

**PROGRAMMATIC SAFE HARBOR AGREEMENT
FOR VOLUNTARY ENHANCEMENT/RESTORATION ACTIVITIES BENEFITTING
RAZORBACK SUCKER AND BONYTAIL
WITHIN CLARK COUNTY, NEVADA**

This Safe Harbor Agreement (Agreement) is made and entered into on the ____ day of _____, 200_, by and among the Nevada Department of Wildlife (Department); the U.S. Department of the Interior, Fish and Wildlife Service (Service); hereinafter collectively called the "Parties." This Agreement will serve as a programmatic safe harbor agreement under which individual landowners ("Cooperators") will be enrolled through Cooperative Agreements. This Agreement follows the Service's Safe Harbor Agreement final policy (FR 64:32717) and final regulations (FR 64:32706), and implements the intent of the Parties to follow the procedural and substantive requirements of section 10(a)(1)(A) of the Endangered Species Act (ESA). The State of Nevada enters into this agreement under authority of NRS § 501.351.

1. INTRODUCTION

The Safe Harbor program encourages proactive management to benefit endangered and threatened species by non-Federal landowners, by providing regulatory assurances that future property-use restrictions will not be imposed if those efforts attract endangered or threatened species to their enrolled property or result in increased numbers or distributions of listed species already present. This Agreement is a cooperative government/private effort to achieve biological goals for the covered species that are unlikely to occur on the enrolled property in the foreseeable future without such an Agreement. The Parties also intend the Agreement to demonstrate that conservation of endangered and threatened species is compatible with current land-use practices.

The purpose of this Agreement is to promote the conservation, enhancement of survival and recovery of the endangered razorback sucker *Xyrauchen texanus* and bonytail *Gila elegans* through the development of facilities for the rearing of juvenile fishes on private and non-Federal lands for use in augmentation of extant wild populations, and for the development and maintenance of facilities suitable to provide refuge habitats for the long-term maintenance of adult individuals of those species. Under this programmatic Agreement, Cooperators will make habitat available to razorback sucker and bonytail and will assist with maintenance and management of those species and their habitats on enrolled properties over a period of 50 years.

The Safe Harbor program encourages proactive conservation efforts by non-Federal landowners while providing them certainty that future property-use restrictions will not be imposed as a result of the presence of listed species on the property. In return for voluntary conservation commitments, the Agreement will extend to the Department and Cooperators assurances allowing future alteration or modification of properties enrolled through certificates of inclusion back to their original baseline conditions. Without this cooperative government/private effort, the enrolled lands would not otherwise be utilized by the species.

When signed, this Agreement will serve as the basis for the Service and the Department to issue permits under ESA section 10(a)(1)(A), NRS §503.181 and 503.585, and NAC §503.093 that allow the incidental take of razorback sucker and bonytail. This Agreement will authorize the Department to enroll landowners (Cooperators) with certificates of inclusion under the Federal permit and State permit when Cooperators sign individual Cooperative Agreements that describe actions that will be taken to benefit razorback sucker and bonytail. Thus, the Cooperators will be authorized to take razorback sucker and bonytail that have increased above the baseline established in this Agreement and Cooperative Agreements as a result of the Cooperators' voluntary conservation activities. Although the Agreement and permits will authorize incidental take of razorback sucker and bonytail associated with returning the enrolled property to its agreed-upon baseline condition, which would typically be zero individuals, the Parties anticipate that this level of take is unlikely to be realized except under unforeseen circumstances out of the reasonable control of the Department, Service or individual Cooperators.

Incidental take is defined as take that is incidental to and not the purpose of, otherwise lawful activities and does not include shooting, capture or other direct take of animals or plants. Certificate of Inclusion issuance will not preclude the need for the Cooperator to abide by all other applicable Federal, State, and local laws and regulations that may apply.

2. COVERED SPECIES

2.1 COVERED SPECIES: This agreement covers the razorback sucker *Xyrauchen texanus* and the bonytail *Gila elegans*, which are federally listed as endangered species.

2.1.1. SPECIES DESCRIPTIONS:

Razorback sucker: The razorback sucker is a large-bodied, long-lived catostomid sucker endemic to the Colorado River Basin of the southwestern United States, including the mainstem Colorado River and major tributaries. Adult razorback suckers are characterized by the presence of a distinct dorsal bony keel and thickened, foreshortened caudal rays thought to be adaptations to historic flow and current conditions in Colorado River mainstem and tributary habitats. Adult fish can reach 1 meter (m) in length and a weight of up to 6 kilograms (kg) although lengths of 400-740 millimeters (mm) are typical. The razorback sucker was historically common and widely distributed from Mexico to major lower and upper Colorado River basin tributaries including the Gila and Salt rivers in Arizona and the Green, Yampa and San Juan rivers in Utah, Colorado, Wyoming and New Mexico. Lower Colorado River basin populations exhibited significant declines in numbers and distribution beginning in 1935 with the creation of Lake Mead, and subsequently, other mainstem Colorado River reservoirs. Declines in upper basin adult fish captures have accelerated in the last 20 years indicating an ongoing loss of upper basin populations in most known habitats (USFWS 1998). An absence of recruitment, related to both habitat alterations and the increased presence of introduced fish species, is assumed to be the primary cause of population declines on a range wide basis but the great longevity of adult fish (<40 years, McCarthy and Minckley 1987) has allowed the retention of old-aged, reproducing

adult stocks and provides the opportunity for collection of wild larvae which can be successfully reared in off-river, predator free habitats and facilities.

Bonytail: The bonytail is a large cyprinid fish endemic to the Colorado River Basin (Valdez and Clemmer 1982). Closely related to the roundtail chub (*Gila robusta*) and other endemic *Gila* species, it demonstrates unique morphological adaptations presumably related to flow regimes of the historic Colorado River mainstem and tributaries. The bonytail typically reaches 350mm total length (TL) although large adults in lower basin habitats can reach a length of 600mm. Adult fish are characterized by a small head and an elongated, laterally compressed body with a long, thin caudal peduncle. The bonytail was historically widespread throughout the Colorado River mainstem and tributaries from the mouth of the Colorado River at the Gulf of California to Grand Junction in Colorado and the Green River in Wyoming. Lower basin bonytail populations are believed to have declined severely in the Colorado River mainstem and tributaries by the early 1900s, and in upper basin habitats including the Green River by the 1970s (USFWS 1990), because of a variety of causal factors affecting recruitment and adult persistence. The bonytail disappeared from most of its original range throughout the Colorado River basin primarily because of the many dam impoundments and water diversions that destroyed most of its habitat as well as the introduction of non-native fishes (Ono et. al1983). Small numbers of wild adult bonytail persist in the mainstem Colorado River and reservoirs primarily because of the potential life span of this species of between 40 and 50 years (USFWS 2002b).

2.1.2. SPECIES DISTRIBUTION:

Razorback sucker: In the lower Colorado River basin, the current distribution of razorback sucker is limited to altered mainstem habitats and reservoirs in four known locations. A relict population exists in Lake Mead of <200 adult fish which has demonstrated very limited recruitment in the wild. In Lake Mohave a population estimated at <20,000 adult fish is composed of both aged wild fish and additional young adult fish released into the reservoir since 1994, which were hatchery reared individuals from larvae collected in the wild. A population of unknown size exists in Lake Havasu and upstream to below Davis Dam from reared sub-adult fish released into that reservoir. An unknown number of adult razorback sucker persist in the Colorado River above Imperial Dam from recent releases for research purposes. With the exception of Lake Mead, none of these populations have conclusively demonstrated natural recruitment.

In the upper Colorado River basin above Glen Canyon Dam, Arizona, there are small reproducing populations in the Green River, Utah, as well as small numbers of wild individuals in the upper Colorado River and San Juan River sub-basins. The fish in all upper basin populations are aged, with senescent adults and little or no recruitment, except for the middle Green River (USFWS 2000b). Hatchery-reared juvenile and adult fish are currently being stocked into selected riverine habitats in the upper basin with some recent evidence of success. Although naturally recruited razorback suckers are thought to be extirpated from the Gunnison River and this population consists of only a few hatchery-reared adults (USFWS 2000b), analysis of larval fish collected from the Gunnison River in spring 2002 indicated the presence

of razorback sucker larvae in the sample, suggesting successful reproduction in the wild by hatchery-reared adults released into mainstem upper basin habitats (USFWS 2002a).

Bonytail: In the lower Colorado River bonytail are limited in distribution to a small number of sub-adult and adult fish in Lake Mohave and Lake Havasu. The majority of these fish represent recent releases of juvenile and adult fish produced from parent stock held at Dexter National Fish Hatchery (NFH), New Mexico, and the rate of survival for those recently released fish is unknown. The total number of free-ranging bonytail in the lower basin is unclear and it is unknown if any wild naturally recruited fish still exist in lower basin riverine habitats. Bonytail in off-stream refugium ponds have demonstrated recruitment and survival (Goodchild pers com. 2003, Mueller et al. 2002) but there is no recent evidence of recruitment in connected flowing water or reservoir habitats. In the upper Colorado River basin there is no known natural reproduction or recruitment, and fewer than 15 wild adult fish have been taken within canyon regions in the upper basin in the past twenty-five years (USFWS 2000a). Hatchery-reared fish are currently being stocked into riverine habitats and riverside ponds in the upper basin with unknown success.

2.1.3. THREATS TO THE SPECIES:

Razorback sucker: Principal threats to the razorback sucker include predation on early life stages by and competition from nonnative fish species, the alteration of mainstem and tributary historic flow regimes and loss of seasonal variability, the alteration of habitats through impoundment and channelization including thermal alteration and physical attributes, fragmentation of habitats and loss of connectivity, isolation and modification of connected backwaters essential for rearing and nursery habitat, and the small population sizes of remaining relict adult populations even where wild recruitment has been identified. Although reproduction is well documented in a variety of occupied habitats through the presence of early-stage razorback sucker larvae, there is almost invariably an absence of recruitment due to the loss of post-larval early life stages because of the absence of suitable nursery habitats, predation, and other factors.

Bonytail: Principal threats to the bonytail are the same as for razorback sucker. In addition, the continued existence of wild adult stocks is unclear, and recovery is dependent on production of fish for release to the wild from very limited numbers of adult refugium stock held at Dexter NFH and other facilities.

2.1.4. SPECIES RECOVERY ACTIONS:

Primary recovery guidance for the razorback sucker and bonytail is provided by recovery plans developed respectively for each species (USFWS 1990, 1998), recently completed recovery goals which supplement the species recovery plans (USFWS 2002b, 2002c), an Upper Colorado River Basin Recovery Action Plan and a recovery implementation strategy plan for the Lower Colorado River Basin (USFWS 2005). The Colorado River Fishes Recovery Team (Team) provides some level of rangewide guidance for recovery actions and the Upper Colorado River

Endangered Fish Recovery Program is actively implementing recovery actions for these and associated Colorado River endangered fishes. Although the lower Colorado River basin does not have an equivalent formal Recovery Program, recovery activities are guided by various Biological Opinions and the above referenced documents through the Lake Mohave Native Fish Work Group, the Scientific Work Group of the Team (SWG), and various other implementation level groups. Recovery direction and ongoing activities for razorback sucker and bonytail as they relate to the purpose of this agreement and actions that will be conducted by the cooperators to the Programmatic Safe Harbor Agreement and holders of Certificates of Inclusion to this agreement are detailed below by species.

Razorback sucker: The three principle objectives identified for recovery of razorback sucker are prevention of immediate extinction, protection and enhancement of existing populations, and the establishment and maintenance of additional wild populations from remnant stocks or through re-introductions. The maintenance of existing genetic diversity in wild adult fish through augmentation of the adult population of razorback sucker in Lake Mohave, using repatriated fish encompassing the maximum level of genetic diversity, is a specific recovery goal which compliments the overall recovery strategy (USFWS 1998). For the lower Colorado River basin, the action-level implementation strategy to achieve these goals has the following elements. First, the augmentation of existing adult stocks in Lake Mohave, using fish reared from wild-caught larvae to maintain levels of diversity present in the existing adult population, will be utilized to maintain genetic diversity and prevent extirpation of that large adult population as existing wild adults reach a terminal age. Because adult razorback sucker are long-lived and grow rapidly to a size where they are not subject to predation by the majority of nonnative aquatic predators, and have demonstrated long-term persistence and survival in altered habitats such as Lake Mohave, this will provide a substantial window for design and implementation of additional recovery actions while greatly reducing the potential for species extinction. Secondly, additional refugium populations of razorback sucker will be established in suitable lower basin predator-free, off-channel habitats including backwaters and dedicated constructed ponds to provide additional security from extinction and assess the ability to establish self-sustaining refugium populations. Finally, relatively large numbers of suitably-sized razorback suckers will be released into mainstem river habitats to provide additional redundancy of persistent adult fish populations and to assess the potential for recruitment to occur in lotic habitats in combination with habitat enhancements, even in the presence of native and non-native predators and competitors.

All of these strategies will require the production of large numbers of genetically suitable large juvenile or adult razorback sucker reared from wild-caught larvae or matched hatchery brood stock pairings, to a minimum size of approximately 300mm to maximize survival and minimize predation effects. Estimates of annual rearing capacity needs for juvenile razorback suckers vary from 50,000 to 150,000 individuals to meet lower basin recovery strategy goals and this requirement is expected to be necessary for up to a 50 year period as suitable habitats for razorback sucker augmentation are identified or constructed and as the efficacy of ongoing release efforts is assessed. Initial rearing of larvae up to approximately 125mm can be completed in hatchery facilities but for larger sub-adult fish total space requirements will likely

exceed existing or projected hatchery raceway and pond facilities for the foreseeable future. The use of predator-free isolated rearing ponds to provide final grow-out of juvenile razorback suckers to approximately 300mm has been demonstrated successfully through the Lake Mohave Native Fish Work Group project in operation since 1990 using Lake Mohave natural backwaters, golf course and isolated urban park ponds. Existing grow-out pond sites have been successful in providing up to 16,000 reared razorback sucker per year, but additional facilities will be necessary to meet minimal production and grow-out requirements as recovery activities expand beyond replacement and maintenance of the Lake Mohave adult population.

Bonytail: The principle objectives for recovery of bonytail are similar to those for razorback sucker; prevention of immediate extinction, protection and enhancement of existing populations, and the establishment and maintenance of additional wild populations from remnant stocks or through re-introductions. Because existing wild populations of bonytail are much more limited and much less well understood than for razorback sucker, if extant at all in any useable sense, collection of genetically diverse wild larvae is not an option and recovery actions for bonytail which require the production of reared adult fish for release into the wild will be essentially dependent on hatchery production of juvenile fish using progeny of existing parent stock at Dexter NFH. A secondary objective of maintaining a large refugium adult population in one or more Lower Basin reservoirs, presumably Lake Mead or Lake Havasu, is similar to that objective for razorback sucker but because no existing adult relict population exists that adult population will need to be constructed through stocking of reared large juvenile or adult fish. Because bonytail are shorter lived than razorback sucker it is also possible that maintenance of progress towards bonytail recovery objectives in the lower basin will have a higher maintenance stocking requirement than for razorback sucker, until such time as self-sustaining wild populations can be constructed.

The implementation of bonytail recovery strategies will require, like for razorback sucker, production of large numbers of genetically suitable large juvenile or adult bonytail reared primarily from matched hatchery brood stock pairings, to a minimum size of approximately 250mm to maximize survival and minimize predation effects. As for razorback sucker, an estimated minimum annual production in excess of 50,000 suitably sized bonytail will be required for an extended period to fully meet recovery strategy objectives, with a similar requirement for hatchery and grow-out pond rearing space and for stocking of refugium environments. Initial rearing can occur in hatchery environments, but adult bonytail unlike razorback sucker are omnivorous and an active piscivore on young life stages of other fishes under most circumstances. Although the rearing and recruitment of bonytail in common isolated rearing ponds in conjunction with razorback sucker has been demonstrated on a limited basis (Mueller et al. 2002), further research is necessary to assess the feasibility of rearing bonytail in isolated ponds in conjunction with other native fish species, particularly if ponds contain uneven-aged stocks or limited cover and complexity. Additional rearing and grow-out space may have to be specifically dedicated to bonytail if they cannot be raised in conjunction with razorback sucker in a production environment.

2.2 IMPORTANCE OF PRIVATE LANDS: Razorback sucker and bonytail require predation-free, stable pond environments for the rapid growth of juvenile fish to a size range suitable for release to unprotected habitats. Suitable pond environments on public lands in Clark County are limited primarily to managed, isolated backwaters along the shoreline of Lake Mohave which are subject to uncontrolled public access and variable environmental and water level conditions which cannot be fully manipulated to the benefit of the covered species. Ponds located on private lands which are maintained for landscape, recreation and irrigation purposes frequently have more controlled access and have a higher ability to control certain environmental variables including water level, contaminants, and contamination with undesirable species which would limit productivity and the ability to provide suitably-sized individual covered species for augmenting wild populations. The total acreage of suitable grow-out ponds available on public lands is not adequate to meet production needs of covered species to address current and future recovery and population augmentation goals, and this acreage cannot be expanded on public lands without construction of new pond facilities or substantive renovation of existing backwaters and other habitats, which may be of detriment to other wildlife species dependent on wetland and backwater habitats. Similarly, isolated pond and backwater habitats suitable for long-term maintenance of adult razorback sucker and bonytail populations are very limited on public lands, and will not meet the identified need for environments to sustain replicate, persistent adult populations to maintain the security of genetic stocks independent of production requirements for fish to be released to the wild. Existing private pond facilities in Clark County can meet much of the existing needs for production and refuge habitats without the need to construct new facilities and without the loss of existing habitat values for resident wildlife.

3. DESCRIPTION OF ENROLLED PROPERTY

The enrolled property is the area over which Safe Harbor assurances apply and on which incidental take of the covered species is authorized. The Parties reasonably expect the covered species may occupy all or a portion of aquatic habitats on the enrolled property as a result of management actions undertaken through this Agreement. Clark County, Nevada, includes numerous private and local-government controlled sites containing landscape and irrigation ponds which have been identified as potentially suitable for grow-out or refugia facilities for razorback sucker and bonytail (Attachment 1). Those sites are currently being managed as golf courses, public or private parks, residential landscape features, for irrigation storage, or for other purposes. This Agreement may include any and all of those sites within Clark County, or other suitable sites within Clark County which have not yet been specifically identified. However, the Agreement will focus on those properties that have apparently suitable aquatic habitat for the rearing and long-term adult maintenance of razorback sucker and bonytail. Such habitat includes defined permanent ponds with a preferred minimum depth of 10 feet, reliable and protected water supplies and water quality, limited or controllable public access, and accessibility for management actions and fish stocking/removal. The majority of sites meeting these characteristics are located in the Las Vegas/Henderson and Boulder City metropolitan areas, and in the vicinity of the City of Mesquite, as shown on Attachment 1. A Cooperative Agreement will be completed and signed for each property to be enrolled. Each Cooperative Agreement will include a map of the property and its legal location, a description of the existing biological

community including nonnative aquatic species and sensitive or protected species if any, the portion of the property to be enrolled and its acreage, and a description of the habitat types found on the portion of the property to be enrolled including an accurate description of ponds or other aquatic habitats and their characteristics. In addition, current land-use practices and existing development, the characteristics of water supplies to aquatic habitats, access and any expected land-use changes or future development will be described.

4. BASELINE DESCRIPTION FOR RAZORBACK SUCKER AND BONYTAIL

The baseline for each landowner signing a Cooperative Agreement is the number of razorback sucker and bonytail on the property and/or the amount of occupied, suitable habitat, except that for those enrolled properties which contain only pond facilities that will be managed as active rearing and grow-out facilities for razorback sucker and/or bonytail, the baseline for those species will be assumed to be zero. Each Cooperative Agreement will specify the baseline for the particular property covered under that Cooperative Agreement. The template for a Cooperative Agreement is included as Attachment 2.

5. RESPONSIBILITIES OF THE PARTIES

The responsibilities of the Cooperators will be detailed on each individual Cooperative Agreement, but at a minimum will include all of the responsibilities detailed in the template Cooperative Agreement (Attachment 2). In addition to the following stipulations, the Parties will work cooperatively on other issues as necessary to further the purposes of the Agreement. Moreover, nothing in this Agreement shall limit the ability of Federal and State conservation authorities to perform their lawful duties, and conduct investigations as authorized by statute and by court guidance and direction.

Specific responsibilities of Parties to this Agreement are as follows:

Department:

- a. Department agrees to hold a Section 10(a)(1)(A) Enhancement of Survival Permit and to enroll landowners who express interest in the program and who have potentially suitable razorback sucker and/or bonytail rearing and grow-out habitat on their land. Department will develop Cooperative Agreements with such landowners, will process and sign Cooperative Agreements, and will issue landowners with a Certificate of Inclusion under the Federal permits (Attachment 3) and a NDOW Letter of Authorization for Take of Protected Species (Attachment 4).
- b. Provide Service with copies of finalized Cooperative Agreements and Certificates of Inclusion within 30 days of their execution.
- c. Meet with Cooperators on at least a semi-annual basis and visit enrolled properties for the purposes of compiling an annual report (as described in Section 10.3) on actions

taken through this Agreement, on the numbers or distribution of razorback sucker and bonytail on enrolled lands, and on any take of razorback sucker and bonytail that has occurred on properties enrolled under this Agreement.

d. Stock, augment and harvest razorback sucker and bonytail on enrolled lands consistent with Cooperative Agreements and recovery and management objectives for those species.

e. Provide technical assistance to Cooperators, to the maximum extent practicable, when requested.

f. Ensure Cooperators are implementing the terms of the Agreement.

g. Provide Cooperators with information on razorback sucker and bonytail biology and management needs and information on proper responses to finding injured or stranded razorback sucker and bonytail and handling of razorback sucker and bonytail carcasses.

h. Inform the Service of any known razorback sucker and bonytail mortalities or injuries within five working days of receiving notice from a Cooperator of razorback sucker and bonytail mortalities or injuries.

i. Carry out habitat management and enhancement activities as required by specific Cooperative Agreements.

j. Conduct compliance and biological monitoring, as described in Section 10 of this Agreement and provide completed report that describes finding of monitoring to the Service.

k. If warranted, recommend procedures the Cooperators can take to avoid future take based on any take described in past annual reports.

l. Work with the Service on potential baseline adjustments, new management actions, and adaptive management plans as necessary.

m. Provide the Service with annual reports detailing razorback sucker and bonytail activities on enrolled cooperator lands.

Service:

a. Upon execution of the Agreement and satisfaction of all other applicable legal requirements, issue a permit to the Department in accordance with ESA section 10(a)(1)(A) authorizing incidental take of the covered species as a result of lawful

activities within the enrolled property. The term of the permit will be 50 years except as otherwise provided by this Agreement.

b. Provide technical assistance to the Department, to the maximum extent practicable, when requested, and provide information on Federal funding programs that the Department can provide to Cooperators.

c. Ensure the Department is implementing the terms of the Agreement.

d. Assist the Department with biological monitoring and management activities if assistance is requested.

e. If warranted, recommend procedures the Department can suggest to Cooperators to avoid future take based on any take described in past annual reports.

f. Work with the Department on potential baseline adjustments, new management actions, and adaptive management plans as necessary.

6. MANAGEMENT ACTIVITIES FOR COVERED SPECIES

The primary objective of this Agreement is to aid in the recovery of razorback sucker and bonytail and to assist in the re-establishment of wild populations of those species that in some situations may become self-sustaining. In order to accomplish this, it is essential that private landowners, the Service, and the Department work together to provide good habitat and positive stewardship for sites to be used for adult refuges and for the rearing of sub-adult razorback sucker and bonytail prior to their release to the wild. Management activities that are undertaken through Cooperative Agreements will result in additional areas being available for the rearing of razorback sucker and bonytail in protected habitats, which will provide additional razorback sucker and bonytail of a suitable size for release into the wild, and for the maintenance of adult refuge populations. Until such a time as razorback sucker and bonytail are placed on an included property for purposes of rearing and maintenance, the Cooperator will have no responsibilities under this Agreement except to implement those specific actions, including maintenance of habitat quantity and quality, agreed to in the Cooperative Agreement.

The Service and the Department may choose, solely at their discretion, to remove any or all razorback sucker and bonytail from the property. If razorback sucker or bonytail are placed on an enrolled property the Service and the Department, solely at their discretion, may choose to augment total numbers of those species or adjust stocking levels, including the removal of individual animals for release to the wild, as necessary to maintain growth rates and insure appropriate conditions for razorback sucker and bonytail maintenance. Additional management actions may be carried out on enrolled properties to enhance or improve razorback sucker and bonytail habitats and production capability and will be conducted by the landowner and/or the Department as specified in the Cooperative Agreement. The net effect of these management activities will be to increase the quality of habitats and the ability to provide appropriately sized,

healthy razorback sucker and bonytail for release to the wild. Specific management actions that will be implemented once razorback sucker and bonytail are placed on a Cooperator's property are detailed on the draft Cooperative Agreement (Attachment 2) as described under Section 5, Responsibilities of the Parties.

Nothing in this Agreement prevents the Cooperator from implementing management activities not described in the Agreement, as long as such actions maintain the original baseline conditions and do not affect the beneficial actions set forth in the Agreement. As long as the Cooperator implements the agreed upon conservation measures and maintains baseline responsibilities on the enrolled lands, the Cooperator may develop, conduct commercial recreational activities or make any other lawful use of the enrolled property, even if loss of razorback sucker and bonytail or occupied habitat above the established baseline levels occurs. The Cooperator will notify the Department at least 30 calendar days in advance of any activities reasonably anticipated to result in the loss of species individuals or occupied habitat. The notification will allow the Department an opportunity to capture and relocate the affected individuals, thereby minimizing the impact of the authorized take.

Emergency situations arising from natural disasters (e.g., fire, excessive rainfall, flood, extreme drought) may require the initiation of certain land management actions that may result in take of razorback sucker and bonytail. The Cooperator will notify the Department within 5 working days of such a situation, and will make reasonable accommodations to the Department and/or the Service for survey and/or relocation of razorback sucker and bonytail prior to initiation of the land management action. Certain other emergency situations such as the failure of water supplies, water delivery systems or pond structures, may occur outside of the control or intention of the Cooperator, which could result in the take of razorback sucker or bonytail. Under such situations the Cooperator will notify NDOW as soon as is practicable to allow the salvage and/or relocation of affected razorback sucker or bonytail individuals. The Department and the Service acknowledge that survey and/or relocation may be impossible in certain urgent situations.

Cooperative Agreements will grant to the Department and to the Service, after reasonable prior notice and in coordination with the landowner, the right to enter the Cooperator's property for the purpose of ascertaining compliance with the Agreement and for monitoring aquatic habitat quality, censusing, stocking, removing, and relocating species, as well as other measures that may be necessary. Access to enrolled properties for monitoring and management activities will be scheduled to reasonably accommodate and avoid interference with commercial or other uses of those properties such as professional sporting events and scheduled recreational activities. In addition, the Department will complete in coordination with Cooperators and submit an annual report of activities related to species management to the Service, and other reports as required by the Agreement.

7. NET CONSERVATION BENEFIT

The biological goal of this Agreement is to aid in the conservation and recovery of razorback sucker and bonytail within their native range in the Colorado River and its tributaries by

providing reared adult and sub-adult fish for use in establishing and augmenting wild populations and maintaining persistent adult populations in long-term refuge environments. This will assist in achieving the objectives of the species' recovery plans, supplemental recovery goals, and recovery tasks identified by the Team and the SWG. The Parties reasonably expect this Agreement will result in the availability of a minimum of five (5) and up to ten (10) or more additional sites for the rearing of razorback sucker and bonytail or the refuge maintenance of adult individuals of those species, and the annual average availability of a minimum of 500 additional razorback sucker and bonytail from each enrolled property that is utilized as a rearing site for use in recovery program activities over the terms of individual Cooperative Agreements.

Because of differences in sizes and productivity of aquatic habitats on individual enrolled properties, and other environmental variables, the production of reared sub-adult razorback sucker and bonytail may be less or greater than that estimate from any individual property in any specific year. However, for as long as management activities are carried out and created rearing and refuge habitats persist, enrolled lands will benefit the conservation of razorback sucker and bonytail. The Parties anticipate this Agreement will result in an increased number and/or distribution of the covered species, and/or an increase in the total area of occupied suitable habitat, within the enrolled lands. Without this cooperative government/private effort, the Cooperators' enrolled properties would not provide suitable razorback sucker and bonytail refugia and rearing habitat or support the rearing and production of sub-adult razorback sucker and bonytail. The Agreement will also provide an example of a mutually beneficial relationship between government agencies and a private landowner to benefit endangered and threatened species, and evidence that such species can coexist with current land-use practices. Therefore, the cumulative impact of this Agreement and the activities it covers, which are facilitated by the authorized take, will provide a net conservation benefit to razorback sucker and bonytail.

Cooperators will voluntarily manage the enrolled lands to produce a cumulative net conservation benefit to the covered species, by implementing conservation measures to increase species populations and to create, enhance and maintain suitable habitat for certain life stages of the included species. The net conservation benefit will be sufficient to contribute, directly or indirectly, to recovery of the covered species, after taking into account the lengths of the Cooperative Agreements and any off-setting adverse effects of authorized take. Although the Cooperative Agreements will not permanently conserve or recover species populations or their habitats, they provide for important short- and mid-term benefits to the species, including but not limited to the following: creation, enhancement and maintenance of rearing habitat; maintenance and increase of population numbers and enhanced distribution of the included species through the availability of additional individuals of a suitable size for use in enhancing existing and creating new wild populations; insurance against catastrophic events; maintenance of persistent adult stocks to preserve critically important genetic resources; and creation of areas for testing and implementing new conservation strategies.

The actions proposed under this Agreement are of limited duration making the Agreement's benefits appear transitory. However, the habitat maintained through this Agreement will not necessarily cease to exist upon expiration or termination of the Agreement because Cooperators may not choose to bring enrolled properties back to baseline at that or any other time in the

future. If new landowners continue to enroll under this Agreement over an extended period of time, the effect will be to have new land parcels constantly coming under Cooperative Agreements while other Cooperative Agreements expire. The net effect will be a shifting matrix of properties being maintained for razorback sucker and bonytail rearing efforts essential to the conservation of those species, with a net beneficial impact upon the status quo.

8. AGREEMENT AND PERMIT DURATION

Except as otherwise provided by this Agreement, the Agreement, including the obligations of the Parties and any commitments related to funding, will be in effect for 50 years following the date of its signing by the Parties. The rights to take will hold for the duration of the Federal and State permits. Except as otherwise provided by this Agreement, the Federal section 10(a)(1)(A) permit authorizing incidental take of the covered species will have a duration of 50 years from its effective date. State authorization permitting incidental take of the covered species under NAC §503.093 will be provided for the period of 50 years from its effective date, but will be addressed through individual letters of authorization issued to individual holders of Certificates of Inclusion or Cooperative Agreements to run concurrent with them. The Agreement and Permits may be renewed beyond their specified durations through amendment, with concurrence of both Parties. Given the probable time required to enroll individual Cooperators, develop or enhance aquatic rearing habitats, and provide included habitats with sub-adult fish for rearing, the Parties estimate it may take two [2] years of implementing the Agreement to fully reach a net conservation benefit for the species, although some level of benefits will likely occur within a shorter time period. Based on previous experience in the use of grow-out facilities for razorback sucker (NDOW 2001), the 50-year duration of this Agreement is considered sufficient to establish, use and maintain grow-out ponds for razorback sucker and bonytail on properties enrolled through Cooperative Agreements at a level that will substantially augment and assist recovery efforts for those species. The 50-year permit term will be advantageous to the Parties because of the potential that additional properties with facilities suitable for use as grow-out ponds could be developed over the term of the permit and enrolled for conservation purposes under Cooperative Agreements and Certificates of Inclusion.

The Department may enroll Cooperators under Cooperative Agreements at any time from the date this Agreement is signed until 10 years before it terminates. Obligations under Cooperative Agreements will be in effect for variable lengths of time depending on the property covered and the desire of the Cooperator and the Department, but the minimum duration of obligations will be for five (5) years from the date each Cooperative Agreement is signed. Upon signing of a Cooperative Agreement the Department will issue a Certificate of Inclusion to a Cooperator authorizing the incidental take of razorback sucker and bonytail on the Cooperator's lands.

In the event of death, receivership, bankruptcy, or involuntary transfer by a Landowner who is enrolled as a Cooperator to this agreement, the successor to such Landowner's rights and title as described in 50 C.F.R. § 13.24 shall have the same protections and assurances of the Landowner, and if such successor desires to be covered by the Cooperative Agreement and Permit, the successor shall use its best efforts to, within ninety (90) days of such succession, notify the

Department and execute a completed Cooperative Agreement and Certificate of Inclusion. It is recognized that such successor may not have notice of the Agreement or Permit and the Department, upon discovery of the successor, shall make all reasonable efforts to notify the successor of the existence of the Agreement and Permit. A successor who after reasonable notification chooses not to execute a Cooperative Agreement and Certificate of Inclusion shall within ninety (90) days of such notification provide reasonable good faith efforts to assist the Department and/or the Service in returning the property to original baseline conditions through removal of any remaining covered species from the previously enrolled lands to receive continued assurances and incidental take authorization for those covered species until the original baseline conditions are achieved.

9. TAKE

Take is defined as actions or attempted actions to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect such species. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. "Harass" is further defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns including, but not limited to, breeding, feeding or sheltering. Incidental take is any take of Federally-listed wildlife or State-listed wildlife and plants that is incidental to, but not the purpose of, otherwise lawful activities.

Under the terms of this Agreement, Cooperators are authorized to make use of their enrolled property in any manner that does not result in reducing the population and/or occupied habitat of razorback sucker and bonytail below the established baseline conditions. The permits will authorize incidental take of razorback sucker and bonytail and their progeny resulting from lawful activities within the enrolled property, from the time this Agreement is signed until expiration of the permits. Such uses may include, but are not limited to: building or fence construction, gardening, control of weeds, maintenance of landscaping and recreational facility infrastructure, commercial and non-commercial recreational activities or normal utilization of impounded waters for irrigation and landscape maintenance. The Cooperators may continue current land-use practices or make any other lawful use of the property, even if such use results in the take of razorback sucker and bonytail or loss of occupied habitat in excess of baseline amounts. In the event of planned, otherwise legal activities including the modification or alteration of occupied habitats, which might reasonably be anticipated to result in the indirect take of razorback sucker or bonytail on an enrolled property, the Cooperator shall provide at least 30 calendar days notice to NDOW to allow for removal of razorback sucker and bonytail to other habitats within the enrolled property or the removal of razorback sucker and bonytail from the enrolled property.

In addition to establishing a property's baseline, each Cooperative Agreement will detail the take of above-baseline individuals that is likely to occur. Implementation of this Agreement is expected to result in increased numbers of razorback sucker and bonytail in excess of the enrolled property's established baseline population. No loss of the existing baseline population

is authorized by the Certificates of Inclusion issued in conjunction with the Agreement. Thus, the maximum net impact of take authorized under the Safe Harbor program is a return to initially established baseline conditions, which would not have an adverse impact on razorback sucker and bonytail populations as a whole.

To return the enrolled property to baseline conditions, a Cooperator must demonstrate that the agreed-upon baseline conditions were maintained and the activities identified in the Agreement were carried out for the duration of the Agreement. At the end of the permit term a Cooperator may take individuals or occupied habitat in excess of the original baseline before the permit expires, to avoid accruing take liability under the ESA. However, no species or habitat will be impacted until the Cooperator has given the Department at least a 30 calendar day prior notice to relocate any remaining species individuals from the area to be impacted.

10. REPORTING AND MONITORING

10.1. COMPLIANCE MONITORING: The Department, with the assistance of the Service where appropriate, will visit enrolled properties to ensure compliance with this agreement, including any obligations of Cooperators under Cooperative Agreements and maintenance of baseline responsibilities. Cooperative Agreements will grant the Department, after reasonable prior notice to the Cooperator, the right to enter the enrolled lands to ascertain compliance with the Agreement.

10.2. BIOLOGICAL MONITORING: Prior to the finalization of a Cooperative Agreement and Certificate of Inclusion for any enrolled property, the Department in cooperation with the landowner will complete a detailed biological assessment of that property to determine baseline conditions which will include but is not limited to an evaluation of aquatic habitat quality and suitability, a characterization of species present including nonnative aquatic species if any, and a determination of appropriate management actions and needs which will be incorporated into the subsequent Cooperative Agreement. For any enrolled property where razorback sucker or bonytail were stocked for purposes of rearing or grow-out prior to completion of a Cooperative Agreement and Certificate of Inclusion as a result of previous management activities, the Department will inventory those animals to determine the total number present and their status, but those fish will not be included as part of the baseline established through the Cooperative Agreement with that landowner.

Following the placement of razorback sucker and bonytail on enrolled lands or when razorback sucker or bonytail are otherwise known to be present the Department, with the assistance of the Service where appropriate, will monitor razorback sucker and bonytail by visiting occupied enrolled lands at least semi-annually to ascertain the number of razorback sucker and bonytail present and growth rates, to monitor aquatic habitat quality, to perform management actions on animals present on the enrolled lands including marking/tagging and capture/removal of fish for release to the wild, and for the purpose of evaluating the efficacy of current management activities and strategies for occupied habitats.

10.3. ANNUAL REPORT: The Department must compile, and the respective Cooperator shall provide information to assist with the compilation of, an annual report on the implementation of this Agreement. Annual reports will cover the period from July 1st to June 31st each year and are due October 1st of each year. Copies will be made available to the Service and the relevant Cooperator(s). The report will list all of the properties that are enrolled through Cooperative Agreements under this Agreement and their legal descriptions, current ownership, and presence or absence of razorback sucker and bonytail on each property including when that presence or absence was determined. The report will include copies of all Certificates of Inclusion and the associated Cooperative Agreements executed during the reporting period. This annual report will include information on the results of biological and compliance monitoring, including, overall status of razorback sucker and bonytail, numbers of razorback sucker and bonytail stocked into individual ponds or aquatic habitats or removed for release to the wild by enrolled property, management activities undertaken related to razorback sucker and bonytail and occupied habitats, maintenance of baseline conditions, and any take of razorback sucker and bonytail on lands covered by Cooperative Agreements signed under this Agreement, including numerical losses during the rearing and grow-out process which cannot be attributed to specific causes. The report will include an assessment of the contribution of enrolled properties to the success of recovery activities for razorback sucker and bonytail through the augmentation of wild and refugium populations of those species.

10.4. ADAPTIVE MANAGEMENT:

Adaptive management allows for mutually agreed-upon changes to the Agreement's conservation measures in response to changing conditions or new information. If the expected results of the conservation measures appear ineffective, management activities can be changed or alternative activities undertaken to achieve those results. Decisions related to adaptive management will be based on an evaluation of the compliance and biological monitoring results detailed in the annual reports and on field observations by the Cooperators and Parties to this Agreement.

Adaptive management decisions can be made at any time as deemed necessary by the Department and the Service, however, a major evaluation of this Agreement will be carried out every five years, to ensure that it is achieving its conservation goals. Management activities will be evaluated as to whether they are resulting in the protection of razorback sucker and bonytail from incidental take and are providing effective adult persistence and/or growth and production of suitably-sized and genetically appropriate razorback sucker and bonytail for removal and release to the wild. If survival, production and growth rates of razorback sucker and bonytail placed in enrolled protected habitats are insufficient to meet recovery program objectives or expected biological criteria from production performance in other similar habitats, based on annual site performance evaluations, the Parties will assess reasons for that low growth performance or survival and may change management activities to enhance the performance of enrolled properties to meet management objectives. This will include, but is not limited to, management actions such as altering stocking densities, sizes of stocked fish, the retention time

of fish in rearing habitats, source populations for fish to release into rearing and refuge ponds, and actions to directly improve aquatic habitat quality with the concurrence of individual Cooperators. The evaluation will also include an assessment of incidental take that has occurred to determine if high levels of ongoing take that may have occurred on individual enrolled properties may be prevented or reduced through modifications to management practices in aquatic habitats or on adjacent lands.

If management activities need to be altered to improve benefits for the species, this will be done by amending future Cooperative Agreements, not by altering the responsibilities of parties in existing Cooperative Agreements. However, if existing Cooperators agree to alter their Cooperative Agreements then any modification of their responsibilities in relation to adaptive management will be addressed on a case by case basis. Strategies to reduce incidental take, if necessary, will be reviewed with individual Cooperators and implemented where appropriate on a voluntary basis.

11. FUNDING

The responsibilities of the Department under this Agreement, to monitor enrolled properties and carry out biological monitoring and management of razorback sucker and bonytail, will be funded by the Department using existing grants, State of Nevada General Fund Appropriations, new federal grants and other sources. The responsibilities of the Service under this Agreement will be funded by the Service. Management activities undertaken by Cooperators will be paid for by the Cooperators undertaking those activities, unless otherwise agreed to under individual Cooperative Agreements.

12. MODIFICATIONS

After execution of this Agreement, the Service and the Department may not impose any new requirements or conditions on, or modify any existing requirements or conditions applicable to, a landowner or successor in interest to the landowner except as stipulated in 50 CFR 17.22(c)(5) and 17.32(c)(5).

12.1. MODIFICATION OF THE AGREEMENT:

This Agreement may be modified to accommodate changed circumstances as provided by 50 CFR 13.23. Any Party may propose modifications or amendments to this Agreement by providing written notice to the other Parties and obtaining their written concurrence. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will make their best efforts to respond to proposed modifications within 60 calendar days of receiving the notice. Proposed modifications will become effective upon the other Parties' written concurrence. Any modifications to this Agreement will not affect Cooperators' responsibilities under existing Cooperative Agreements.

12.2. AMENDMENT OF THE PERMIT:

The permits may be amended to accommodate changed circumstances in accordance with all applicable legal requirements, including but not limited to the ESA, the National Environmental Policy Act, the Service's permit regulations at 50 CFR 13 and 50 CFR 17, and the State of Nevada's regulations at NAC §503. Any Party may propose amendments to the Permits by providing written notice to the other Parties. Such notice shall include a statement of the proposed amendment, the reason for it, and its expected results. The Parties will make their best efforts to respond to proposed modifications within 90 calendar days of receiving the notice. Proposed amendments will become effective upon fulfillment of the legal requirements stated above. Any amendments to the Agreement will not affect Cooperator's responsibilities under existing Cooperative Agreements.

12.3. MODIFICATION OF COOPERATIVE AGREEMENTS: The Department or a Cooperator may propose modifications or amendments to a Cooperative Agreement by providing written notice to the other party and obtaining their written concurrence. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The parties to a Cooperative Agreement will make their best efforts to respond to proposed modifications within 60 calendar days of receiving the notice. Proposed modifications will become effective upon the other party's written concurrence.

12.4. BASELINE ADJUSTMENT TO COOPERATIVE AGREEMENTS: Unforeseen circumstances could involve habitat impacts resulting from catastrophic (*force majeure*) events such as intense rainstorms, severe drought, sustained extreme heat, or insect/disease epidemics. Independent of the reasonable caution and application of good management practices by a Cooperator, impacts to habitats or take of animals could occur from unforeseen events. Such events are beyond the reasonable control of, and did not occur through, the fault or negligence of the Department or the Cooperator, including but not limited to "acts of God" or sudden actions of the elements such as those described above. Such catastrophes could either locally destroy the species population or render the habitat unsuitable, thereby reducing population numbers or occupied acreage below the original baseline conditions. For such circumstances beyond the control of the Department or the Cooperator, the Parties may agree to revise the Cooperative Agreement's baseline conditions to reflect the new circumstances, rather than terminate the Cooperative Agreement.

12.5. TERMINATION OF THE AGREEMENT: The Department will not terminate this Agreement before its expiration 50 years following approval. As provided for in Part 12 of the Service's Safe Harbor Policy (FR 64:32717), Cooperators may terminate implementation of their Cooperative Agreements before their expiration date due to circumstances beyond the Cooperator's control. In such circumstances, the Cooperator may return the enrolled property to baseline conditions even if the expected net conservation benefit has not been realized, provided that baseline conditions have been maintained. A Cooperator may terminate their Cooperative Agreement due to circumstances beyond the Cooperator's control upon 90 calendar days' prior written notice to the Department and the Service. Cooperators must provide the Department and the Service the opportunity to relocate razorback sucker and bonytail within 60 calendar days of receiving that notice. The Cooperator also may terminate their Cooperative Agreement at any

time for any other reason, but termination for reasons other than uncontrollable circumstances such as those associated with a *force majeure* event shall extinguish the Cooperator's authority to take razorback sucker and bonytail, and the Cooperator must relinquish their Certificate of Inclusion to the Department. Cooperators must provide NDOW the opportunity to relocate razorback sucker and bonytail within 60 calendar days of receiving that notice. NDOW may terminate a Cooperative Agreement if it is determined that use of the enrolled property to provide rearing or refuge ponds is no longer necessary as a contribution to recovery efforts for the included species. Following that determination and notification to the Cooperator, NDOW, with the assistance of the Service when appropriate, shall remove all razorback sucker and bonytail from the included properties within 60 calendar days in coordination with the Cooperator, and release the Cooperator from any further obligations under the Agreement.

12.6. PERMIT SUSPENSION OR REVOCATION: The Service may suspend or revoke the Federal permit for cause in accordance with the laws and regulations in force at the time of such suspension or revocation. The Service also, as a last resort, may revoke the permit if continuation of permitted activities would likely result in jeopardy to covered species (50 CFR 13.28(a)). Prior to revocation, the Service would exercise all possible measures to remedy the situation. The Department may suspend or revoke State take authorization for cause pursuant to NRS § 503.585 and NAC § 503.093.

12.7. CERTIFICATE OF INCLUSION SUSPENSION OR REVOCATION: The Department may suspend or revoke a Cooperator's Certificate of Inclusion if a Cooperator has breached their obligations under a Cooperative Agreement and has failed to cure the breach in a timely manner, and the effect of the breach is to diminish the likelihood that the Cooperative Agreement will achieve its stated goals.

12.8. REMEDIES: Each party shall have all remedies otherwise available to enforce the terms of the Agreement and the permit, except that no party shall be liable in damages for any breach of this Agreement, any performance or failure to perform an obligation under this Agreement or any other cause of action arising from this Agreement.

12.9. DISPUTE RESOLUTION: The Parties agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Parties.

13. ADDITIONAL MEASURES

13.1. SUCCESSION AND TRANSFER: This Agreement shall be binding on and shall inure to the benefit of the Parties and their respective successors and transferees, in accordance with applicable Federal regulations (50 CFR 13.24 and 13.25). The rights and obligations under this Agreement and any Cooperative Agreements shall run with the ownership of the enrolled properties and are transferable to subsequent private property owners pursuant to 50 CFR 13.25 and NRS. A Certificate of Inclusion issued to a Cooperator also will be extended to the new owner. The Cooperator shall notify the Department of any transfer of ownership at least 90 calendar days prior to the intended transfer, so that the Department can attempt to contact the

new owner, explain the baseline responsibilities applicable to the property, and explain the terms and conditions of the Cooperative Agreement. By becoming a party to the original agreement and permit, the new owner will have the same rights and obligations with respect to the enrolled property as the original owner at the original baseline. The new owner(s) also will have the option of receiving Safe Harbor assurances by signing a new Cooperative Agreement and receiving a new Certificate of Inclusion.

13.2. AVAILABILITY OF FUNDS: Implementation of this Agreement is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any funds from the U.S. Treasury. The Parties acknowledge that the Service will not be required under this Agreement to expend any Federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

It is understood that all funding commitments made under the Agreement are subject to budget authorization and approval by the appropriate agency or government appropriation.

13.3. RELATIONSHIP TO OTHER AGREEMENTS: This agreement is intended to complement other conservation activities for wildlife which may be occurring or may occur in the future on enrolled properties. Nothing in this agreement shall preclude the development between the Parties or between the Department or Service and Cooperators of cooperative agreements for activities under Partners for Fish and Wildlife, the Landowner Incentives Program, or similar conservation programs unless such activities are in conflict with the objectives and implementation of this agreement.

13.4. NO THIRD-PARTY BENEFICIARIES: This Agreement does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this Agreement to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third parties shall remain as imposed under existing law.

13.5. OTHER LISTED SPECIES, CANDIDATE SPECIES, AND SPECIES OF CONCERN: The possibility exists that other listed, proposed, or candidate species, or species of concern and suitable habitats for those species may occur in the future on lands enrolled in the Agreement as a direct result of a Cooperator's voluntary conservation actions. If biological surveys determine this Agreement will provide a net conservation benefit to any such species or their potential habitat, the Parties may agree to amend the Agreement and permit to cover additional species, at the Department's request.

If federally designated candidate species should occur on enrolled properties, the Service will recommend measures for including them in a joint Safe Harbor Agreement/Candidate Conservation Agreement with Assurances to contribute toward the conservation of those species. If appropriate measures are included in such an agreement, the Service, consistent with its "No

Surprises" policy, will not impose additional requirements on the Department or Cooperators as a result of any such species later being listed as threatened or endangered.

13.6. NOTICES AND REPORTS: Any notices and reports, including monitoring and annual reports, required by this Agreement shall be delivered to the persons listed below, as appropriate:

Director
Nevada Department of Wildlife
1100 Valley Road
Reno NV 89512

Field Supervisor, Nevada Fish and Wildlife Office, U.S. Fish and Wildlife Service
1340 Financial Blvd., Suite 234
Reno NV 89502

14. REFERENCES CITED

- McCarthy, M.S. and W.L. Minckley. 1987. Age estimation for razorback sucker from Lake Mohave, Arizona and Nevada. *Journal of the Arizona-Nevada Academy of Sciences* 21:87-97.
- Mueller, G., J. Carpenter and C. Minckley. 2002. Cibola High Levee Pond Draft Annual Report for FY-2002. USGS-BRD Denver Field Unit, Denver, CO. 18 pg.
- Nevada Division of Wildlife. 2001. Southern Region Native Fish and Amphibian Program Activities Report, January 1, 2000 through December 31, 2000. 80 pg. + Appendix.
- Ono, R.D., J.D. Williams and A. Wagner. 1983. *Vanishing fishes of North America*. Stone Wall Press, Washington D.C.
- US Fish and Wildlife Service. 1990. Bonytail Chub Revised Recovery Plan. Denver; US Fish and Wildlife Service, Region 6. 35 pg.
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- US Fish and Wildlife Service. 2002a. Biologists find evidence that hatchery-raised endangered fish are reproducing in the Gunnison River. Grand Junction; Upper Colorado River Endangered Fish Recovery Program, US Fish and Wildlife Service, Region 6 News Release, September 30, 2002. 2 pg.
- US Fish and Wildlife Service. 2002b. Bonytail (*Gila elegans*) Recovery Goals, Amendment and Supplement to the Bonytail Chub Recovery Plan. Denver; US Fish and Wildlife Service, Region 6. 70 pg. + Appendix.

US Fish and Wildlife Service. 2002c. Razorback Sucker (*Xyrauchen texanus*) Recovery Goals, Amendment and Supplement to the Razorback Sucker Recovery Plan. Denver; US Fish and Wildlife Service, Region 6. 78 pg. + Appendix.

US Fish and Wildlife Service. 2005. Management Plan for the Big River Fishes of the Lower Colorado River Basin: amendment and supplement to the Bonytail, Humpback chub, Colorado pikeminnow, and Razorback sucker Recovery Plans. Albuquerque: US Fish and Wildlife Service, Region 2. 52 pg.

Valdez, R.A. and G.C. Clemmer. 1982. Life history and prospects for recovery of the humpback chub and bonytail chub. Pages 109–119 in W.H. Miller, H.M. Tyus, and C.A. Carlson (eds.) *Fishes of the upper Colorado River system: present and future*. Western Division, American Fisheries Society, Bethesda, Maryland.

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Safe Harbor Agreement to be in effect as of the date that the Service issues the permit.

Director
Nevada Department of Wildlife

Date

Field Supervisor, Nevada Field Office
U.S. Fish and Wildlife Service

Date

Approved as to form by:

Deputy Attorney General for Attorney General
State of Nevada

Date