

RECLAMATION

Managing Water in the West

Bighorn Lake/Bighorn River Operating Criteria

What's Next??



U.S. Department of the Interior
Bureau of Reclamation

Background

- **2000-2007 drought period**
 - Very low levels in Bighorn Lake (3572 +/-)
 - Very low flows in Bighorn River (1,300 cfs)
 - Power generation was less than 50% of normal
- **Concerns expressed by local, state, tribal, federal entities regarding management of system's resources – NO ONE WAS HAPPY!**
- **Issues Group formed in 2007**

Operating Criteria - Short History

- **Criteria implemented in 2010**
- **Rule curves updated with 2011 statistics (record inflow volume)**
- **Stakeholder input formally requested in January 2011 and January 2015**
- **Comments grouped and mostly addressed with some changes made to the criteria**

https://www.usbr.gov/gp/mtao/yellowtail/bighorn_longterm.html

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Criteria Expectations

- **Improved benefits compared to historic operations:**
 - Increased water supply
 - Improved lake recreation and fishery
 - More dependable river fishery flows
 - Increased power generation
 - Enhanced flood control benefits

Criteria Expectations

- **Lake Recreation and Fishery**
 - Jan-Apr: 3-4' higher
 - May: Same
 - June: 1' higher
 - Jul-Dec: 2' higher
- **River Fishery Targets (*change in % of time target is provided*)**
 - 1,500 cfs: +9%
 - 2,000 cfs: +7%
 - 2,500 cfs: +0%
 - 3,000 cfs: +3%
 - 3,500 cfs: -4%

Criteria Expectations

- **Power generation: increase by 1% annually**
- **Enhanced flood control**
 - Peak elevation would decrease 1.5 feet
 - Peak monthly average release decrease 700 cfs
- **Transparency to Stakeholders**
 - Procedure for winter release rate
 - Operational Rule Curves

2017 Concerns

- **Friends of Bighorn River, Bighorn River Alliance, and Landowners on Bighorn River:**
 - **Criteria is not working**
 - **WE ARE NOT HAPPY**
- **New Approach is Needed**

Moving Forward

- **Past: Stakeholder Requests (2011, 2015):**
 - You tell us what was working/not working
- **Future: New Approach to Reviewing Criteria:**
 - Did the Criteria meet our original expectations/benefits?
 - Flood Control
 - Lake levels
 - River Flows
 - Power Generation
 - If not, WHY?
 - Criteria
 - Errors in forecasting
 - Hydrology (high or low)
 - Not following criteria

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Moving Forward

- **Commitment: Transparency to all Stakeholders**
- **Technical Working Group?**
 - Friends of Bighorn Lake
 - Friends of Bighorn River
 - Bighorn River Alliance
 - Montana Fish, Wildlife & Parks
 - Others?