Canal (cfs)</td>
<td>25</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>200</strong></td>
<td><strong>101</strong></td>
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</tbody>
</table>

![Map of Idaho Power 200 CFS Bypass Flow Modeling](image-url)
Resolution 21-2020
200 CFS Bypass Flow Analysis

Reach Gains Blackfoot to Minidoka

Yearly Acft Gains Forgone Above Milner with a 200 cfs Bypass Flow at Milner

4,258 acft
Resolution 21-2020

IWRB ESPA Recharge

<table>
<thead>
<tr>
<th>Year</th>
<th>Recharge Volume (af)</th>
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<tr>
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<tr>
<td>2015-2016</td>
<td>60,000</td>
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<tr>
<td>2017-2018</td>
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</tr>
<tr>
<td>2019-2020</td>
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