**NPS Draft Desired Future Conditions**

**NPS Desired Conditions (by AMWG priority goals)**

**Goal 1: Maintain or attain viable populations of existing native fish, and prevent adverse modification to their habitat (including critical habitat)**

Humpback chub (HBC) populations have been enhanced and jeopardy status has been removed through recovery and improvement of habitat in the Little Colorado River, other tributaries, and the mainstem.

Distribution and enhancement of the razorback sucker (RBS) has occurred and jeopardy status has been removed through recovery and improvement of habitat.

Threats to native and threatened and endangered species from warm water non-native fish species, parasites, etc... and trout have been reduced.

Canyon tributaries are used as refugia to temporarily enhance HBC and RBS populations and for research/experimental purposes.

Viable populations of native fishes (flannelmouth sucker, bluehead sucker, and speckled dace, etc...) are maintained in the river corridor ecosystem.

**Goal 2: Preserve, protect, manage and treat cultural resources for the inspiration and benefit of past, present, and future generations**

Cultural resources (including archaeological, ethnographic, architectural, historic, trails, and cultural landscapes) are preserved, protected, treated and understood to ensure their long-term viability and integrity.

The integrity and condition of American Indian sacred places is preserved, and access to them for traditional uses is maintained.

**Goal 3: Establish water temperature, quality and flow dynamics to achieve GCDAMP ecosystem goals**

Anthropogenic impacts do not exceed Federal and State standards of water quality.

A natural range of annual temperature regimes in the mainstem is obtained and maintained.

Arizona water quality assessment for the Colorado River as “impaired” is corrected so that it is not longer based solely on turbidity.

**Goal 4: Protect or improve the aquatic food base so that it will support viable populations of desired species at higher trophic levels**

Primary and secondary producer composition (algae, macrophytes) is understood and the biomass and community composition is managed to maintained or enhance the aquatic food base in the full length of the river within GRCA (to include carbon loads and drift materials).

**Goal 5: Protect or improve the biotic riparian and spring communities within the Colorado River ecosystem. Including threatened and endangered species and their habitat**

Stands of native vegetation of sufficient density and extent to support naturally occurring riparian fauna exist below the old high water zone; invasive exotics plants in the new high water zone are minimal.
Encroachment of invasive exotic plant species below the level of dam operations and at seeps and springs is negligible.

Pre-dam naturally occurring wetlands (e.g. Horeshoe Bend in GCNRA, and Warm Springs at Prospect Canyon in GCNP) seeps, and springs exist that support native biotic communities.

Critical habitat of SWWF below Separation Canyon and native riparian vegetation valuable for the neotropical songbird community for migratory and nesting uses is maintained.

Backwater and riparian habitats are maintained for bird and bat food chain support needs to sustain peregrine falcons.

**Goal 6: Maintain or attain levels of sediment storage within the main channel and along shorelines to achieve GCDAMP ecosystem goals**

Sufficient sediment exists in the river to achieve sediment storage and conservation to accomplish the following:
- Rebuild and stabilize sandbars and campsites to 1983-1985 post flood values;
- Control of vegetation encroachment onto sandbars (control exotics);
- Allow for aeolian transport to re-supply upper benches and protection of cultural resources and native riparian community; and
- Conserve sediment throughout the system to enhance near shore habitat and riparian function.

**Goal 7: Maintain or improve the quality of recreational experiences for users of the Colorado River ecosystem, within the framework of GCDAMP ecosystem goals**

Provide a diverse range of quality recreational opportunities on the Colorado River consistent with NPS resource management mandates and the preservation of wilderness character. Ensure that the levels and types of use enhance visitor experience and minimize crowding and conflicts.

Provide visitors the opportunity to access educational information on the potential risks associated with recreational activities in the Grand Canyon wilderness setting including whitewater rafting and hiking.

Recreational use campsites are provided that emulate the 1983-1985 conditions in number, distribution and quality.

**Goal 8: Maintain or attain viable populations of the Kanab ambersnail**

Desired Condition pending further evaluation by Fish and Wildlife Service.

**Goal 10: Maintain recreational trout fishery at Lees Ferry**

Continue management to provide for recreational trout fishery in the Lees Ferry reach upriver to Glen Canyon Dam consistent with NPS, Arizona Game and Fish Department, and Fish and Wildlife Service management needs and provide for a native species fishery below this reach through the remainder of Marble and Grand Canyon to support endangered species recovery for primarily humpback chub and secondarily razorback sucker and other native fish.

**Goal 11: Restore viable populations of extirpated species**

Restore populations of extirpated species of warm water native fish (Colorado pikeminnow, bonytail, roundtail chub, razorback sucker, and leopard frog, river otter (Sonoran) as feasible.