



Non-native control ad hoc report

January 2003
Report to AMWG

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Charge to the committee:

Amended AMWG motion passed January 18, 2002:

1. Evaluate methods to remove non-native fish except for rainbow trout from Bright Angel Creek in 2002;
2. Evaluate methods to remove non-native fish from the LCR in 2002;
3. Gather public input, and conduct public education and environmental compliance on long-term removals in #1 and #2 above;
4. **Establish a TWG ad hoc committee to develop a 2002-2006 research, monitoring and management work plan for meeting MO 2.5 and 2.6 of the 17 August 2001 draft of the AMP Strategic Plan. The TWG will report back to the AMWG at the next meeting.**
5. **Using data from #1 - #4 above, make recommendations on future removals.**



Management Objectives

Management Objectives 2.5 & 2.6 (which were referenced in the motion)

(MO 2.5) Attain humpback chub condition in the LCR and main stem aggregations. Target is viable populations and removal of jeopardy.

(MO 2.6) Reduce native fish mortality due to non-native fish predation/competition as a percentage of overall mortality in the LCR and main stem to increase native fish recruitment.

(Note: numbering of management objectives is that used in the August 17, 2001 draft of the AMP Strategic Plan).



MO 2.6

(MO 2.6) Reduce native fish mortality due to non-native fish predation/competition as a percentage of overall mortality in the LCR and main stem to increase native fish recruitment.



Threats

Perceived Threat

Mode of responses

0 2 4 6 8 10 12 14 16 18

Species





Control Methods:

- ◆ **Electrofishing or net**
- ◆ **Traps or weirs**
- ◆ **Seine**
- ◆ **Chemical**
- ◆ **Managed flow**
- ◆ **Temperature Control**
- ◆ **Other**



Brown Trout Control:

- **Electrofishing or net**
- **Chemical control**
- **Traps or weirs**





Rainbow Trout Control:

- **Electrofishing or net**
- **Managed flow**
- **Temperature control**





Catfish Control:

- Traps or weirs
- Chemical control
- Temperature control





Report Recommendations 1:

Improve public information and education efforts concerning non-native fish impacts on native fishes.



Report Recommendations 2:

Evaluate methods to remove brown trout from Bright Angel Creek and consider the removal of rainbow trout after public input.



Report Recommendations 3:

Evaluate shocking and removal of rainbow trout near mouth of the Little Colorado River.



Report Recommendations 4:

Evaluate channel catfish, black bullhead and carp removal using nets and other appropriate methods in the Little Colorado River.



Report Recommendations 5:

Evaluate managed flows to disadvantage trout and other non-native fish.



Report Recommendations 6:

Evaluate the feasibility of a Temperature Control Device to improve humpback chub and native fish recruitment.



Report Recommendations 7:

Consider sediment augmentation or redistribution to benefit native fishes.



Report Recommendations 8:

Due to the urgency of the need to protect humpback chub, any feasible control methods should be implemented immediately.



TWG Motion:

TWG recommends that the AMWG approve the TWG Non-native Fish Control Ad Hoc Group's plan, and recommends further that the AMWG:

- **Develop a comprehensive strategy for ensuring the viability of native fish populations, with emphasis on listed species,**



TWG Motion:

- **Control non-native fish in additional tributaries, after public input through appropriate agencies,**



TWG Motion:

- **Increase focus on management actions rather than just evaluations, and**



TWG Motion:

- **clarify the AMWG directive to the TWG to consider actions to improve conditions for the HBC, i.e., for “...meeting MO 2.5 and 2.6 of the 17 August 2001 draft of the AMP Strategic Plan.”**

Complete TWG Motion

TWG recommends that the AMWG approve the TWG Non-native Fish Control Ad Hoc Group's plan, and recommends further that the AMWG:

- **Develop a comprehensive strategy for ensuring the viability of native fish populations, with emphasis on listed species,**
- **control non-native fish in additional tributaries, after public input through appropriate agencies,**
- **increase focus on management actions rather than just evaluations, and**
- **clarify the AMWG directive to the TWG to consider actions to improve conditions for the HBC, i.e., for “...meeting MO 2.5 and 2.6 of the 17 August 2001 draft of the AMP Strategic Plan.”**