2019 Idaho Water Supply Committee Meeting

April 11, 2019

Ryan Hedrick
Middle Snake Field Office – Water Operations
Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 66% of capacity.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Total space available</td>
<td>319384 AF</td>
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<tr>
<td>Total storage capacity</td>
<td>949700 AF</td>
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<tr>
<td>Natural Flow</td>
<td>13582 CFS</td>
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</table>
Boise Reservoir System
Apr-Jul Water Supply Forecast
WY1983 to WY2019

1981-2010 Average Actual Apr-Jul Runoff = 1,261,000 ac-ft

WY2019 Apr-Jul Adopted Forecast
1,500,000 ac-ft
119% of 1981-2010 average
Calculated Inflow

Lucky Peak Lake near Boise, ID
Elevation: 3060.000

Oct 1  Nov 1  Dec 1  Jan 1  Feb 1  Mar 1  Apr 1
Represents current targets, SUBJECT TO CHANGE
Anderson Operations

- Currently discharging 600 cfs

- Increases likely to occur as inflows rise to meet flood control rule curves

- Expecting increases in the next few weeks but could possibly change depending upon runoff and reservoir conditions downstream
Calculated Inflow

South Fork Boise River at Anderson Ranch Dam

PNRO - Boise

Calculated Inflow

Represents current targets, SUBJECT TO CHANGE
Arrowrock Operations

- Currently discharging 2,900 cfs
- Increases likely as Lucky Peak increases occur
- Operated as needed to slow the fill at Lucky Peak or to keep Lucky Peak from drafting.
Payette River system (Cascade, Deadwood) is at 67% of capacity.

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<td>Total space available:</td>
<td>264339 AF</td>
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<td>Total storage capacity:</td>
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<td>Natural Flow:</td>
<td>16514 CFS</td>
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Payette System @ Horseshoe Bend
Apr-Jul Water Supply Forecast
WY1983 to WY2019

1981-2010 Average Actual Apr-Jul Runoff = 1,485,000 ac-ft

WY2019 Apr-Jul Adopted Forecast
1,736,000 ac-ft
117% of 1981-2010 average
Payette River near Horseshoe Bend, ID

Flood Stage 12,000 cfs

Black Canyon Dam and Reservoir near Emmett, ID

Flood Stage 16,000 cfs
Cascade Dam and Lake Cascade at Cascade, Idaho  Elevation: 4828.000

- 2019
- 2018
- 2017
- avg

[Graph showing water levels for Cascade Dam and Lake Cascade over different years.]

- Elevation: 4828.000
- Water levels from Oct 1 to Sep 1
- Graph indicates water levels for 2017, 2018, and 2019, with 2019 showing the highest and most recent data.
Represents current targets, SUBJECT TO CHANGE
Cascade Operations

• Flows were at 600 cfs – Evening of April 8, flows reduced to minimum flows of 200 cfs as Emmett flows began to rise (Target flood flows: 16,000)

• Increased flows to 1,200 cfs yesterday, April 10th

• Increased flows today to 2,200 cfs, anticipate increase to 3,000 tomorrow to hold space in reservoir

• System inflows will determine the rate and timing of releases
Deadwood River below Deadwood Dam

Calculated Inflow

PNRO - Boise

Graph showing calculated inflow from 3/2/2019 to 4/6/2019.
Represents current targets, SUBJECT TO CHANGE
Deadwood Operations

• Currently discharging 50 cfs

• Anticipate increasing outflows next week possibly depending on inflows at that time

• Targeting full in late June
Owyhee
Apr-Jul Water Supply Forecast
WY1983 to WY2019

1981-2010 Average Actual Apr-Jul Runoff = 353,000 ac-ft

WY2019 Apr-Jul Adopted Forecast
474,000 ac-ft
134% of 1981-2010 average
Owyhee Operations

- Currently discharging 105 cfs below the dam
- Currently discharging 75 cfs out the canal, will increase on Monday
- Discharge will increase as irrigation demand turns on
- Complete reservoir refill unlikely unless we get a very wet spring