INTRODUCTION OF A MOTION TO TWG REGARDING CLARIFICATION OF THE HIGH FLOWS PROTOCOL FOR SPRINGTIME HFEs: DRAFT FOR SCAHG CONSIDERATION AND REVIEW

Grand Canyon Wildlands Council, Grand Canyon River Guides, National Parks Conservation Association, and Recreational Anglers (Trout Unlimited / International Federation of Fly Fishers)

30 October 2015

ISSUE STATEMENT

The language surrounding the conduct of springtime high flows from Glen Canyon Dam, as described in the Glen Canyon Dam High Flow Experiment Protocol (HFEP) Environmental Assessment (EA) appears to severely limit the implementation of HFEs during the March-April springtime period. In this memorandum we request a modification of the HFEP to clarify the text to allow springtime HFEs, which are more naturally timed, and which would provide substantially improved resource benefits to native fish, the aquatic food base, preservation of archaeological sites, and river recreation, than do autumn (November) high flows. Such clarification is in keeping with the intent of the Grand Canyon Protection Act (1992) and the Glen Canyon Dam Adaptive Management Program. Below we present the rationale and draft motion language to clarify when and under what circumstances springtime HFEs can be conducted.

WHEREAS: Late autumn (November) HFEs appear to be unnatural in the pre-dam record, while springtime high flows in late March and early April occur at the beginning of the period of the natural time for high flows in the Colorado River ecosystem (CRE) downstream from Glen Canyon Dam, and

WHEREAS: The sandbar campsite benefits of sediment storing late autumn (November) HFEs are largely lost within 6 months of normal dam operations, while springtime HFE sandbar rejuvenation effects would last well into the summer months when such resources are most needed, and

WHEREAS: The nearshore aquatic habitat benefits of sediment storing autumn (November) HFEs are largely lost within 6 months of normal dam operations, while springtime HFE shoreline habitat rejuvenation effects would last well into the springtime and summer native fish breeding period, when such resources are most needed, and

WHEREAS: Results of the 2008 spring HFE suggest that spring HFEs may be a useful tool for enhancing the aquatic food base and stimulating rainbow trout recruitment if needed, and

WHEREAS: The spring HFE in 2008 was shown to suppress populations of the invasive New Zealand mudsnails, and

WHEREAS: The concern that springtime HFEs differentially promote nonnative tamarisk recruitment has been largely negated by the introduction of tamarisk leaf beetle, and

WHEREAS: Springtime HFEs provide a reservoir of sand available to protect riverside archeological sites during the springtime, when canyon wind for eolian transport is generally strongest, and

WHEREAS: Springtime HFEs that contribute to sandbar building between the Paria and Little Colorado Rivers further enhance sandbar rejuvenation in western Grand Canyon due to complementary springtime sediment inputs from the Little Colorado River, and

WHEREAS: Only two HFEs (1996 and 2008) have been conducted during the springtime period, and provide insufficient information to evaluate the resource impacts, benefits, and tradeoffs associated with springtime HFEs, and

WHEREAS: We recognize that uncertainties exist regarding resource trade-offs, and need to be experimentally tested and evaluated before adoption of springtime HFEs becomes an accepted management practice, and

WHEREAS: We recognize that legal authorizations, policies, and caveats regarding the approval and conduct of HFEs still obtain, and

WHEREAS: The present language of the HFEP restarts the CRE sediment mass balance accounting period on 1 December, regardless of whether sufficient sand supplied by the Paria River still exists on the channel bed between Colorado River miles 2 and 61 following an autumn HFE (i.e., the absence of "roll-over" sediment accounting across periods),

WHEREAS: The present language of the HFEP does not allow for a spring flow in the event that resource conflicts prevent a fall high flow (e.g., the sudden expansion of an undesirable non-native fish, such as green sunfish in 2015).

THUS: The above issues and elements will improve HFE planning and implementation, as well as adaptive management of Glen Canyon Dam in relation to the guidance and intent of the Grand Canyon Protection Act (1992).

THEREFORE: We propose the following motion to the Glen Canyon Dam Technical Work Group (TWG) for consideration and advancement to the Adaptive Management Work Group (AMWG) for consideration for advancement as a recommendation to the Secretary of the Interior:

"The language surrounding the conduct of springtime high flows from Glen Canyon Dam, as described in the Glen Canyon Dam High Flow Experiment (HFE) Protocol (HFEP) Environmental Assessment (EA) may limit implementation of HFEs during the March-April springtime period. HFE benefits to nearshore native fish habitats, the aquatic food base, recreational sandbar camping area, and sediment deposits that contribute to eolian transport and protection of

archeological sites are largely lost within 6 months of an HFE. Springtime HFEs are more naturally timed, and provide substantially improved nearshore native fish habitat and camping and eolian sandbar resource benefits during the springtime and summer months than do autumn (November) high flows.

Therefore, the TWG requests that AMWG recommend the Secretary clarify the HFEP to allow for springtime HFEs by: 1) including consideration of unused sediment supplies following autumn HFEs, or 2) in the case in which an autumn HFE is not conducted and sufficient sand exists on the channel bed, that the accounting period for sediment supplies be relaxed to permit a springtime HFE to be conducted. AMWG recognizes that existing legal authorizations, caveats, uncertainties, and trade-offs exist regarding springtime HFEs. These issues should be considered, experimentally tested, and evaluated before springtime HFEs are accepted as a management practice. Clarification of the HFEP is in keeping with the intent of the Grand Canyon Protection Act (1992) and the mission and vision of the Glen Canyon Dam Adaptive Management Program."