

# SAFE HARBOR AGREEMENT

**WITH THE BISHOP PAIUTE TRIBE  
FOR OWENS PUFFISH (*Cyprinodon radiosus*),  
INYO COUNTY, CALIFORNIA**

Prepared by

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## **SAFE HARBOR AGREEMENT BISHOP PAIUTE TRIBE**

### **1.0 INTRODUCTION**

This Safe Harbor Agreement (Agreement) is made and entered into as of [MONTH] 2014, between the Bishop Paiute Tribe (Tribe), and the U.S. Department of the Interior, Fish and Wildlife Service (Service); hereafter collectively called the “Parties” or singularly as “Party.” The purpose of this Agreement is to promote the conservation and recovery of the federally endangered Owens pupfish (*Cyprinodon radiosus*) through the translocation and establishment of the species within suitable habitat on lands held in trust for the Tribe by the United States and managed by the Tribe (hereafter, Tribal Trust Lands). This Agreement follows the Service’s Safe Harbor Agreement policy (64 Federal Register [FR] 32717) and regulations (50 CFR 17.22(c) and 50 CFR 17.32(c)) 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 of 1973, as amended (Act).

For the purposes of this Agreement, we define “translocation” according to the International Union for Conservation of Nature and Natural Resources (IUCN) position statement (IUCN 1987) as “the movement of living organisms from one area with free release in another.” The goal of this Agreement is to translocate wild (non-captive) individuals of Owens pupfish from source populations, informed by genetic analyses, to establish and maintain an additional self-sustaining population of Owens pupfish on Tribal Trust Lands within its historic range.

Considerable measures have been and will be taken to prevent Owens pupfish, once translocated, from escaping off of Tribal Trust Lands. The technical designs for any pond intended for Owens pupfish establishment incorporate elements that will prevent their escape including an air gap to prevent Owens pupfish entering the supply line water and a mechanism to prevent Owens pupfish from exiting in outflow water to areas beyond a pond. These design elements prevent Owens pupfish from entering surface flows and remove the potential for Owens pupfish to swim off of Tribal Trust Lands. A hydrological analysis to inform design parameters will be conducted.

Safe harbor agreements encourage voluntary conservation efforts by non-Federal landowners and provide them certainty that future property-use restrictions will not be imposed if those efforts attract covered species to their properties or result in increased numbers or distributions of covered species already present. In return for voluntary conservation commitments, the safe harbor agreement will extend assurances to the landowner that allows future alteration or modification of the enrolled lands back to pre-agreement conditions (Baseline). Under this Agreement we have established an elevated Baseline to further promote the conservation and recovery of the Owens pupfish. Elevated Baseline conditions consist of setting the Baseline for an enrolled property at an increase in individuals within the population of a species and/or an increase in the amount of a species’ habitat from those conditions at the enrolled property when

the safe harbor agreement is executed between the Service and the property owner. In this case, the elevated Baseline is established for numbers of individuals at the Enrolled Property, as described in Part 4 of this Agreement. This cooperative effort provides landowners with a way to manage enrolled lands to support the conservation of listed species while conducting certain other land-use practices. This Agreement will also be subsequently integrated into the Tribes Integrated Resource Management Plan.

The Tribe is a federally recognized Indian tribe that has ancestral homelands in the greater Owens Valley region of California. The Bishop Paiute Reservation (Reservation) is 875 acres. The Tribe is a sovereign nation governed by the Tribal Council, a board of five members elected by the General Council. The Tribe is the fifth largest tribe in California with around 2,000 enrolled members. The Tribe provides members with various programs and services and operates a variety of tribally owned entities and enterprises.

The indigenous people who live on the Reservation are Paiute, speak the Uto-Aztecan language, and, similar to all Paiute groups, refer to themselves as (“Nuu Mu”). The culture of the Paiute people is deeply embedded with the surrounding environment. The natural resources provided by land, water, and air, have been safeguarded by the Tribe for numerous years. The traditions of the Paiutes are alive and active today, and can be witnessed in many traditional tribal functions and festivities.

As a sovereign nation, the Tribe is not subject to jurisdiction of the State. States have no authority over tribal governments unless expressly authorized by Congress. In 1953, Congress enacted Public Law 83-280 (67 Stat. 588) to grant certain states, including the State of California, criminal jurisdiction over offenses committed by or against Indians in Indian country and to allow civil litigation that had come under tribal or federal court jurisdiction to be handled by state courts. The law did not grant states regulatory power over tribes or lands held in trust by the United States or subject to a restriction against alienation. These states also may not regulate matters such as environmental control, land use, gambling, and licenses on federal Indian reservations.

When signed, this Agreement will serve as the basis for the Service to issue the Tribe an enhancement of survival permit under section 10(a)(1)(A) of the Act (Permit), for the incidental take of the species covered in this Agreement while conducting translocation and establishment activities, activities associated with the maintenance of habitat, and other covered activities, including the potential future return of any enrolled lands to the elevated Baseline condition. The Permit will authorize the Tribe to take individuals of covered species, and their progeny, that occur on the enrolled lands above the established elevated Baseline conditions, as a result of the activities described in this Agreement. The Parties expect that the maximum level of take authorized under this Agreement and subsequent Permit will never be realized. Permit issuance will not preclude the need for the Tribe to abide by all other applicable Federal, State, and local laws and regulations that may apply.

## 2.0 SPECIES COVERED BY THIS AGREEMENT

This Agreement covers the Owens pupfish, which is also referred to in this document as the “Covered Species.”

The following description of the Owens pupfish and its habitat is based upon information from Service (1998 and 2009), Pister (1974), Soltz and Naiman (1978), Miller (1948), and Moyle (2002), and may include information from references therein.

Historically, Owens pupfish were widely distributed and abundant along the Owens River, occurring in clear waters of springs, sloughs, marshes, irrigation ditches, and flooded pastures from Fish Slough in Mono County and possibly as far south as the Owens River delta in Owens Lake in Inyo County. By the early 1930s, the Owens pupfish had become scarce throughout its historical range. This scarcity is attributed to predation from introduced non-native fish (e.g., largemouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), brown trout (*Salmo trutta*), bluegill (*Lepomis macrochirus*)), and water diversions that decreased and altered Owens River flows resulting in loss of hydrological connections and desiccation of shallow pupfish habitats. By 1942, the Owens pupfish was believed to be extinct; however, in July of 1964, the Owens pupfish was rediscovered in Fish Slough. All current populations have been propagated from this remnant stock. More recently, introduced mosquitofish (*Gambusia affinis*), red swamp crayfish (*Procambarus clarkii*), and bullfrogs (*Rana catesbeiana*) have become a threat to Owens pupfish through competition and/or predation. Currently, there are only three populations of Owens pupfish: the population at Fish Slough, consisting of three sub-populations; the population at Mule Spring; and the population at Well 368. The latter two are located in Inyo County.

The Owens pupfish is one of four fishes native to the Owens Basin. The three other fishes are Owens tui chub (*Siphateles [Gila] bicolor snyderi*), Owens speckled dace (*Rhinichthys osculus* ssp.), and Owens sucker (*Catostomus fumeiventris*). The Owens pupfish is a small fish in the family Cyprinodontidae, which rarely exceeds 2.5 inches in length, and lives for approximately one to several years. Females are dusky, olive-green in color, with several dark vertical bars aligned in a row along the sides. Males are bright blue, particularly during the spring and summer spawning season. The Owens pupfish is restricted to the Owens Valley portion of the Owens River in Mono and Inyo counties, California. Morphological, genetic, and geological studies have concluded that the desert pupfish (*Cyprinodon macularius*) of the lower Colorado River system is the closest relative to the Owens pupfish.

In general, pupfishes (members of the genus *Cyprinodon*) inhabit springs and creeks of the desert region and are known to tolerate extreme environmental conditions. Pupfish can survive in water with salinities up to 3 times that of seawater (seawater is 35 parts per thousand salinity), pH from near neutral (pH 7.5) to highly alkaline (pH 9), dissolved oxygen concentrations less than 0.25 ppm (parts per million), and water temperatures that vary seasonally from near freezing to over 100 degrees F.

The Owens Pupfish is particularly vulnerable to and does not coexist with introduced fish predators. Pupfishes will occupy most aquatic habitat where water is relatively warm and food is plentiful. The Owens pupfish occurs in aquatic habitats with clear water, absent to abundant bank vegetation, areas with little to no submergent or emergent vegetation with soft substrate consisting of sand, mud, and detritus, and locations with depths of a few inches to several feet. Adult Owens pupfish frequently occupy deeper water than juveniles, but all life stages may be found in the various microhabitats with little preference.

There can be differences between the habitat of the Owens pupfish and that of other pupfish species. Aquatic habitats in and adjacent to the Owens River are generally colder than that of other pupfishes and can be covered by ice during winter, and are lower in conductivity and salinity than habitats of other pupfishes. In most contemporary Owens pupfish populations, the fish appear to become dormant and are believed to burrow into the substrate during long periods of cold temperature. In locations where water temperatures remain relatively constant, Owens pupfish may remain active throughout the year.

Owens pupfish congregate in small schools and feed mostly on aquatic insects. Spawning occurs in spring and summer. Owens pupfish males are highly aggressive, especially during mating season. Males are territorial, displaying and defending territories from other competing males. Females actively select mates and frequently oviposit on plants or rocks outside the male's territory. Eggs hatch in water temperatures ranging from 75 to 81 degrees Fahrenheit. Juveniles typically mature into adults in 3 to 4 months and usually spawn before their first winter. The lifespan of a mature Owens pupfish may be 1 to 3 years in the wild. Due to this short lifespan, the magnitude of Owens pupfish populations may vary annually by a factor of two or more.

Owens pupfish were extant at only one site in 1964, as previously mentioned. The significant reduction in Owens pupfish distribution and number may have created a genetic bottleneck prior to their rediscovery. The resulting effect of this potential genetic bottleneck, in combination with small number of founders in subsequent translocations, may have inadvertently reduced the genetic diversity of current Owens pupfish populations. The California Department of Fish and Wildlife (formerly the Department of Fish and Game) received funding under section 6 of the Act to study Owens pupfish genetic diversity. The primary objectives of the study are to compare the contemporary genetic structure and diversity of Owens pupfish populations and prepare a genetic management and monitoring plan for the species. Funds were awarded for the study in 2006; the ultimate findings of this study and the management and monitoring plans are pending.

Population declines of the Owens pupfish are due primarily to predation and competition by non-native species over the past 120 years, in particular by non-native game fishes. Destruction and loss of habitat from water diversions and altered Owens River flows further reduced the remaining area of potentially suitable habitat. Owens pupfish management activities, such as those described in this Agreement, will contribute to the recovery and conservation of the Owens pupfish by: translocating and establishing an Owens pupfish population within its historic range; maintaining habitat; and controlling non-native species. The translocation and establishment of

new populations from existing populations is an essential conservation tool for the Owens pupfish, as identified by the Service in its recovery plan (Service 1998) and 5-Year Review (Service 2009).

### **3.0 DESCRIPTION OF ENROLLED PROPERTY**

The property subject to this Agreement (Enrolled Property) is Tribal Trust Land, held by the United States in trust for the Tribe and managed by the Tribe. The Enrolled Property is the 875-acre Bishop Paiute Reservation located adjacent to the City of Bishop, Inyo County, California (see Figure 1). The translocation, establishment, and associated activities in this Agreement would occur at the 24.8-acre Conservation Open Space Area (COSA) (see Figure 2). In 1998, the COSA was created as the result of mitigation required by the U.S. Army Corps of Engineers for the filling of adjacent jurisdictional wetlands for the purpose of commercial development in the Tribe's Commercial Park. A special condition of the U.S. Army Corps of Engineers Nationwide Permit 26 (ACE file # 96-50401-BAH) required that the Tribe set aside a "conservation open space area." The 24.8 acre-area was the determined amount of mitigation area.

In coordination with the California Department of Fish and Wildlife (formerly the Department of Fish and Game), the Tribe identified the COSA as a potential native fish refuge in 2002. The Tribe applied for and received funding from the Bureau of Reclamation, Southern California Office, to evaluate the potential of the area for the creation of a native fish refuge and to repair the subsurface drainage system at the COSA. The funded project consists of a phased approach of repairing and installing water lines, designing and constructing ponds for native fish, installing interpretative signs and kiosks, and constructing up to 3,000 feet of walking trails to connect the site with the Tribal cultural center and off-Reservation public schools. Upon completion, sufficient water will be available to establish native fish populations and conduct additional habitat and vegetation restoration for native species.

Three native vegetation communities are present in the COSA: alkali meadow; alkali marsh; and cottonwood willow riparian forest. The alkali meadow community is characterized by sedges (*Carex* spp.), saltgrass (*Distichlis spicata*), western blue flag (*Iris missouriensis*), and wiregrass (*Juncus balticus*). Species within the alkali marsh include yerba mansa (*Anemopsis californica*), bulrushes (*Scirpus* spp.), and cattails (*Typha* spp.). The cottonwood willow riparian forest includes Fremont cottonwood (*Populus fremontii*), sandbar willow (*Salix exigua*), and red willow (*Salix laevigata*). Non-native vegetation at the COSA includes perennial pepperweed (*Lepidium latifolium*), Canada thistle (*Cirsium arvense*), and bermudagrass (*Cynodon dactylon*).

Suitable habitat for Owens pupfish at the Enrolled Property consists of the aquatic habitat within Pond 1. Pond 1 has been specifically created for the translocation and establishment of Owens pupfish. Threesquare bulrush (*Schoenoplectus americanus*) and beaked spike rush (*Eleocharis rostellata*) were planted around the pond to prevent invasion from non-desirable vegetation. Pond 1 contains a deep-water moat to prevent encroachment of emergent vegetation and shallow

areas which will help maintain the warm water temperatures to which Owens pupfish are well adapted. Water quality of Pond 1 has been tested using standardized procedures and meets the requirements to support a viable Owens pupfish population. The area of Pond 1 is approximately 0.09 acre (4,000 square feet).

The Tribe plans to create another pond for Owens pupfish, Pond 2. Pond 2 would be constructed incorporating similar design specification, size, and habitat requirements as Pond 1. The area of Pond 2 is anticipated to be 0.11 acre (5,000 square feet).

A third pond, Pond 3, has been created at the COSA that provides habitat for other species of native fish, including the Owens speckled dace (*Rhinichthys osculus* ssp.) and Owens sucker (*Catostomus fumeiventris*). The Tribe has future plans to create a fourth pond, Pond 4, at the COSA, which is also intended to provide habitat for the native fish species that reside in Pond 3. Pond 4 would be created in the future when the Tribe has the funding and resources needed for its creation. These ponds are reserved for other species of native fish, and Owens pupfish will not be translocated into Pond 3 or the future Pond 4.

The planning, design, and construction of these four ponds have been addressed in the documents associated with the Tribe's application for funding to Bureau of Reclamation, Southern California Office. The Tribe has completed the required Federal and Tribal compliance associated with the creation of these ponds and the repair of the subsurface drainage system at the COSA.

Multiple strategies have been implemented and additional strategies are under development (described below) to prevent Owens pupfish from entering into and colonizing Pond 3 or Pond 4, and to prevent other species from entering any pond occupied by Owens pupfish. Further, these strategies will prevent Owens pupfish from escaping off of Tribal Trust Lands.

Water to supply the ponds is delivered to a subsurface point approximately 500 feet into the western edge of the COSA through a 10-inch diameter plastic drainage pipeline containing groundwater. In the COSA, the pipeline extends through the area almost to the eastern exterior boundary of the Reservation where it daylights into the Giraud Ditch. The portion of the pipeline within the COSA is referred to as the "bypass line," so named because it bypasses the ponds while providing each of them with a source of water. A backup water line of similar composition has been installed parallel to this drainage pipeline and connects to the bypass line at the same subsurface point, which provides a conduit for water to the project that can be used to provide water for the ponds in the event of an unexpected loss of water. The water source for the backup water line is from irrigation water that originates in Bishop Creek, per Tribal water rights.

#### **Pond 1 (constructed for Owens pupfish)**

Water is delivered to Pond 1 via an inflow structure constructed in the bypass line. Water flows from the bypass line into a six inch diameter plastic irrigation pipeline (access pipe), out of an air gap, and into Pond 1. The air gap is a vertical portion of the access pipe that extends several

inches above the maximum potential water elevation of Pond 1. Water cascades out of the air gap splashing onto the surface of Pond 1, breaking a direct pipeline connection between the access pipe and Pond 1. The air gap eliminates the potential for Owens pupfish to swim into the access pipe; thereby, preventing Owens pupfish from entering the bypass line and Giraud Ditch.

Water from Pond 1 would flow via an adjustable weir into a precast reinforced concrete box that would be filled with small gravel (outflow structure). The outflow structure serves as an infiltration gallery – the size and type of gravel in the concrete box has been specifically selected (according to engineering calculations) to prevent all life stages (eggs, larvae, juveniles, and adults) of Owens pupfish from escaping beyond Pond 1. Flow continues out of the outflow structure into the wetland area connecting Pond 1 and the future site of Pond 2.

Pond water elevation is adjusted by the weir in the outflow structure as well as the adjustment of control gates located within the inflow structure. The portion of water not diverted into Pond 1 at the inflow structure flows down the bypass line for use in the other ponds or directly into Giraud Ditch.

#### **Pond 2 (future for Owens pupfish)**

Pond 2 is expected to be approximately 5,000 square feet in area and would be located down-gradient and to the east of Pond 1 within the COSA. Inflow and outflow structures and access pipes would be constructed in a similar fashion as has been constructed for Pond 1. Flow of water into and out of Pond 2 would mimic that of Pond 1 (see description of Pond 1 above).

Water supply demands for the future Pond 2 are expected to be met by: (1) water flowing overland from the wetland area; and (2) water from the bypass line delivered to an access line into the Pond 2.

In the summer when evapotranspiration is high, the water flowing into Pond 2 from the bypass line is expected to be the preferred source of water. In the winter when water availability is much greater and water supply to the pond from the wetlands above the pond is higher, the adjustable weir in the outflow structure would be raised to reduce or stop water discharge out the outflow structure. Water that has exited Pond 2 through the infiltration gallery will flow through a culvert, and onto the pasture land to the east where the water would soak into the ground.

#### **Pond 3 (constructed for Owens Speckled Dace and Owens sucker)**

Pond 3 receives water from two sources: (1) the access line from the manhole located on the bypass line; and (2) a diversion constructed on Giraud Ditch. In the winter months, water is diverted from the bypass line. In the summer months, water will be diverted from the Giraud Ditch when that ditch is filled with irrigation water. Water currently outflows directly into the Giraud Ditch through a built up outflow structure constructed out of earth and rock.

#### **Pond 4 (future for Owens Speckled Dace and Owens sucker)**

Pond 4, once constructed, would receive water from two sources: (1) the access line from the manhole located on the bypass line; and (2) a portion of the outflow from Pond 3 through a

pipeline. Water would outflow from Pond 4 directly into the Giraud Ditch through a built up outflow structure that would be constructed out of earth and rock.

The locations of Pond 1 and Pond 2 are separated from the locations of Pond 3, Pond 4, and the pasture lands by a raised dirt road (Sewer Line Road) that is oriented north to south. The flow of surface water is from west to east. The locations of Pond 1 and Pond 2 are to the west of Sewer Line Road; the locations of Pond 3, Pond 4, and the pasture lands are to the east of the road. Sewer Line Road serves as a berm to control surface water entry to the pasture lands. In order for surface water to reach the pasture lands to the east of Sewer Line Road, all surface water must flow through one of two culverts that go under the road – one of these culverts has been permanently plugged. Surface water that drains from Pond 1 (and future Pond 2) is intended to flow into the pasture lands and must pass through the culvert that is under Sewer Line Road. The culvert provides the only conduit for surface waters to reach the pasture lands that come from the Pond 1 and Pond 2 locations. There is no direct or intended hydrological connection from the culvert or pasture lands to the locations of Pond 3 or Pond 4. A structure of descending rock sizes could be installed abutting the culvert on its western side to prevent the culvert from becoming clogged. This rock structure would also function as an infiltration gallery and a further (albeit unlikely necessary) measure to prevent Owens pupfish from escaping to the east of Sewer Line Road and potentially off of Tribal Trust Lands. Based upon the pending hydrological analysis and strategies that are under development, modifications to the design infrastructure may occur to ensure Owens pupfish cannot escape to the east of Sewer Line Road.

The design of the ponds, drainage system, water conveyance, and water supply is such that Owens pupfish are prevented from escaping off of Tribal Trust Lands and into the Giraud Ditch. Additionally, the design of the ponds, drainage system, water conveyance, and water supply is such that fish species from the Giraud Ditch, Pond 3, and Pond 4 would have no hydrological connection to Pond 1 or Pond 2 and would not be able to enter either Pond 1 or Pond 2.

#### **4.0 BASELINE DETERMINATION**

This Agreement provides a way for the Tribe to translocate and establish the Owens pupfish and manage its habitat at the COSA for the benefit of the species without incurring additional regulatory restrictions on the use of the Enrolled Property. To receive the assurances regarding take of Owens pupfish specified in this Agreement, the Tribe must maintain the Baseline conditions, as described below.

Baseline conditions are defined in the Service's Safe Harbor Agreement policy (64 FR 32717) as population estimates and distribution and/or habitat characteristics and determined area of the enrolled property that sustain seasonal or permanent use by the covered species at the time the safe harbor agreement is executed between the Service and the property owner. The Baseline conditions must reflect the known biological and habitat characteristics of the Enrolled Property.

Although the Owens pupfish does not currently occur at the Enrolled Property, suitable habitat

for Owens pupfish exists in Pond 1, as identified in Part 3 of this Agreement. Pond 1 was created for the translocation and establishment of Owens pupfish. Additionally as identified in Part 3, the Tribe has plans in the future to create Pond 2 as a second pond that could be occupied by Owens pupfish. Currently, Pond 2 has not been created and suitable habitat for the Owens pupfish does not exist at this site.

This Agreement has been established to aid in reaching the recovery objective for the Owens pupfish, as identified in its recovery plan (Service 1998). There are three criteria that have been identified to measure the degree to which the recovery objective has been achieved, each of which corresponds to an ascending level of conservation of the species and its eventual recovery: preventing extinction; downlisting; and delisting. Each of these levels of recovery require that the number of Owens pupfish populations within its historic range is greater than or equal to the current amount - three (3) populations are currently in existence. Additionally, the level of recovery that corresponds with both downlisting and delisting requires that the populations are self-sustaining for 5 and 7 years, respectively. Translocation of the species through a safe harbor agreement and the establishment of an elevated baseline for its presence at the site would contribute toward its recovery. The Parties have negotiated an elevated Baseline at the Enrolled Property that will consist of a population of Owens pupfish being present at the COSA, where there currently is no population of Owens pupfish.

The Tribe understands the valuable contribution toward recovery that the translocation and establishment of the Owens pupfish on its lands would provide to the species. Therefore, the Tribe would like to contribute to the recovery of the Owens pupfish by creating an additional population of the species at the Enrolled Property and by establishing an elevated Baseline for the species. The Parties have worked in partnership to establish the following Baseline conditions at the Enrolled Property. The Baseline conditions for the Owens pupfish at the Enrolled Property will contain two components: (1) the current area of suitable habitat for the Owens pupfish at the Enrolled Property (specifically the 0.09-acre Pond 1); and (2) an elevated presence of the Owens pupfish at the Enrolled Property. The elevated Baseline has been established with the intent to create and maintain a self-sustaining population of the Owens pupfish at the Enrolled Property. The Parties have agreed to set the Baseline conditions for the Owens pupfish at the Enrolled Property as follows.

1. The Enrolled Property contains 0.09 acre of suitable habitat for the Owens pupfish in Pond 1. The Baseline area for the Enrolled Property is the 0.09-acre area of suitable habitat for the Owens pupfish, as described herein.
2. The elevated Baseline for the Owens pupfish at the Enrolled Property will be achieved when its suitable habitat is occupied by a self-sustaining population (as defined in Part 4 of the Agreement) of the species. Once the goal of a self-sustaining population of Owens pupfish is reached, the population of Owens pupfish at the Enrolled Property will not be reduced intentionally to a condition that is not self-sustaining. The determination that the elevated Baseline has been reached would be made jointly by the Parties.

Initially, the elevated Baseline conditions for the presence of the species will apply to Pond 1. Upon the completion of Pond 2 and a determination by the Parties that it is suitable for the survival and reproduction of the Owens pupfish, individuals of the species may be translocated into Pond 2. At that time, either Pond 1 or Pond 2, or both will be occupied by a population of Owens pupfish, but one population must be at the elevated Baseline level.

Provided that the Baseline conditions are maintained and a self-sustaining population of Owens pupfish is present at the Enrolled Property, either Pond 1 or Pond 2 may be designated by the Tribe as the pond that they will maintain at the elevated Baseline conditions for species presence. Under these circumstances, the Tribe will not be required to simultaneously maintain a population of Owens pupfish in both ponds to comply with the elevated Baseline conditions for species presence. The Tribe will coordinate with the Service prior to any changes in its designation of the location of suitable habitat where Owens pupfish will be maintained, Pond 1 or Pond 2, and prior to any changes that may alter the status and location of the Owens pupfish population.

As defined by this Agreement, a self-sustaining population of the Owens pupfish is one that displays life history demographics that show the population is reproducing annually for 3 or more consecutive years, in which adults dominate the population in spring and autumn, and juveniles dominate the population in early summer, and abundance is such that the species is present within its suitable habitat in Pond 1, or in Pond 2, or a combination thereof.

The translocation and establishment of the Owens pupfish will be considered successful when the elevated Baseline for species presence is reached and maintained for 3 consecutive years. At that time, the Tribe will have aided in preventing extinction of the Owens pupfish by adding a self-sustaining population of the species. Additionally, the Tribe would like to further contribute to the recovery of the Owens pupfish by helping to achieve the downlisting criteria by maintaining this population for 5 years with the goal of eventually helping to reach the delisting criteria by maintaining this population for 7 years (Service 1998). The intent of the Tribe is to maintain a viable population of Owens pupfish in perpetuity.

The Tribe will not be considered out of compliance with Baseline conditions or held accountable for actions outside of its control that may reduce the status of Owens pupfish presence in its suitable habitat or may extirpate it from the site.

According to this Agreement, actions considered outside of the Tribe's control include:

- Unexpected major damage to the drainage works that affects the water supply system to the ponds;
- Unavailability of groundwater for the drainage works as a result of natural disasters or other changes in the water table beyond the Tribe's control; and

- Time periods of prolonged drought when water is no longer available to supply the ponds.

The Tribe can supply water to ponds on an emergency basis for brief periods of time from their irrigation and/or domestic supplies; however, this water would be used only as a back-up supply under dire circumstances and would not be available for the ponds for an extended period of time.

## **5.0 MANAGEMENT ACTIVITIES**

The Parties have identified the following beneficial management activities that can be implemented at the COSA to promote the conservation and recovery of the Owens pupfish, and other management activities related to the Tribe's land use. In addition to beneficial management activities, adaptive management and avoidance and minimization measures are identified. The Tribe would be provided take coverage for these management activities as described in this Agreement.

### **Beneficial Management Activities**

These management activities would be beneficial to the Owens pupfish because they are intended to contribute to the recovery criteria of the species by establishing an additional self-sustaining population of the species at the Enrolled Property. Additionally, these activities would be beneficial by creating and maintaining its habitat, and implementing other activities that would be beneficial to the conservation and recovery of the species. The translocation and establishment of this population of Owens pupfish is anticipated to be more genetically diverse than any other population of the species because individuals from multiple sources will be used to create the population at the Enrolled Property. Once the population of Owens pupfish is established, it could serve as a source of individuals for additional translocations at other sites within the historic range of the species, further contributing to the conservation and recovery of the species.

The recovery plan for Owens pupfish identifies that management plans are a needed component for translocations. This Agreement will serve as a management and implementation plan for translocation, establishment, and other associated conservation and recovery activities for the Owens pupfish at the Enrolled Property, including habitat maintenance and methods to control and reduce threats to the species and its habitat. The Parties will develop a species monitoring plan within 1-year of the signing of the Agreement. The Tribe will develop a management plan for the COSA. The Tribe's management plan would identify methods for management of the COSA for native plants and animals, Tribal uses of the COSA, and include elements from this Agreement related to management of the pond(s) to benefit the Owens pupfish.

Implementation of translocation and establishment activities for Owens pupfish and activities to maintain its aquatic habitat would be beneficial to the species. Additionally, activities associated with controlling and reducing threats to Owens pupfish within the Enrolled Property would be

beneficial to the species. The Tribe agrees to carry out the following activities at the Enrolled Property.

- The Tribe will provide suitable habitat for and allow the translocation and establishment of the Owens pupfish at the Enrolled Property. The translocation of Owens pupfish will occur at the first appropriate time, as determined by the Parties, after the Agreement goes into effect. Translocation may occur in one or multiple events, as deemed appropriate by the Parties.
- Translocation of Owens pupfish will not occur until a qualified engineer verifies and the Service concurs that: (1) the designs for a pond intended for Owens pupfish establishment meet the project specification that Owens pupfish would be prevented from escaping the pond (and, therefore, not be able to escape off of Tribal Trust Lands); and (2) the engineering designs intended to prevent escapement of Owens pupfish off Tribal Trust Lands have been implemented successfully.
- Qualified biologists from the Tribe and Service, and those assisting under their direct supervision, may capture and translocate Owens pupfish from the source site(s) for purposes of establishment at the COSA. Supplemental translocation activities could occur multiple times over the 10-year period of the Agreement, as deemed appropriate by the Parties.
- Any deceased Owens pupfish from the COSA may be collected for future study. Any individuals collected for biological purposes must be properly stored in a manner that will maintain biological integrity until the time of study or must be properly discarded according to applicable laws and methods for biological specimen and preservative disposal if any collected individuals will not be used for study.
- The Tribe will maintain the area of Owens pupfish suitable habitat at the Enrolled Property for the 10-year period of the Agreement.
- Once established, the elevated Baseline population of Owens pupfish at the Enrolled Property will be maintained for the duration of the Agreement.
- Once the population of Owens pupfish at the Enrolled Property has reached or exceeds the elevated Baseline, individuals from this population may be used for additional translocations at other sites, provided that removal of the desired number of individuals from the pond(s) in the COSA would not reduce the population below self-sustaining levels (elevated Baseline) or adversely affect the viability of the population of Owens pupfish at the Enrolled Property. The Tribe will coordinate with the Service prior to the removal of any individuals of Owens pupfish from the COSA. Qualified biologists from the Tribe and Service, and those assisting under their direct supervision, may capture and translocate Owens pupfish from the COSA for purposes of establishment at other sites. Translocations of Owens pupfish into other sites could occur multiple times over the 10-

year period of the Agreement, as deemed appropriate by the Parties, provided the elevated Baseline population level is maintained.

- After the elevated Baseline has been reached, the Tribe may designate a specific pond in which they will maintain a self-sustaining population of Owens pupfish (as described in Part 4 of this Agreement). Owens pupfish may be transferred from the originating pond to the designated pond, removed, or transferred to another site, provided that the elevated Baseline is maintained in the pond designated for that purpose. The Tribe may “restock” either Pond 1 from Pond 2 or vice versa, provided the elevated Baseline is maintained in the designated pond. The Tribe will coordinate with the Service prior to any transfer or removal of Owens pupfish. The Tribe would not change the designated pond more than once every 3 years over the 10-year period of the Agreement.
- The native vegetation in or adjacent to Pond 1 (and future Pond 2) will be managed in a manner to benefit the Owens pupfish for the 10-year period of the Agreement.
- If largemouth bass or any other non-native species that may prey upon Owens pupfish are detected within Pond 1 or Pond 2, the Tribe will conduct eradication activities. These eradication activities could occur multiple times over the 10-year period of the Agreement and will be coordinated with the Service.
- The Tribe will develop and implement programs to educate its members, visitors, and schoolchildren about the sensitive nature of listed species, which could occur multiple times over the 10-year period of the Agreement. The Tribe will conduct several educational events in the COSA with the public school district and the tribal educational program to educate students on the critical nature of the species and to learn basic ecological principles. The Tribe will participate in educational events annually sponsored by the Bureau of Land Management at Fish Slough and will make connections between that conservation area and the one at the COSA with respect to Owens pupfish and other endemic species.
- The Tribe plans to establish a small population of Owens pupfish in aquaria for public display at the Owens Valley Paiute-Shoshone Cultural Center and Museum (Cultural Center), which is located adjacent to the COSA. Providing the public with information and educational opportunities to increase their understanding of the status of the Owens pupfish is a recovery action in the species’ recovery plan, see Recovery Task 8.1 Recovery Information and Education (Service 1998). The Tribe will establish, house, and maintain four 40-gallon display aquariums and one 125-gallon aquarium inside the Cultural Center building. Each of the four 40-gallon aquariums will be dedicated to a single species and only house one species of the following: Owens pupfish, Owens speckled dace, Owens tui chub, or Owens sucker. The 125-gallon aquarium will house a few individuals of each the above mentioned species. In coordination with the Service, the Tribe will develop the Owens Native Fishes Aquarium Management and Maintenance Plan. The plan will be designed to provide guidance on the care of these species in the

aquaria, prioritizing the survival of Owens pupfish, for the 10 year duration of the Agreement at minimum. The Tribe will coordinate with the Service before any individuals of Owens pupfish are transferred from the COSA, or another site, to aquariums in the Cultural Center. No more than 20 Owens pupfish adults will be removed from the COSA, or another site, per year for purposes of being kept on display in aquaria. The number of Owens pupfish individuals that will be kept on display at the Cultural Center at any one time will be determined by the Parties. Any individuals of Owens pupfish in aquaria will not be returned to the wild.

- The Tribe will construct kiosks and informal signage to identify the presence of listed species at the COSA, and to describe and highlight the issues surrounding listed species that occur at the Enrolled Property within 3 years after the signing of the Agreement, and as resources and funding are available. Boardwalks, trails, and/or viewing platforms may be constructed to connect the refuge with the tribal cultural center, public elementary school, and senior center to reduce impacts to the Owens pupfish and its habitat from foot traffic.

#### **Other Management Activities**

These management activities relate to activities associated with the continued use of the Enrolled Property for cultural activities, ongoing activities, and activities associated with the maintenance and the management of the COSA for other purposes and activities not specific to conservation and recovery of the Owens pupfish. The Tribe would be covered for these activities provided these activities would not reduce the Tribe's ability to maintain the elevated Baseline conditions. These activities would be conducted in a way that would not interfere with the implementation of the beneficial activities described above. The Tribe would be covered in this Agreement for the following activities; provided such activities are consistent with the intent of this Agreement and are not contrary to the beneficial activities in this Agreement.

- Cultural and ceremonial activities.
- Cattle grazing and associated activities.
- Operation, management, and maintenance of the water supply and drainage system.
- Maintenance and associated activities, including: maintenance of boardwalks and walking trails; maintenance of kiosks and interpretive signs; fence installation and maintenance; fuel reduction and fire clearance activities; dredging or removal of sediment from the ponds; and clearing of vegetation within and around ponds.
- Management of the Enrolled Property for conservation of native species (i.e., invasive species control and native species restoration).

#### **Adaptive Management**

This Agreement covers activities associated with adaptive management of the Enrolled Property

for the purposes of establishing and maintaining the Owens pupfish and its habitat. The need for adaptive management may arise in case any unforeseen circumstances occur that could negatively affect the success of the translocation, establishment, and/or maintenance of the self-sustaining population of the Owens pupfish.

### **Avoidance and Minimization Measures**

The Tribe agrees to implement the following avoidance and minimization measures.

- Cattle will not be permitted within any area occupied by Owens pupfish. The Tribe will implement measures to prevent cattle from entering and disturbing areas occupied by Owens pupfish. A fence will be constructed to prevent cattle access into the area in the COSA occupied by Pond 1 and Pond 2.
- The Tribe will not intentionally introduce non-native fish species into the ponds at the COSA or other aquatic habitats within the Enrolled Property.
- To avoid and minimize effects to the Owens pupfish, the Tribe will ensure that all education and outreach event activities will not disturb the Owens pupfish or their habitats, or any other listed species or their habitats.
- The Tribe will ensure that its members and visitors (including schoolchildren) will be informed of the presence of any federally listed species that occur on the Enrolled Property and will be informed of areas that provide habitat for listed species. Members of the Tribe and visitors will be instructed to avoid disturbing listed species and their habitat.

The Tribe is committed to supporting listed species and their habitats at the Enrolled Property and will manage and maintain the property to provide benefits to native plants and wildlife. The Tribe has shown this commitment through their dedication to create and maintain suitable habitat for the Owens pupfish at the Enrolled Property with the intent for the translocation and establishment of the Owens pupfish.

## **6.0 INCIDENTAL TAKE OF COVERED SPECIES**

As used in this Agreement, incidental take refers to the unintentional or unavoidable killing or injuring of individuals of the Covered Species in the course of carrying out otherwise lawful activities. Section 3(19) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to,

breeding, feeding, or sheltering.

Safe harbor agreements are written in anticipation that take of the Covered Species and their progeny could occur at some point in the future. Any take that occurs as a result of a reduction in the quality and/or quantity of the established Baseline on the Enrolled Property is not authorized. Under this Agreement, incidental take could occur: (1) as a result of the Management Activities, described in Part 5 of this Agreement; (2) the monitoring described in Part 8 of this Agreement; and (3) as a result of the potential return to Baseline at the termination of the Agreement and its associated Permit. The Tribe may conduct these activities, even if such use results in the incidental take of individual Owens pupfish covered under this Agreement and as authorized in the Permit.

The Beneficial Management Activities have been developed with the intent to establish and maintain a self-sustaining population of the Owens pupfish at the Enrolled Property, while the Other Management Activities are not anticipated to impede the beneficial contribution to the status of the Owens pupfish.

### **Translocation and Establishment**

The Permit would authorize the Tribe, and persons associated with the Tribe, to incidentally take individuals of the Owens pupfish while conducting activities associated with the translocation and establishment of the species at the Enrolled Property. Such incidental take of Owens pupfish could occur as a result of activities associated with the capture and translocation of individuals from a source population(s) for establishment into suitable habitat at the COSA. Owens pupfish adults would be targeted during translocation activities, although eggs, larvae, or juveniles may be unintentionally encountered. As a result of these activities, incidental take could occur in the form of direct mortality or injury to eggs, larvae, juveniles, and/or adults through suffocation, desiccation, exposure, stranding, entrainment, or trampling by the Tribe or persons assisting the Tribe. Service biologists will also be authorized to incidentally take Owens pupfish while conducting the above activities under the Permit to assist the Tribe in the implementation of the Agreement. The number of individual Owens pupfish removed during any single capture and translocation event would be determined by the Service and would be no more than 10 percent of the source population estimate. Under no circumstances would the number of individual Owens pupfish removed from a source population exceed 500 individuals per translocation event. The time of year and source location(s) for any translocation and establishment activities would be determined by the Service in coordination with the Tribe.

### **Management Activities**

The Permit would authorize the Tribe, and persons associated with the Tribe, to incidentally take individuals of the Owens pupfish and their progeny at the Enrolled Property within and outside of the established Baseline area, as a result of the Management Activities. Incidental take of individuals within the established Baseline area cannot reduce the quality and/or quantity of the established Baseline area. Such incidental take of Owens pupfish on the Enrolled Property could occur as a result of: activities associated with maintaining, enhancing, and restoring habitat; cattle grazing and associated activities; operation, management, and maintenance of the water

supply and drainage system; monitoring; cultural and ceremonial activities; conducting education and outreach and associated activities; and hosting visitors and school field trips. As a result of these activities, incidental take could occur in the form of direct mortality or injury to eggs, larvae, juveniles, and/or adults through suffocation, desiccation, exposure, stranding, entrainment, digging, planting, cutting, or trampling by the Tribe or persons associated with the Tribe; and trampling by cattle. Service biologists will also be authorized to incidentally take Owens pupfish while conducting the above activities under the Permit to assist the Tribe in the implementation of the Agreement.

The Permit would provide the Tribe with incidental take coverage for individuals of Owens pupfish that could be taken as a result of becoming entrained, suffocated, desiccated, crushed, or stranded in an outflow structure or other project design elements. The Permit would authorize the incidental take of all Owens pupfish, in any life stage, that are killed or injured in an outflow structure or by other project design elements.

Additionally, the Permit would provide the Tribe incidental take coverage for a certain number of Owens pupfish that could be taken as a result of the Management Activities, as described above and in Part 5 of this Agreement, at the Enrolled Property, on a per year basis over the 10-year duration. The Permit would authorize the incidental take of the following number of Owens pupfish per year in the identified life stage, over the 10-year duration: two hundred fifty (250) adults; and fifty (50) juveniles, larvae, or eggs or combination thereof.

#### **Transfer within the COSA or Translocation to Other Sites**

After the elevated Baseline for the species at the Enrolled Property is reached, the Permit would authorize the Tribe, and persons associated with the Tribe, to incidentally take individuals of the Owens pupfish and their progeny while conducting activities associated with the transfer of individuals of the species to additional suitable habitat at the COSA (e.g., Pond 2) or translocation to other sites. The elevated Baseline conditions would be reached when the population of Owens pupfish at the COSA has been determined by the Parties to be self-sustaining, as described in Part 4 of this Agreement. Incidental take of Owens pupfish could occur during capture and translocation of individuals from Pond 1 for establishment into the future Pond 2, or from the COSA for establishment into other sites containing suitable habitat. Owens pupfish adults would be targeted during these activities, although eggs, larvae, or juveniles may be unintentionally encountered. As a result of these activities, incidental take could occur in the form of direct mortality or injury to eggs, larvae, juveniles, and/or adults through suffocation, desiccation, exposure, stranding, entrainment, or trampling by the Tribe or persons assisting the Tribe. Service biologists will also be authorized to incidentally take Owens pupfish while conducting the above activities under the Permit to assist the Tribe in the implementation of the Agreement. The number of individual Owens pupfish removed during any single capture, translocation, and establishment event would be determined by the Service and would be no more than 10 percent of the estimated population size at the COSA. The maximum number of individual Owens pupfish removed from the COSA population would not exceed 500 individuals per year unless a determination is made by the Service and Tribe that removing a greater number of individuals would not adversely affect the elevated Baseline. The

time of year and location(s) for any translocation and establishment activities would be determined by the Service in coordination with the Tribe.

Additionally, after the elevated Baseline has been reached, incidental take of Owens pupfish could occur as a result of activities associated with the transfer of individuals within the COSA if the Tribe decides to change which pond is the designated pond for Owens pupfish, per the Tribe's discretion in maintaining the elevated Baseline conditions as described in Part 4 of this Agreement. All individuals in all life stages in the pond that Owens pupfish would be transferred from would be subject to take as a result of the removal of individuals from this pond into the newly designated pond containing suitable habitat at the COSA. If the newly designated pond is currently supporting a self-sustaining population of Owens pupfish, individuals could be transferred to another site off of the COSA that contains suitable habitat within its historic range (provided appropriate permitting and other relevant regulations are met). Such incidental take of Owens pupfish could occur as a result of activities associated with the capture and translocation of individuals from this pond to another site containing suitable habitat. As a result of these activities, incidental take could occur in the form of direct mortality or injury to eggs, larvae, juveniles, and/or adults through suffocation, desiccation, exposure, stranding, entrainment, collection for cultural or ceremonial purposes, or trampling by the Tribe or persons assisting the Tribe. Incidental take resulting from these activities must not reduce the population of Owens pupfish at the Enrolled Property below the elevated Baseline (i.e., not below a self-sustaining population at the Enrolled Property, as defined in Part 4 of this Agreement). Service biologists will also be authorized to incidentally take Owens pupfish while conducting the above activities under the Permit to assist the Tribe in the implementation of the Agreement. The pond that is designated by the Tribe to be occupied by Owens pupfish for elevated Baseline purposes would change no more than once every 3 years over the 10-year duration.

### **Monitoring**

Incidental take of Owens pupfish could occur as a result of conducting survey and monitoring activities at the Enrolled Property. As a result of surveys and monitoring, incidental take of Owens pupfish could occur in the form of harassment, injury, or mortality to all life stages through exposure, suffocation, desiccation, stranding, entrainment, or trampling by the Tribe or persons associated with the Tribe. Service biologists will also be authorized to incidentally take Owens pupfish while conducting survey and monitoring activities under the Permit to assist the Tribe in the implementation of the Agreement. Additionally, during these survey and monitoring activities, Service biologists may capture and handle any Owens pupfish, in any life stage, for identification or other scientific purposes.

### **Return to Baseline Conditions**

The Permit would authorize the Tribe, and persons conducting activities on behalf of the Tribe, to incidentally take individuals of the Owens pupfish and their progeny as a result of activities associated with the return to Baseline conditions. The Baseline conditions are described in Part 4 of this Agreement and consist of (1) the Baseline area for suitable habitat and (2) the elevated Baseline for species presence. Because the Baseline area has been determined as the current area of suitable habitat for Owens pupfish - Pond 1, activities that would result in a return to Baseline

area could include those activities that would reduce or remove any additional suitable habitat that has been created or developed over the term of the Agreement, in addition to Pond 1 (i.e., reduction or removal of the intended future Pond 2). A return to the Baseline area could entail altering (the future) Pond 2 to a condition that would no longer provide suitable habitat for Owens pupfish, such as ceasing the supply of water or removal of habitat, or could include bulldozing and filling the pond. Incidental take of Owens pupfish (including adults, juveniles, larvae, and eggs) could occur, as a result of the return to the Baseline area at the Enrolled Property, in the form of direct mortality or injury to Owens pupfish through habitat loss, suffocation, desiccation, exposure, stranding, entrainment, digging, planting, cutting, or trampling by the Tribe or persons associated with the Tribe. The Permit would authorize the incidental take of all Owens pupfish outside the Baseline area that could result from activities associated with the return to Baseline area. The Permit would not authorize incidental take of Owens pupfish within the Baseline area based on activities associated with the return to Baseline conditions. For instance, if Owens pupfish are occupying Pond 1 at the end of the Permit term, there should be no alteration to that habitat or to the population in Pond 1 involved with return to Baseline, and thus no incidental take. But if Owens pupfish are occupying Pond 2 at the end of the Permit term, which could be destroyed as a result of return to Baseline, there could be incidental take relating to the capture and relocation of Owens pupfish from Pond 2 to Pond 1. Because the elevated Baseline for Owens pupfish consists of its suitable habitat being occupied by a self-sustaining population of the species at the COSA, a return to Baseline could result in the removal of individuals from any additional habitat that has been created over the term of the Agreement. A return to the elevated Baseline could entail removing all individuals of Owens pupfish in all life stages in any newly created habitat areas (e.g., Pond 2), provided that a self-sustaining population of Owens pupfish remains at the Enrolled Property. Such incidental take of Owens pupfish could occur as a result of activities associated with the capture and translocation of individuals. Incidental take of Owens pupfish could occur, as a result of the return the elevated Baseline, in the form of direct mortality or injury to Owens pupfish (including adults, juveniles, larvae, and eggs) through exposure, suffocation, desiccation, stranding, entrainment, or trampling by the Tribe or persons associated with the Tribe. Service biologists will also be authorized to incidentally take Owens pupfish while conducting the above activities under the Permit to assist the Tribe in the implementation of the Agreement. The Permit would authorize the incidental take of all Owens pupfish that could result from activities associated with the return to the elevated Baseline.

The Parties expect that the potential take authorized under this Agreement and Permit will be reduced because the Tribe will implement the avoidance and minimization measures in Part 5 of this Agreement. Additionally, the potential take will be reduced because, as identified in Part 8 of this Agreement, the Tribe is required to notify the Service of any planned activity that the Tribe reasonably anticipates will result in take of the Owens pupfish on the Enrolled Property, including a return of the Enrolled Property to the identified Baseline conditions, and provide the Service the opportunity to capture and relocate any individuals that could potentially be affected. Incidental take of Owens pupfish could occur in the form of capture as a result of these activities. The Permit would authorize Service biologists to capture Owens pupfish for such activities.

Certain activities by the Tribe, which will not be considered a limitation on any other activity the Tribe desires to engage in, that may result in incidental take of the Owens pupfish are: 1) emergency maintenance of the water supply and drainage system; and 2) activities associated with fire prevention, suppression, and response.

## **7.0 NET CONSERVATION BENEFIT**

In accordance with the Service's Safe Harbor Policy (64 FR 32717), "net conservation benefit" means that management activities that are part of the Agreement are expected to provide an increase in the Covered Species' population or distribution, and/or the enhancement, restoration, or maintenance of Covered Species habitat. The net conservation benefit will be sufficient to directly and indirectly contribute to recovery of the Owens pupfish.

This Agreement would establish the fourth population of Owens pupfish in the Owens Valley. Translocating Owens pupfish to the COSA provides the opportunity to create the most genetically diverse contemporary population of Owens pupfish, and reduce the effects that habitat fragmentation and associated genetic isolation have had on the species by including individuals from each of the currently isolated populations into the new population at the COSA.

The destruction and loss of habitat and negative effects from non-native species continue to threaten the survival and recovery of the Owens pupfish. Activities associated with this Agreement are anticipated to translocate and establish a self-sustaining population of the Owens pupfish and maintain, enhance, and create habitat for the species at the Enrolled Property. The Tribe's implementation of the activities identified in Part 5 of this Agreement would be highly beneficial to the Owens pupfish.

The creation and maintenance of small, often intensively managed, populations have prevented the extinction of the Owens pupfish. The Owens pupfish is a species that is short-lived and currently survives in only three small, isolated populations: the population at Fish Slough, consisting of three sub-populations; the population at Mule Spring; and the population at Well 368. Species under such circumstances are vulnerable to extinction as a result of stochastic (i.e., random) threats (Shaffer 1981). The translocation and establishment of additional populations of Owens pupfish reduces the potential of extinction from stochastic events. The Beneficial Management Activities in Part 5 of this Agreement have been developed to support the conservation and recovery of the Owens pupfish. The translocation and establishment of the Owens pupfish in suitable habitat and the maintenance of suitable habitat are recovery actions for the Owens pupfish as identified in its recovery plan (Service 1998). Therefore, management activities associated with this Agreement would benefit the Owens pupfish by contributing to its conservation and recovery. The Service anticipates that implementation of these management activities will produce a net conservation benefit to the Owens pupfish by:

- Establishing a population of the Owens pupfish at the Enrolled Property.

- Providing areas where existing suitable habitat for the Owens pupfish will be maintained and increased in quantity and quality.
- Providing areas where suitable habitat for the Owens pupfish will remain relatively undisturbed.

Under this Agreement, the Tribe will conduct translocation and associated activities to establish a self-sustaining population of the Owens pupfish, make habitat available to the Owens pupfish, and will maintain and manage the Owens pupfish and its habitat for a period of 10 years.

## **8.0 RESPONSIBILITIES OF THE PARTIES**

In addition to carrying out the management activities described in Part 5, the Tribe agrees to:

1. Notify the Service at least 60 days in advance of any planned activity that the Tribe reasonably anticipates will result in take of any individual of the Covered Species on the Enrolled Property, including a return of the Enrolled Property to the Baseline conditions described in Part 4 of this Agreement, and provide the Service the opportunity to capture and relocate any individuals that could potentially be affected.
2. Conduct surveys for Owens pupfish in suitable habitat as follows. When possible, the Service will assist the Tribe in these surveys; however, Service agreement to assist is limited by its authorities, workload priorities, and appropriated funds, as stated in Part 12.D of this Agreement.
  - Surveys will be conducted annually according to the species monitoring plan that will be developed by the Parties.
  - During these surveys, Service biologists may capture and handle any Owens pupfish, in any life stage, for scientific purposes.
  - The results of these surveys, including whether any Owens pupfish were observed, and the species of all fish detected, will be reported to the Service.
3. The Tribe will monitor the implementation and progress of the Management Activities in Part 5 of the Agreement, and provide the Service with the status of these activities in an annual report.
4. Allow reasonable access by the Service onto the Enrolled Property for purposes related to this Agreement, including: the translocation and establishment of the Owens pupfish; the verification of the identification of species using voluntarily established or enhanced habitats; the maintenance of Owens pupfish habitat; the eradication of non-native predatory species; surveys and monitoring; the implementation of the Beneficial

Management Activities in Part 5 of this Agreement; and capture and relocation of Owens pupfish.

5. Notify the Service at least 60 days prior to the transfer of ownership so that the Service can attempt to contact the new owner, explain the elevated Baseline responsibilities applicable to the Enrolled Property, and seek to interest the new owner in signing the existing Agreement or a new one to benefit the Covered Species on the Enrolled Property.
6. Notify the Service if any Tribal member or employee observes at the Enrolled Property: a substantial and unplanned change in any water depth in a pond(s) occupied by Owens pupfish; a failure in the water supply or drainage system that would affect a pond(s) occupied by Owens pupfish; signs of water pollution; or an unusual mortality event of Owens pupfish. This notification will be provided within three (3) working days, preferably sooner, via telephone to the Service's Ventura Fish and Wildlife Office at (805) 644-1766; attention Assistant Field Supervisor, Desert Division. The verbal notification will include the date, time, location, cause if known, and any other pertinent information. Every effort will be made to speak directly with the identified individual above or an alternate acting on their behalf.

If an unusual mortality event of Owens pupfish is observed, an email message or written report, containing the detail from the verbal notification, must be sent to the Ventura Fish and Wildlife Office and, if possible a photograph(s), within three (3) weeks of its finding. The person to whom the message is sent, and corresponding email address if applicable, would be determined at the time of the phone call.

7. Provide the Service with an annual report (Attachment 1), due November 1 of each year for the prior calendar year. The report will describe any translocation and establishment activities, any habitat restoration activities, any substantial change in condition of the Covered Species population and/or its habitat that occurred during the previous year, any observations of the Covered Species by the Parties during the previous year, and any incidental take of the Covered Species that has occurred.

In consideration of the foregoing, the Service agrees to:

1. Upon execution of the Agreement and satisfaction of all other applicable legal requirements, issue a Permit to the Tribe, authorizing incidental take of the Covered Species, as a result of lawful activities on the Enrolled Property in accordance with the terms of such Permit. The duration of the Agreement will be 10 years, and the duration of the Permit will be 10 years.
2. As appropriate, provide the Tribe with a determination that they have fulfilled the terms of this Agreement within 1 year of the expiration of the Agreement.

3. Provide the Tribe with technical assistance when requested, and provide information on Federal funding programs for habitat improvement including those for threatened and endangered species.
4. Assist the Tribe with the translocation and establishment, and survey and monitoring activities for the Owens pupfish; however, Service agreement to assist is limited by its authorities, workload priorities, and appropriated funds.

## **9.0 AGREEMENT AND PERMIT DURATION**

This Agreement becomes effective upon issuance of the Permit by the Service. The Agreement will be in effect for 10 years. The Permit authorizing incidental take of the Owens pupfish will be in effect for 10 years from the effective date of the Permit (i.e., the date the Permit is signed). Both the duration of the Agreement and the Permit may be extended upon mutual agreement among the Parties.

## **10.0 ASSURANCES TO THE TRIBE REGARDING TAKE OF COVERED SPECIES**

This Agreement will provide the Tribe with assurances that efforts to promote the conservation and recovery of the Owens pupfish on the Enrolled Property will not result in additional restrictions on the use of the Reservation.

The Permit will authorize the Tribe to take Owens pupfish incidental to the Management Activities identified in Part 5 of this Agreement, the surveys and monitoring described in Part 8 of this Agreement, and as discussed in Part 6 of this Agreement, provided that such take is consistent with maintaining the Baseline conditions identified in Part 4 of this Agreement. Additionally, the Permit will authorize the Tribe to take Owens pupfish incidental to the return of Enrolled Property to Baseline conditions.

## **11.0 MODIFICATIONS**

A. Modification of the Agreement. Either Party may propose amendments to this Agreement, as provided in 50 CFR 13.23, by providing written notice to, and obtaining the written concurrence of, the other Party. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will use their best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Parties' written concurrence.

B. Termination of the Agreement. As provided for in the Service's Safe Harbor Policy (64 FR 32717), the Tribe may terminate the Agreement for circumstances beyond the Tribe's control. In such circumstances, the Tribe may return the Enrolled Property to the Baseline conditions

identified in this Agreement even if the net conservation benefit activities have not been fully implemented, provided that the Tribe gives the Service the notification required by Part 8 of this Agreement prior to carrying out any activity likely to result in the taking of the Covered Species. Upon return to Baseline under these circumstances, the Permit will terminate. If the Tribe terminates the Agreement for any other reason, the Permit referenced in Part 8 of this Agreement shall immediately cease to be in effect.

C. Permit Suspension or Revocation. The Service may suspend or revoke the Permit referred to in Part 8 of this Agreement 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 the Covered Species (50 CFR 13.28(a)). In such circumstances, the Service will exercise all possible measures to avoid revoking the Permit.

D. Baseline Adjustment. The Baseline conditions set forth in Part 4 of this Agreement may, by mutual agreement of the Parties, be adjusted if, during the term of the Agreement and for reasons beyond the control of the Tribe, the utilization of the Enrolled Property by the Covered Species or the quantity or quality of habitat suitable for or occupied by the Covered Species is reduced from what was at the time the Agreement was negotiated.

## **12.0 OTHER MEASURES**

A. 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.

B. Dispute Resolution. The Parties agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Parties.

C. Succession and Transfer. As provided in Part 11 of the Service's Safe Harbor Policy (64 FR 32717), if the Tribe transfers their interest in the Enrolled Property to another non-Federal entity, the Service will regard the new owner or manager as having the same rights and responsibilities with respect to the Enrolled Property as the Tribe, if the new owner or manager agrees to become a party to the Agreement in place of the Tribe.

D. Availability of Funds. Implementation of this Agreement by the Service 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.

E. Applicable Laws. All activities undertaken pursuant to this Agreement and its associated Permit must be in compliance with all applicable state, Federal, tribal, and local laws and regulations.

F. Relationship to the Act and other Authorities. The terms and conditions of this Agreement shall be governed by and construed in accordance with the Act and applicable Federal law. In particular, nothing in this Agreement is intended to limit the authority of the Service to seek penalties or otherwise fulfill its responsibilities under the Act. Moreover, nothing in this Agreement is intended to limit or diminish the legal obligations and responsibilities of the Service as an agency of the Federal government.

G. No Monetary Damages. No Party shall be liable in damages to any other Party or other person for any breach of this Agreement, any performance or failure to perform a mandatory or discretionary obligation imposed by this Agreement, or any other cause of action arising from this Agreement.

H. 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.

I. Other Listed Species, Candidate Species, and Species of Concern. There is the possibility that other listed, proposed, or candidate species, or species of concern may occur in the future on the Enrolled Property as a direct result of the management actions specified herein. In the event that a non-covered species that may be affected by covered activities becomes listed under the Act, the Tribe and the Service will work together either to amend this Agreement, and the Permit described in Part 8 of this Agreement, to cover such other species or otherwise to confer upon the Tribe similar assurances with respect to such other species as are described above for the Covered Species.

J. Notices and Reports. Any notices and reports, including monitoring and annual reports, required by this Agreement shall be delivered to the person at the address listed below:

U.S. Fish and Wildlife Service  
2493 Portola Road, Suite B  
Ventura, California 93003  
Attn: Field Supervisor

K. Pursuant to Section 22, Title 41, United States Code, it is further mutually agreed that no member of or delegate to Congress or resident commissioner, after their election or appointment, and either before or after they have qualified and during their continuance in office, shall be admitted to any share or part of the Agreement, or to any benefit to arise thereupon; but this

provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit.

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.

**U.S. Fish and Wildlife Service**

By: \_\_\_\_\_

Field Supervisor, Ventura Fish and Wildlife Office

\_\_\_\_\_

Date

**Bishop-Paiute Tribe**

By: \_\_\_\_\_

Tribal Chairman, Bishop Paiute Tribe

\_\_\_\_\_

Date

## LITERATURE CITED

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**Figure 1. Location of Conservation Open Space Area (COSA)**



**Figure 2. Conservation Open Space Area (COSA) – Approximation of Ponds 1-4**

Figure 2



0 75 150 300 450 600 Feet

Red Line - 24.8 Acre COSA (Area of Potential Effects)  
Dark Blue - Constructed Ponds/Infrastructure  
Light Blue - Proposed Ponds/Infrastructure

**Attachment 1.**

**Annual Monitoring Report for Safe Harbor Agreement  
between the U.S. Fish and Wildlife Service  
and Bishop Paiute Tribe**

**Permittee's Name:** Bishop Paiute Tribe

**Permit Tracking Number:** TE-XXXXXX-0

**Location:** Conservation Open Space Area, Bishop Paiute Tribe Reservation, Inyo County, California

**Agreement Approved by:** Ventura Fish and Wildlife Office

**Species:** Owens pupfish

**Monitoring Program:** Describe in general terms the monitoring program for the current year pursuant to Part 8 of the Safe Harbor Agreement. Annual reports are designed to provide information to the Service concerning the effects and effectiveness of the Agreement's conservation actions for the Permitted Species, as well as to determine if the conservation actions the Permittee undertakes meet the Service's Safe Harbor Policy "standard." The monitoring report will document any changes in the condition of individuals of the Permitted Species or their habitat over time and will denote whether the data provided is from the Permittee, a professional scientist, or other specific individual or entity. Photographs are helpful but may not be required.

**Date Annual Report is Due:** On or before November 1, for the prior calendar year

**Date Annual Report was Received:** \_\_\_\_\_

**Date Annual Report was Reviewed:** \_\_\_\_\_

**Signature of Reviewer:** \_\_\_\_\_

**Printed Name and Phone # of Reviewer:** \_\_\_\_\_

**Management and Conservation Actions:** Please write a summary of the actions taken to date and the results of the actions taken on each of the management and conservation actions (attach additional pages if necessary).