HUP 2021 Wrap Up and 2022 Outlook
Upper CO River Endangered Fish Recovery Program

OUTLINE

• Review of 2021 – Targets, Releases, Pros and Cons

• Other Significant Recovery Program Progress
  • Downlisting Humpback Chub
  • Completed 15-Mile Reach PBO Review Document – Process Update

• Preview of 2022

David Graf, March 9, 2022
David_graf@fws.gov
Water Year 2021 in a Glance

Upper Colorado Watershed

U.S. Drought Monitor
JAN 5 2021

Upper Colorado Watershed
APR 6 2021

Upper Colorado Watershed
June 2 2021

Upper Colorado Watershed
Aug 3 2021

Upper Colorado Watershed
Nov 2 2021

Upper Colorado Watershed
JAN 4 2022
2021 in Review: Program and Partners manage flows throughout the Upper Basin

- 29,413 AF of storage released for Base Flow Augmentation 7/22 – 10/16
- HUP Carryover from 2020 added ~ 6800 AF during April 2021
- Partners Leased or Donated 7550 AF of Water for 15-MR Augmentation!!
- NO CROS in 2021
- Peak of 5530 cfs 6/6, 31% of Mean Annual Peak
- Q < 810 cfs 124 days
- Q < 500 cfs 56 days
- 233 cfs MIN FLOW July 21
WINTER FLOW 2021

15 MR Winter Flows November – March
‘100% Exceedence Target’ = 1240 cfs at USGS Blw GVIC gage

862 ft³/s - Feb 05, 2022 11:30:00 AM MST

1240 cfs
BRIEF PDO PBO* UPDATE

* PDO = Program Director’s Office
  PBO = Programmatic Biological Opinion

Colorado Pikeminnow: 15 Mile Reach
REMINDER: WHY DO WE DO THIS?

“In summary, the 15-Mile Reach is important for several reasons:

1. The 15-Mile Reach provides valuable spawning habitat for Colorado pikeminnow and razorback sucker.

2. The 15-Mile Reach provides an optimum balance between temperature and food availability for adult Colorado pikeminnow in the Colorado River.

3. The 15-Mile Reach provides an important refuge for endangered fishes should a catastrophic event cause a loss of populations in the Gunnison River or in the Colorado River below the Gunnison River confluence.”

1999 15-Mile Reach PBO
PBO Updates for 2021

1. Downlisting of the humpback chub from Endangered to Threatened (*Humpback Chub - Colorado River Recovery Programs*)

2. Finalized PBO Review (“This review will begin when actual depletion levels from the first depletion block reach 50,000 acre-feet/year or the year 2015, whichever comes first.” PBO, p. 75)

3. Completed Biennial ‘Sufficient Progress’ memo

4. Materials presenting case for downlisting of razorback sucker are under review by FWS Ecological Services
PBO Updates for 2021 – Depletion Summary

TAKE HOME POINTS

1. Depletions Variable

2. Depletions Stagnant or Decreasing

3. New Depletions since 1999 NOT the driver for unmet flow targets
PBO Updates for 2021 – CROS*

**TAKE HOME POINTS**

1. CROS implemented 12 times since 1997 including 5 of 6 years 2015 - 2020
2. Total nearly 400,000 AF in 12 years
3. Given hydrologic change, peak flows for habitat purposes critical for habitat quality
4. NO CROS in 2021

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*CROS – Coordinated Reservoir Operations (voluntary peak flow enhancements)
PBO Updates for 2021

- 2020 CROS Operations totaled 19,966 AF
- Added ~1500-1700 cfs to peak
PBO Updates for 2021

Report also provides overview of other Program Element Activities over life of Program:

• Habitat Protection through Flow Management
• Habitat Development and Maintenance
• Native Fish Stocking (razorback sucker & bonytail in 15-MR)
• Non-Native Fish Control
• Research, Monitoring, and Data Management
• Information, Education, and Outreach – e.g., Palisade High School Fish Hatchery!

“Based on this history and these substantial accomplishments, and on the demonstrated enhancement to flow conditions, the Recovery Program does not at this time deem it necessary to reinitiate or amend this PBO for purposes of providing habitat improvement and flow management actions in compliance with the 15-Mile Reach PBO. “ – 2021 Final PBO Review Document
PBO Updates for 2021

FWS Ecological Services RESPONSE:

“...we recommend coordination between the Recovery Program and the Service to evaluate the recommended flow targets in the 15-Mile Reach by the end of the year 2028, ensuring this evaluation is available to the Service before the next PBO re-initiation checkpoint. This evaluation should incorporate climate analyses, examine changes in water supply, and investigate annual flow variation targets.”  - DRAFT FWS letter to MC/IC – 2022

Take Home Points:

1. Evaluate Recommended Flow Targets by 2028
2. Incorporate Climate Analyses and Variability
3. Assess Future Supply in River-Basin context
4. Continue Implementation and Development of Recovery Program Management Activities in lieu of Re-initiation of ESA Section 7 Consultation on New Depletions
CO Headwaters = 99% SWE
Upper CO = 93%
3/7/2022
Drought conditions improve in U.S. West, but more snow is needed

By January, snowpack was above normal for most Western basins
Colorado April – July Runoff Forecasts:

Colorado River blw Glenwood Springs = 88%
Colorado River nr Cameo = 88%
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2022 – LOOKING AHEAD

• CROS?
• DROA & Lake Powell?
• HUP Coordination
• 15-MR Flow Release Coordination

THANK YOU!

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