SAFE HARBOR AGREEMENT
FOR VOLUNTARY ENHANCEMENT/RESTORATION ACTIVITIES BENEFITING LAHONTAN CUTTHROAT TROUT ON NON-FEDERAL LANDS WITHIN THE UPPER HUMBOLDT RIVER DISTINCT POPULATION SEGMENT AREA

1.0 INTRODUCTION

This Safe Harbor Agreement (Agreement) is made and entered into on the 23rd day of June, 2006, by the Nevada Department of Wildlife (NDOW or Permittee) and the U.S. Department of Interior, Fish and Wildlife Service (Service); hereinafter collectively called the "Parties". This Agreement will serve as a programmatic agreement under which non-federal landowners ("Cooperators") will be enrolled through Cooperative Agreements (CAs) and Certificates of Inclusion (CIs) with the Permittee. This Agreement implements the Service's Safe Harbor Agreement final policy (FR 64:32717) and final regulations (FR 64:32706) as revised (FR 69:24084), in accordance with the procedural and substantive requirements of section 10(a)(1)(A) of the Endangered Species Act, as amended (ESA).

NDOW is the State agency responsible for the restoration and management of fish and wildlife resources within a majority of Nevada's lands and waters. These resources include 109,894 square miles of land, 667 square miles of water and 529 streams that flow 2,765 miles. There are 892 species of mammals, reptiles, fish, birds, and amphibians under NDOW's jurisdiction. Of that number, 790 species are native and 64 are found only in Nevada. In order to most effectively meet these responsibilities, NDOW has one State-wide office, three regional offices and three additional satellite offices.

NDOW has been involved in Lahontan cutthroat trout, *Oncorhynchus clarki henshawi* (LCT), a federally-listed threatened species, management, restoration, and recovery since the early 1970's and reached a new level of responsibility after developing species management plans for the majority of LCT's historic range (e.g., Elliott and Layton 2005). These plans describe activities and direction designed to move LCT towards recovery and subsequent de-listing throughout its historic range.

This Agreement encourages proactive conservation efforts by non-Federal landowners to benefit LCT by providing regulatory assurances that future property-use restrictions will not be imposed if those efforts attract the species to their enrolled property or result in increased numbers or distributions of the species already present. In return for voluntary conservation commitments, the Agreement will extend to the Cooperators assurances allowing future alteration or modification of the enrolled property to attain established baseline conditions, if desired. Without this cooperative government/private effort, LCT would not otherwise occupy important recovery habitats in the foreseeable future.

This Agreement serves as the basis for the Service to issue an Enhancement of Survival permit (Permit) under section 10(a)(1)(A) of the ESA for the "take" of covered, listed species associated with the potential return of the Cooperator's enrolled lands to baseline conditions. Under the Safe Harbor Permit that accompanies this Agreement, NDOW can issue CIs to landowners (Cooperators) who agree to carry out habitat improvements and/or habitat maintenance for LCT and abide by the conditions of the CI/CA. The Parties anticipate that the maximum level of take authorized under this Agreement and Permit will never be realized. Permit issuance will not preclude the need to abide by all other applicable Federal, State, and local laws and regulations that may apply.

This Agreement covers proposed management activities on non-federal land and waters within the historic and current range of the Humboldt River Distinct Population Segment (DPS) of LCT. The Humboldt DPS area consists of the upper Humboldt River basin population segment of LCT as delineated in the Service's 1995 LCT Recovery Plan (Recovery Plan), excluding the North Fork of the Little Humboldt River and its tributaries, and Rock Creek in the Sonoma Range (U.S. Fish and Wildlife Service 1995; Attachment A). The Humboldt DPS area also includes several introduced populations in central Nevada (Interior Subbasin) which have LCT populations with management significance. Under this Agreement, NDOW will enroll willing non-federal landowners in CAs to develop recovery activities and strategies while providing protections and assurances for incidental takings of LCT on enrolled lands.

Landowners enrolled with NDOW under the Agreement will receive CIs (Attachment B) when they sign CAs (Attachment C). The CA will include:

- a map of the property;
- the portion of the property to be enrolled and its stream mileage/feet;
- the property's baseline and biological assessment which would include a thorough stream analysis (with photographs) of the enrolled stream miles/feet;
- the specific conservation measures to be carried out; and,
- the responsibilities of both the landowner and NDOW.

2.0 PURPOSE AND NEED

The purpose of this Agreement is to enhance the reintroduction and long-term recovery of LCT within the Humboldt DPS area by encouraging non-federal landowners to voluntarily create, enhance, maintain, or restore LCT populations and habitat.

The primary objective of this Programmatic Agreement is to encourage voluntary habitat restoration, maintenance, or enhancement activities that benefit LCT by relieving a landowner, who enters into and implements the provisions of a CA with NDOW, from any additional section 9 liability under the ESA beyond which exists at the time the CA is signed (baseline responsibilities). In other words, the objective is to give Cooperators "safe harbor" from added liability. The Agreement encourages landowners and assures them that they will not be subjected to increased restrictions should their beneficial stewardship

efforts result in an increased LCT population. As long as landowners carry out agreed upon conservation measures on their property and maintain their baselines to the maximum extent practicable, they may continue or undertake future management activities.

The Upper Humboldt River Drainage Basin is located in northeastern Nevada, encompassing portions of Elko, Eureka, Lander, and Nye counties (Attachment A). Historically, LCT may have occurred in as much as 2,210 miles of habitat in the Upper Humboldt Basin during wet cycles. Based on the most recent population sampling in the Upper Humboldt Basin, LCT now occupy only 71 streams and an estimated 179 miles of habitat. The two primary causes of this population decline have been the degradation of aquatic habitat and the introduction of non-native trout (Elliott and Layton 2005).

Of the major subbasins within the Humboldt River Basin occupied by LCT, the Marys River Subbasin has the highest potential miles of LCT habitat (180) and the greatest potential for connectivity as exhibited by stable flows, riparian habitat, core subpopulations, and presence of LCT spawning and rearing habitats among connected tributaries. Others with the strongest potential include the South Fork Little Humboldt River, Rock Creek, and Maggie Creek. Those subbasins with less favorable conditions include the South Fork Humboldt River, Reese River, North Fork Humboldt River, East Humboldt River Area, and Pine Creek. Within each subbasin, priority, potential, and isolated LCT areas have been identified as focus areas for immediate and future recovery actions (see Elliott and Layton 2005 for descriptions and subbasin maps). Isolated, genetically pure LCT populations also occur within several streams in the Interior Subbasin as a result of early transplant efforts. Qualified lands adjacent to these streams are included within the scope of this Agreement because of their close proximity and the importance of those LCT subpopulations as potential donor sources.

Efforts to recover this species without involving and incorporating non-federal lands and landowners may impact our ability to make measurable progress toward LCT recovery. It is with this acknowledgement that NDOW intends to enroll private landowners willing to allow the introduction or expansion of LCT within their non-federal lands and associated waters into CAs. CA/CIs will offer protections and assurances to allow for inadvertent takings of LCT for individuals who agree to provide voluntary conservation benefits to the species within their non-federal holdings. Additionally, Cooperators may cancel their CAs at anytime and return to the established baseline conditions.

3.0 LIST OF COVERED SPECIES

This Agreement only covers the Lahontan cutthroat trout, which is a unique subspecies of the cutthroat trout complex endemic to the Lahontan basin of Nevada, Oregon and California. LCT was once distributed throughout the basin and drainages of ancient Lake Lahontan, but currently within the Humboldt DPS area are forced to survive as small populations in isolated headwaters of streams in many mountain ranges in Nevada. Settlement of the Great Basin resulted in the loss of LCT habitat as livestock grazing,

urban and mining development, water diversions, hybridization, and competition with non-native trout led to significant declines in the range and numbers of this unique trout species. In response to these declines, it was listed as an endangered species in 1970 by the Service and subsequently reclassified as a threatened species in 1975. The threatened designation allowed the Service to promulgate regulations which facilitate management actions and allow regulated angling.

LCT were historically common in the subbasins constituting the Humboldt River system, occupying an estimated 2,210 miles of stream habitat (Coffin 1983). Presently, LCT are believed to occupy a total of 71 streams with approximately 179 miles of stream habitat (Elliott and Layton 2005). Recovery actions in the Humboldt River drainage are a high priority in the Service's 1995 Lahontan Cutthroat Trout Recovery Plan (U.S. Fish and Wildlife Service 1995).

To facilitate recovery of LCT, the Humboldt DPS Team (Team) was formed in 1999. Members of the Team are comprised of personnel from the Service, NDOW, Bureau of Land Management, U.S. Forest Service, and University of Nevada, Reno. Expanding on the themes identified in the 1995 Recovery Plan, the Team has been working to restore habitat and networked populations based upon the results of recent research.

4.0 RESPONSIBILITIES

The following are the responsibilities of NDOW, the Service, and Cooperators. Representatives of the Parties may include the Humboldt DPS Team, if available and if acceptable to Cooperators. However, their participation will not be required.

NEVADA DEPARTMENT OF WILDLIFE:

a) Administer the Permit which includes enrolling individual landowners via CIs and CAs. Upon signing of a CA, issue a CI to a Cooperator authorizing incidental take of LCT on the enrolled properties.

b) Provide copies of the draft CAs to the Service for review and concurrence with the recommended activities, baselines, and biological assessments.

c) Lead preparation and completion of the biological assessments and determination of baseline conditions in collaboration with the Service and Cooperators.

d) Provide a qualified biologist(s) for coordinated implementation of the biological and compliance monitoring as needed on an annual basis.

e) Provide copies of all finalized CIs and CAs to the Service within 30 calendar days of their execution.

f) Provide an annual report to the Service in accordance with Section 12.3.

g) If warranted, recommend procedures/actions Cooperators may implement to avoid future take based on any take which occurred as described in past annual reports.

h) Provide notification of non-compliance to the responsible Cooperators and the Service within 30 calendar days of the compliance monitoring results. If warranted, collaborate with the Service and Cooperator to identify actions needed to obtain compliance.

U.S. FISH AND WILDLIFE SERVICE:

a) Upon satisfaction of all other applicable legal requirements, issue a Safe Harbor Permit to NDOW in accordance with ESA section 10(a)(1)(A), authorizing take of LCT as a result of lawful activities within the enrolled property. The term of the permit will be 50 years.

b) Provide NDOW comments within 15 business days of receiving a draft CA. If no comments are received within this period, NDOW may proceed to finalize the CA.

c) Develop biological assessments and determine baseline conditions with NDOW for a minimum of the first five CAs. After this period of calibration between the two Parties' finishes, NDOW will submit their biological assessment (See Section 12.2) with the CA for the Service's concurrence unless a unique situation arises which warrants both Parties involvement.

d) Provide a qualified biologist(s) for coordinated implementation of the biological and compliance monitoring as needed on an annual basis.

e) If warranted, recommend procedures/actions Cooperators may implement to avoid future take based on any take which occurred as described in past annual reports.

f) If warranted, collaborate with NDOW and the responsible Cooperators to identify actions needed to obtain compliance.

COOPERATORS

a) Comply with their individual CA; and

b) Provide reasonable access to his or her property for NDOW and the Service, and/or their representatives.

In addition to the above obligations, the Parties agree to 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.

5.0 BASELINE DETERMINATION

The Parties understand that the Permittee may enroll a wide variety of non-federal lands that could have a wide degree of baseline conditions. It is understood that baseline determinations will be made at a site-specific level and described in individual CAs to capture each unique situation. Baseline may be determined as numbers/populations of LCT, habitat conditions, or both. Typically, baseline determinations will be based on habitat conditions due to the migratory behavior of the species and the need to reestablish networked populations. Habitat conditions which define baseline will be detailed in each individual CA based on each particular situation and will be based on a variety of conditions such as stream width, riparian vegetation, substrate, etc. Enrollment of non-federal lands will allow LCT to access many miles of publicly-owned stream habitat for LCT restoration and recovery activities that is currently not useable.

6.0 DESCRIPTION OF ENROLLED LANDS

This Agreement will cover all or portions of the Humboldt DPS area for LCT (Attachment A). Enrolled properties may include any non-Federal land within the Humboldt DPS area that has, or could become, aquatic habitat suitable for LCT. Enrolled properties are those areas under the enrollee's jurisdiction over which Safe Harbor assurances apply and on which incidental take of the covered species is authorized.

The potential enrollment properties may be any private land associated with perennial streams, springs, ponds, lakes or other waterbodies within the Humboldt DPS area. Major tributaries include the North and South Forks of the Humboldt River, Marys River, Reese River, Maggie Creek, Susie Creek, Pine Creek, Rock Creek, and the Little Humboldt River. Lands associated with Interior streams outside the historic range for LCT but which are currently occupied (as a result of past transplanting efforts) may also be included[1]. The potential covered lands may range in elevation from about 4,000 to 9,500 feet and represent many of the northern Great Basin vegetative communities that include bulrush (*Scirpus spp.*), cattail (*Typha spp.*), cottonwood (*Populus spp.*), willow (*Salix spp.*), aspen (*Populus tremuloides*), saltgrass (*Distichlis spicata*), wildrye (*Elymus cinereus*), greasewood (*Sarcobatus vermiculatus*), rabbitbrush (*Chrysothamnus spp.*), and sagebrush (*Artemisia tridentata*). Land used for ranching or agriculture may be dominated by grassland forage, alfalfa, hay, potatoes, and grains.

1 These include Santa Fe, Shoshone, Mosquito, South Fork Thompson, Decker, Moores, and West Fork Deer Creeks.

7.0 LANDOWNER MANAGEMENT ACTIVITIES FOR COVERED SPECIES

Customary management actions considered covered under the Permit for which take may be authorized on the enrolled lands relate to livestock management (e.g., numbers of livestock, season of livestock use, type of livestock, stocking rates, frequency of grazing, livestock water supply), agriculture practices (e.g., crop planting and harvest, irrigation timing, duration, volume, run-off management, water source and diversions), and recreation (e.g., fishing and hunting). These management actions may result in takings of LCT, but take should be minimized by implementing the conservation measures that will be included in the CAs. Incidental take covered by CA/CIs does not include any take that reduces the number of LCT or occupied habitat, or habitat needed for metapopulation connectivity and/or migration patterns under various water years below the established baseline. LCT expansion into these non-Federal lands and associated public lands will allow reconnection of streams previously unused by LCT, achieving the networked populations vital to LCT long-term recovery.

8.0 CONSERVATION MEASURES

Conservation measures may be implemented on enrolled properties to assist with the recovery of LCT and will be as varied as the types of lands and landowners. While this section lists many possible conservation measures for each management action, all possible measures cannot be anticipated. Each Cooperator will not be expected to implement the full set of measures. The conservation measures to be implemented will be specific to each individual's baseline, habitat conditions, and management needs.

Conservation measures implemented by the landowner to manage livestock grazing to meet a desired habitat goal may contain the following elements: control of stocking rates (number/density of animals per unit area), manipulation of grazing season, and/or changes in duration, frequency and livestock types. Other measures may include livestock exclusion fencing, off-site water development, and herding strategies.

Private landowners actively farming to produce an agriculture crop will have the opportunity to implement a multitude of conservation measures to improve habitat conditions for LCT. Agriculture conservation measures could include crop selection, establishment of riparian buffer zones, and fertilizer and land disturbance (plowing and tilling) management. Manipulations in flow diversion timing, duration, and volume may be implemented as well as runoff minimization practices.

These grazing and agriculture mitigation measures may be used to minimize sediment production, algae blooms, water temperature increases, and water quality degradation, as well as to provide for increases in stream flows and improvements in riparian habitat conditions.

Several additional conservation measures that may be implemented include road or trail management (including improved crossings or fish passage structures), riparian vegetation plantings, rehabilitation projects, and stream habitat improvement projects. Other options may exist that are not apparent until a willing landowner and biologist have the opportunity to exchange ideas. The overall goal is to produce conservation measures that are mutually beneficial to the Cooperator and the long-term existence of LCT. As conservation measures are formulated, they will be included in that landowner's specific CA and added to a growing list of conservation measures for future use.

9.0 DURATION

The Service's Safe Harbor Policy states that the length of Agreements must be of sufficient duration to reasonably allow enough time to achieve the expected 'net conservation benefit' for the listed species. This Agreement becomes effective upon issuance of the section 10(a)(1)(A) Permit, and will be in effect for 50 years. Except as otherwise provided by this Agreement, the section 10(a)(1)(A) Enhancement of Survival Permit will also have a duration of 50 years from its effective date. This time frame allows enough time to implement fully functional networked populations within a watershed or basin. Given the probable species response time to the planned conservation measures outlined in Section 8, the Service estimates it may take five years of implementing the CA to fully reach a net conservation benefit for the species, although some level of benefits will likely occur within a shorter time period. It is reasoned that actions needed to support a networked population are typified as follows: one year to construct riparian fencing, two years of livestock management to enhance riparian and stream habitats, and at least two years to repopulate or reintroduce LCT; hence the five-year time frame.

The 50-year term of the Permit will be advantageous to NDOW because of the longer time period available to plan and implement future land-use activities. This extended period will benefit species conservation because impacts associated with take of individuals or habitat above the baseline may not occur in the short term. The Agreement and Permit may be extended beyond their specified durations through amendment, upon agreement of NDOW and the Service.

NDOW may enroll Cooperators under CAs from the date this Agreement becomes effective until ten years prior to its termination. Obligations under CAs will be in effect variable lengths of time, depending on the property covered and the agreement of the Cooperator and NDOW. However, the minimum duration of obligations will be for ten years. Upon signing a CA, NDOW will issue a CI to the Cooperator authorizing incidental take of LCT on the Cooperator's land.

10.0 ASSURANCES TO COOPERATORS REGARDING TAKE OF COVERED SPECIES

Under this Agreement, NDOW is authorized to enroll private landowners via the CAs and CIs, in efforts to sustain LCT on their properties. Cooperators may continue current land use practices or undertake other lawful activities on their property that are covered under the CAs, as long as these activities do not result in take of LCT or habitat below the established baseline. If any Cooperator anticipates an activity that could result in take of LCT or habitat, NDOW and the Service and/or their representatives, should be given an opportunity to capture and/or relocate LCT out of harms way.

To return the enrolled property to baseline conditions, a Cooperator must demonstrate that baseline conditions were maintained and the conservation measures identified in the CAs were carried out for the duration of the CA. Under such circumstances, a Cooperator may take LCT individuals or habitat and return conditions to the established baseline before the CA/CI expires to avoid accruing additional take liability under the ESA. However, no species or habitat may be impacted until the Cooperator has given NDOW, the Service, and/or their representatives at least 30-days prior notice so that individuals can be relocated.

11.0 NET CONSERVATION BENEFIT

Historically, LCT occurred in what were considered networked populations or metapopulations (Ray *et al.* 2000; U.S. Fish and Wildlife Service 1995), which refers to a collection of discrete local breeding populations. The potential for networked populations to persist despite local catastrophes has long been recognized. Networked populations are those where individuals experience different environmental conditions at different locations, but are capable of moving between these locations at sufficient rates to modulate population fluctuations that might otherwise lead to local extinction (Ray *et al.* 2000). The presence of several subpopulations increases the probability that at least one will survive through periods of disturbance and consequently protect the genetic variation available for adaptation to change.

Research shows that LCT population persistence is associated with the ability to maintain connectivity among populations, i.e., networked populations. A networked system is defined as an interconnected, stream and/or stream-lake system in which individuals can migrate from or disperse into areas from which fish have been extirpated (Ray *et al.* 2000). This ability to disperse and repopulate habitats allows populations to persist (Neville-Arsenault 2003; Rieman and Dunham 2000; Ray *et al.* 2000; Dunham *et al.* 1997). Periodic repopulation by upstream or downstream sources enabled LCT to survive extreme circumstances and provided for genetic exchange (Neville-Arsenault 2003).

The conservation measures associated with this Agreement will contribute, directly and/or indirectly, to recovery of LCT. Private lands comprise only a small portion of the stream habitats within the recovery stream systems. However, LCT use these areas to access

many miles of publicly-owned stream habitats for recovery activities that are currently not useable. These private lands encompass streams needed for both the isolated populations as well as networked populations. Currently, LCT are predominant in the isolated streams on public lands due to private landowners reluctant to participate in activities that will benefit LCT due to fear of regulatory impacts from having threatened species on their land. Having landowners participate in this Agreement will open many areas to reintroduction, expansion, and/or preservation of LCT populations needed to protect the species' genetic material. It will also help to implement networked populations and increase numbers of LCT for use in stocking networked populations. Additionally, private lands will be needed for LCT spawning areas, migration corridors, and healthy population dynamics within the networked areas.

Implementation of this Agreement is expected to result in increased numbers of LCT or amount of habitat in excess of the established baseline for each enrolled property. If all Cooperators return their property to baseline conditions upon completion of their CA/CI term, which is not expected, populations will still exist within public lands that have become linked due to conservation activities, and within non-Federal lands which serve as migration corridors, spawning habitat, and overwintering habitat. Isolated populations that were part of the baseline will have been used for repopulating the networked areas, and will still exist. They will no longer need to be tapped for species' recovery in other areas, and therefore will be more stable.

12.0 MONITORING AND REPORTING

Implementation of this Agreement requires monitoring and reporting of enrolled properties. This Agreement provides for two types of monitoring as required by Service policy (61 FR 32717) and Federal regulation (64 FR 32705): (1) compliance monitoring to ensure that all commitments are being met, and (2) biological monitoring to ensure that the biological goals are being met and to determine the effectiveness of the conservation program.

12.1 Compliance Monitoring

CAs will grant NDOW, the Service and/or the DPS team, after reasonable prior notice to Cooperators, the right to enter enrolled lands to ensure compliance with this Agreement, including any obligations of Cooperators. Monitoring visits will focus on maintenance of baseline responsibilities and effectiveness of conservation measures implemented.

12.2 Biological Monitoring

Prior to finalizing CAs and CIs for any enrolled property, NDOW will complete a detailed biological assessment of that property in cooperation with the Service and Cooperator. The biological assessment of the given property will 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 non-native species (if any), and a determination of management actions being practiced and the conservation measures needed. Management practices and conservation measures will be incorporated into the

subsequent CA. Prior to NDOW assuming sole responsibility for the biological assessments, the Service will collaborate with NDOW for a minimum of the first five CAs. After this collaboration period between the Parties, NDOW will submit their biological assessment with the CA to the Service for our concurrence, unless a unique situation arises that requires involvement from both Parties.

Following the placement of LCT on enrolled lands or when LCT are otherwise known to be present, NDOW, the Service, and/or the DPS team will monitor LCT on enrolled lands at least annually to ascertain LCT presence, monitor aquatic and riparian habitat quality, and to evaluate the efficacy of current management activities and conservation measures.

12.3 ANNUAL REPORTING

NDOW will make available and provide the following information to the Service in an annual report due December 31st of each year. The report will include:

a) A narrative explanation describing the number of Cooperators and the amount of habitat potentially maintained, enhanced, or restored as a result of the management actions and/or conservation measures performed under each CA.

b) A summary of the location(s) and circumstance(s) where incidental take of LCT was anticipated including the identity of the Cooperator, the amount of habitat taken back to baseline, when the take occurred, and whether it was the result of a completed CA or early termination.

c) A summary of any interim take of LCT (any LCT or habitat that is taken above returning the property to baseline) which may have occurred, including the identity of the Cooperator, location, the amount of take which occurred, and the management action and conservation measure under which it occurred.

d) A narrative explanation and results of all compliance monitoring activities for each enrolled property.

e) A narrative explanation and copies of any biological monitoring for each enrolled property within the Humboldt DPS area.

f) A summary of actions of any Cooperators who are in non-compliance with the terms and conditions of their CA and/or CI, and the measures employed to remediate the non-compliance.

12.4 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 desired results. Decisions related to Adaptive Management will be based on an evaluation of the compliance and biological monitoring results detailed in NDOW's annual reports and on field observations by the Cooperators and Parties. The Humboldt DPS Team may also be asked to review reports and field observations and determine whether the management actions and/or conservation measures are adequate.

Adaptive Management decisions may be made at any time as deemed necessary by the Parties, however, a major evaluation of this Agreement will be implemented every fifth year to ensure that conservation goals are being achieved. Conservation measures will be evaluated to determine whether they result in increased protection of LCT, i.e., reduced incidental take and/or improved conditions for LCT. The evaluation will include an assessment of incidental take on individual enrolled properties to determine if take can be prevented or reduced through modifications to management actions and/or conservation measures on aquatic habitats or adjacent lands.

If management activities or conservation measures need to be altered to improve benefits for the species, this will be done by amending future CAs, not by altering the responsibilities of existing Cooperators. However, if existing Cooperators agree to alter their CAs, modifications of their responsibilities 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.

13.0 MODIFICATIONS

13.1 Modifications of the Agreement

Any Party may propose modifications or 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 if such modifications do not change the determination that this Agreement will provide a net conservation benefit to LCT. 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 15 days of receipt of such notice. Proposed modifications will become effective upon the other Party's written concurrence.

13.1(a) Modifications of Cooperative Agreements

A Cooperator may propose modifications or amendments to a CA by providing written notice to NDOW and the Service and obtaining written concurrence. Such notice shall include a statement of the proposed modification(s), the reason for it, and its expected results. The Parties will respond to proposed modification(s) within 60 calendar days of receiving the notice. Proposed modifications will become effective upon written concurrence from the Parties.

13.2 Amendment of the Permit

The Permit 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, and the Service's permit regulations at 50 CFR 13 and 50 CFR 17. The Party proposing the amendment(s) shall provide a statement describing the proposed amendment(s), the reasons for it, and an explanation of what, if any, effects the amendment(s) may have on LCT. A *Federal Register* notice with a 30-day comment period will be needed for any proposed amendment(s) to the Permit.

13.3 Permit Relinquishment

If, prior to the expiration of the Permit, NDOW should cease to be able to continue to administer the Agreement, and no other entity satisfactory to the Service is willing to assume NDOW's responsibilities, NDOW will relinquish its Permit to the Service. The Service may convert the CIs that have been previously issued by NDOW to participating landowners into freestanding Safe Harbor Permits that authorize the same actions by the participating landowners as had been authorized by the CIs, provided the participating landowners agree to fulfill the management activities and conservation measures established for their property. These actions shall be made per 50 CFR 13.25 for transfer of permits and scope of permit authorization.

13.3(a) Cooperative Agreement Termination

As referenced in 50 CFR 17.3 (revised May 3, 2004; FR 69:24092), Cooperators may terminate their CAs before the expiration date because of circumstances beyond the landowner's control. In such circumstances, the Cooperator may return the enrolled property to established baseline conditions even if the expected net conservation benefit has not been realized, provided that baseline conditions have been maintained and established conservation measures have been implemented. Cooperators may terminate their CA, due to circumstances beyond their control, ten calendar days after providing notice to the Service. Cooperators may also terminate their CA at any time for reasons other than circumstances beyond their control, but will not have the authority to take LCT. Cooperators must give NDOW, the Service, and/or their representatives the opportunity to relocate LCT within 30 days of providing termination notice. Under any of the termination scenarios, Cooperators must relinquish their CIs to NDOW.

13.3(b) Termination Under Other Circumstances

NDOW, in coordination with the Service, may terminate a CA if it is determined that use of the enrolled property is no longer necessary for LCT recovery efforts. Following that determination and notification to the Cooperator, NDOW, the Service, and/or their representatives (including the Humboldt DPS Team) shall remove all LCT from the included property within 60 calendar days, at their own expense, and in coordination with the Cooperator. Cooperators must then relinquish their CIs to NDOW, and will then be released from any further obligations under the CA.

13.4 Permit Suspension or Revocation

The Service may suspend or revoke the Permit for cause in accordance with the laws and regulations in force at the time of such suspension or revocation. The Service, as a last resort, may revoke the Permit if continuation of permitted activities would likely result in jeopardy to LCT (50 CFR 13.28(a)). In such circumstances, the Service would exercise all possible measures to avoid revoking the Permit.

13.5 Baseline Adjustment

Unforeseen circumstances could involve habitat impacts resulting from catastrophic (*force majeure*) events such as hurricanes, flash floods, severe drought, lethal forest fires, or insect/disease epidemics. Such events are beyond the reasonable control of the Cooperator, and did not occur through fault or negligence, 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 Cooperator, the CA could be terminated, or NDOW and the Service could agree to revise the baseline conditions to reflect the new circumstances.

13.6 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.

13.7 Dispute Resolution

Both NDOW and the Service agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Parties.

14.0 ADDITIONAL MEASURES

14.1 Succession and Transfer of CAs and CIs

The rights and obligations under each CA shall apply to the owner of the enrolled property, and are transferable to subsequent non-Federal property owners pursuant to 50 CFR 13.25. After becoming a party to a CA and CI, the new owner(s) will have the same rights and obligations with respect to the enrolled property as the original owner. The new owner(s) also will have the option of receiving Safe Harbor assurances by signing a new CA and receiving a new CI. Cooperators shall notify NDOW of any transfer of enrolled land ownership; NDOW will attempt to contact the new owner, explain the baseline responsibilities applicable to the property, and seek to interest the new owner in signing the existing CA or a new one to benefit LCT on the property. Assignment or transfer of the CI shall be governed by Service regulations in force at the time.

14.2 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.

14.3 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:

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

Complex Manager
Lahontan National Fish Hatchery Complex
710 Highway 395
Gardnerville, Nevada 89410

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.

Terry R. Crawforth
Permittee
Director, Terry R. Crawforth
Nevada Department of Wildlife

6-23-06
Date

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

6/23/06
Date

Approved as to form by:

Deputy Attorney General for Attorney General
State of Nevada

6/29/06
Date

LITERATURE CITED

Coffin, Patrick D. 1982. Lahontan cutthroat trout fishery management plan for the Humboldt River Basin. Reno, NV. U.S. Fish and Wildlife Service.

Dunham, J. B., G. L. Vinyard, and B. E. Rieman. 1997. Habitat fragmentation and extinction risk of Lahontan cutthroat trout. North American Journal of Fisheries Management. 17:1126-1133.

Elliott, John and Robert Layton. 2005. Lahontan Cutthroat Trout Species Management Plan for the Upper Humboldt River Drainage Basin. Nevada Department of Wildlife. Elko, Nevada.

Neville-Arsenault, Helen. 2003. Genetic assessment of complex dynamics in an interior salmonid metapopulation. Doctoral Dissertation. Ecology, Evolution and Conservation Biology. University of Nevada- Reno.

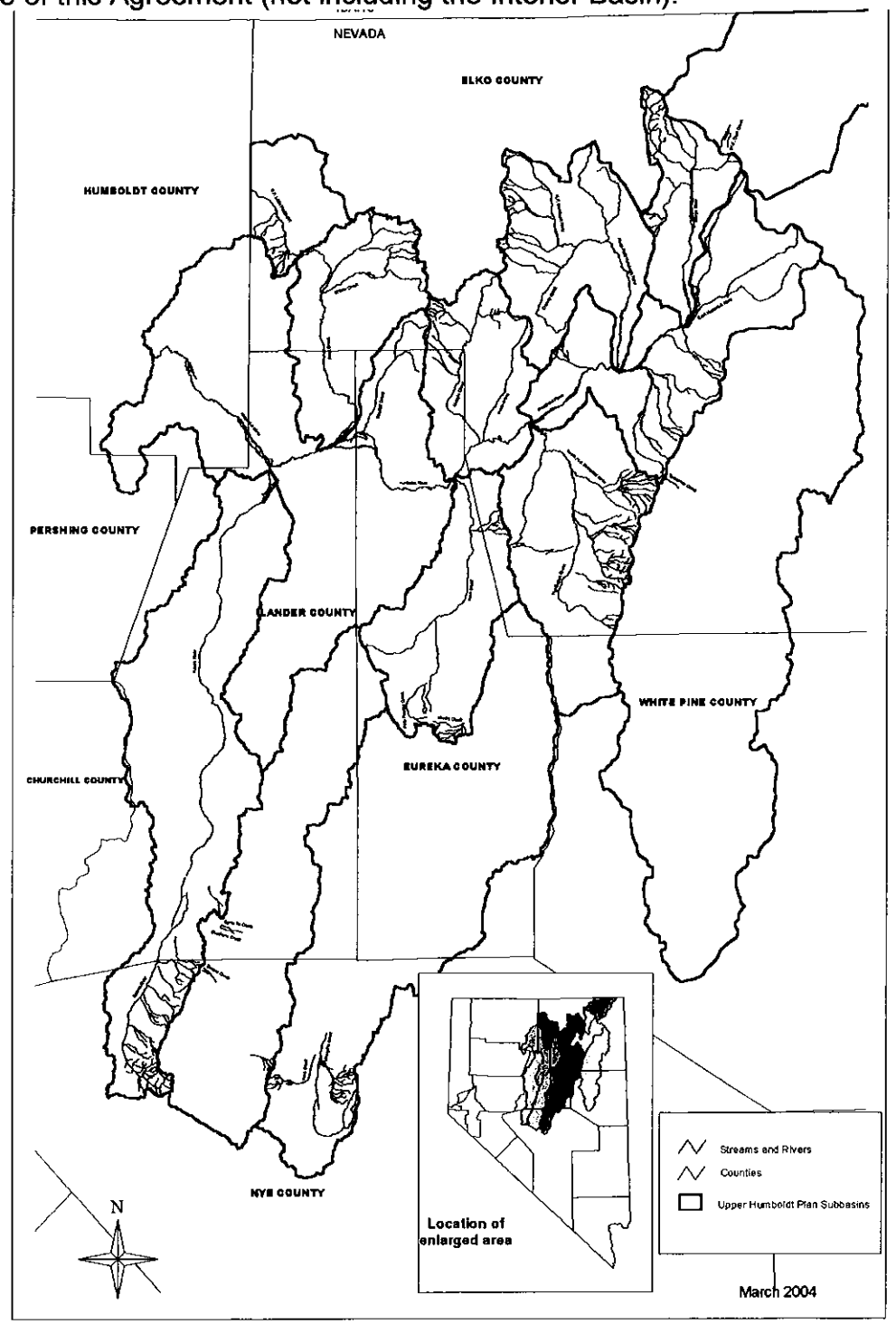
Ray, C. M., M. Peacock, and J. B. Dunham. 2000. Population structure and persistence of Lahontan cutthroat trout: results from a comparative study of isolated and networked streams. Interim report for cooperative agreement FWS 14-48-001-95646.

Rieman, B. E., and J. B. Dunham. 2000. Metapopulations of salmonids: a synthesis of life history patterns and empirical observations. Ecology of Freshwater Fishes. 9:51-64.

U.S. Fish and Wildlife Service. 1995. Lahontan Cutthroat Trout,(*Oncorhynchus clarki henshawi)* Recovery Plan. Portland, Oregon.

ATTACHMENTS

Attachment A. Subbasins of the Upper Humboldt River DPS area and geographic coverage of this Agreement (not including the Interior Basin).



Source: Elliott and Layton 2005.

Attachment B. Safe Harbor Agreement Certificate of Inclusion template.

CERTIFICATE OF INCLUSION

This certifies that the property described as follows _____ *[Description of portion of property covered by the Safe Harbor Permit]* owned by _____ [Cooperator's name] (Cooperator), is included within the scope of Permit No. TE126085-0 issued by the U.S. Fish and Wildlife Service to Nevada Department of Wildlife on June 23, 2006 [date] and expiring on June 22, 2056 [date] under the authority of section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended 16 U.S.C.1539(a)(1)(A.). Such Permit authorizes activities by Cooperators, as part of the Safe Harbor program, to enhance, restore, and recover habitat for the threatened Lahontan cutthroat trout. Pursuant to that Permit and this Certificate, the holder of this Certificate is authorized to engage in lawful activities on the above-described property that may result in the incidental taking of Lahontan cutthroat trout, as appropriate, subject to the terms and conditions of the Permit and the Cooperative Agreement entered into by Nevada Department of Wildlife and _____ [Cooperator's Name] on _____ [date].

_____
Director
Nevada Department of Wildlife

Attachment C. Template Conservation Agreement

COOPERATIVE AGREEMENT TEMPLATE

BETWEEN THE NEVADA DEPARTMENT OF WILDLIFE (PERMITTEE)
AND _____ (COOPERATOR)

1.0 INTRODUCTION

This Cooperative Agreement (CA), between the Nevada Department of Wildlife (NDOW) and _____(Cooperator), is intended to benefit Lahontan cutthroat trout (LCT; *Oncorhynchus clarki henshawi*) through implementation of management actions and conservation measures within the Upper Humboldt River Distinct Population Segment (Humboldt DPS) area on land owned by the Cooperator (enrolled property). Participation in this CA is a prerequisite for obtaining a Certificate of Inclusion (CI) from NDOW as part of the Safe Harbor Agreement (Agreement) between NDOW and the U.S. Fish and Wildlife Service (Service) titled: *Safe Harbor Agreement for Voluntary Enhancement/Restoration Activities Benefiting Lahontan Cutthroat Trout on Non-Federal Lands within the Upper Humboldt River Distinct Population Segment Area.*

2.0 ENROLLED PROPERTY

2.1 BACKGROUND

The Cooperator owns property in the _____ *[East Humboldt River Area, Interior, Marys River, North Fork Humboldt River, Pine Creek, Reese River, Rock Creek, South Fork Humboldt River, South Fork Little Humboldt River]* Subbasin, _____ *[Elko, Eureka, Humboldt, Lander, or Nye*] County, Nevada, that contains habitat that may be used by LCT along _____ Creek *[Name of the creek which will be affected].* The property to be enrolled includes ____ miles of _____ Creek, located within T__N, R__W, S__ in northern Nevada.

The enrolled property consists of _____ [*Qualitative/quantitative description of the property. Include biological & major plant communities or habitat types, locations of water delivery and control systems*]. Photographs of the enrolled property are included in Attachment __.

2.2. CURRENT LAND USE

Currently, the Cooperator implements the following management actions on the enrolled property: _____ [livestock management, agriculture, mining, recreation, others] [*Describe in detail the management actions being undertaken and conservation measures to be implemented to minimize impacts or benefit LCT*].

2.3 EXPECTED BENEFITS

Implementation of the conservation measures and management actions listed in this CA is expected to result in _____. *[generally describe the expected benefits—how the land may change to benefit LCT in response to conservation measures and management actions; also how LCT may be able to use the habitat, such as for spawning, rearing, or migration].*

3.0 BASELINE

3.1 EXISTING CONDITION

A description of existing _____ *[habitat conditions and/or LCT numbers]* conditions at the time of executing this CA is critical because the conservation measures agreed upon by the Cooperator may address potential take in the form of _____ [*Description of specific threats, e.g., entrainment, habitat, displacement by exotics*] that are considered _____ [direct, indirect, or both] forms of take. These conditions are based on surveys conducted on _____[date]. Survey results indicate that: _____ [*Discussion of the results of surveys as related to habitat and/or fish populations*]

3.2 ESTABLISHED BASELINE CONDITIONS

Established baseline conditions are qualitative and/or quantitative descriptions with associated photographic documentation of the enrolled property environment prior to implementation of this CA, and are agreed to by the Cooperator, NDOW, and the Service. Baseline conditions shall be based on riparian/stream habitat, fish populations, or both, as well as networked population suitability and recovery needs. Determination of baseline conditions will be accomplished through surveys, photos, and discussions between the landowner, NDOW, and the Service.

Catastrophic natural events such as rainstorms, severe storm events, drought, forest fires, or insect/disease epidemics are beyond the reasonable control of the Cooperator, and could either extirpate LCT from enrolled lands or render LCT habitat on enrolled lands unsuitable for continued occupation. These events may reduce LCT numbers or habitat below original baseline conditions through no fault of, or negligence by, the Cooperator. In such circumstances the Cooperator and NDOW, in coordination with the Service and the Humboldt Distinct Population Segment Team (DPS Team)[2], may agree to revise the baseline conditions in the CA to reflect the new circumstances.

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2 Composed of biologists from the Service, NDOW, U.S. Forest Service, Bureau of Land Management, and University of Nevada Reno.

4.0 MANAGEMENT ACTIONS AND CONSERVATION MEASURES

4.1 MANAGEMENT ACTIONS

Management actions are activities being conducted by the Cooperator on the enrolled property that have the potential to affect LCT populations or recovery. *[Describe all of the covered activities that will be implemented for this CA within this section]*

4.2 CONSERVATION MEASURES

Conservation measures are activities agreed to by the Cooperator and NDOW that will benefit LCT on the enrolled property. These measures will be implemented by the Cooperator. *[Discuss in detail in this section. Identify what measures are being implemented, when they will be implemented, what benefits will be gained through implementation of the measures, and what association they have with management actions.]*

5.0 RESPONSIBILITIES

The responsibilities of NDOW and the Service are listed in the Safe Harbor Agreement signed on June 23, 2006. The responsibilities of the Cooperator include the following:

a. Implement agreed-upon conservation measures within the enrolled property to maintain or enhance conditions for LCT.

b. Provide NDOW, the Service, and/or their representatives (including the Humboldt DPS Team) with reasonable access to enrolled land to manage, monitor, reintroduce, or remove LCT, or to carry out other management activities, perform biological and compliance monitoring, or salvage or relocate LCT from areas to be impacted by management actions. These entities will contact the Cooperator at least seven days in advance for access to enrolled land.

c. Inform NDOW within three working days of finding any dead or accidentally killed LCT, and allow immediate access to NDOW, the Service, and/or their representatives (including the Humboldt DPS Team) to determine the cause of the mortality.

d. Inform NDOW as soon as practicable, of natural or human-caused emergency circumstances (e.g., storm events or failure of water delivery systems) that could negatively affect occupied aquatic habitats and result in take of LCT; allow immediate access to NDOW, the Service, and/or their representatives (including the Humboldt DPS Team) for emergency salvage or relocation of affected individuals.

e. Give NDOW, the Service, and/or their representatives notice at least 30 days prior to planned activities that could reasonably be expected to result in the incidental

take of LCT on the enrolled property so that LCT may be relocated or removed as necessary.

f. Notify NDOW 90 calendar days (if possible) but no less than 30 calendar days prior to transfer of ownership of enrolled land, so that they may contact the new owner, explain the baseline responsibilities applicable to the enrolled property, and seek to interest the new owner in signing the existing CA or a new one.

6.0 MONITORING

To ensure compliance with the Agreement and CAs and to document progress in meeting recovery objectives, compliance and biological monitoring must be conducted on all enrolled properties. The frequency of surveys shall be agreed on by the Cooperator, NDOW, and the Service, based on the Adaptive Management component of the Agreement. The Cooperator agrees to provide NDOW, the Service, and/or their representatives with access to the enrolled property for the purpose of conducting these surveys. Results of this monitoring will be a critical component of the annual reports and will be shared with the Cooperator if requested.

6.1 Compliance Monitoring

Compliance monitoring is needed to ensure compliance with the Permit and CA, maintenance of baseline responsibilities, and effectiveness of the conservation measures as outlined in Section 4 of this CA.

6.2 Biological Monitoring

Monitoring of biological and/or habitat conditions will determine whether conditions on the enrolled property are responding to the conservation measures and management actions being implemented. This response will require comparisons of the established baseline conditions with current habitat or biological conditions as measured through time over the course of implementing the CA.

7.0 DURATION

Obligations under this CA will be in effect for a minimum of _____ years *[may vary from one CA to another, but minimum is ten years]* from the date it is executed. Upon signing the CA and obtaining Service concurrence, NDOW will issue a CI to the Cooperator under Permit No: TE126085-0 authorizing the incidental take of LCT on the enrolled lands. The CI will authorize incidental take of LCT from _____ [date] to_____ [date] but may not exceed June 22, 2056 [the Agreement expiration date]. This CA and CI may be recorded by NDOW in accordance with NRS 277.140, as appropriate.

8.0 INCIDENTAL TAKE

Incidental take is discussed in more detail in Section 10 of the Agreement. Under the terms of this CA, the Cooperator is authorized to make use of enrolled property in any manner that does not result in reducing the number of LCT or occupied habitat, or habitat needed for metapopulation connectivity and/or migration patterns below the established baseline; or affect the beneficial impacts of the conservation measures.

To return the enrolled property to established baseline conditions, a Cooperator must demonstrate that the activities identified in the CAs were implemented to the fullest extent practicable to achieve a net conservation benefit for the duration of the CA. The CI will authorize incidental take of LCT or associated habitat resulting from lawful activities on the enrolled property, from the time this CA is signed until expiration of the CA/CI. Lawful covered uses will be defined in Section 2.2 of this CA. Before CA/CI expiration, a Cooperator may take LCT individuals or habitat back to established baseline levels to avoid accruing additional take liability under the ESA. However, the Cooperator shall give NDOW and the Service notice at least 30 days prior to impacting LCT or habitat so that individuals can be relocated.

9.0 MODIFICATIONS

9.1 Modification Of Cooperative Agreement

The Cooperator or NDOW may propose modifications or amendments to a CA by providing written notice to the Service and obtaining written concurrence. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Service will respond to proposed modifications within 60 calendar days of receiving the notice. Proposed modifications will become effective upon written concurrence by the Service and NDOW.

9.2 Termination Of The Cooperative Agreement

As referenced in 50 CFR 17.3 (revised May 3, 2004; 69 FR 24092), Cooperators may terminate their CA before the expiration date because of circumstances beyond their control. In such circumstances, the Cooperator may return the enrolled property to established baseline conditions even if the expected net conservation benefit has not been realized, provided that baseline conditions have been maintained and established conservation measures have been implemented to the fullest extent practicable. Cooperators may terminate their CAs, due to circumstances beyond their control, ten calendar days after providing notice to the Service. Cooperators may also terminate their CAs at any time for reasons other than uncontrollable circumstances, but will not have the authority to take LCT. Cooperators must give NDOW, the Service, and/or their representatives the opportunity to relocate LCT within 30 days of providing the termination notice. Under either termination scenario, Cooperators must relinquish their CIs to NDOW.

9.2(a) CA TERMINATION UNDER OTHER CIRCUMSTANCES

NDOW, in coordination with the Service, may terminate a CA if it is determined that use of the enrolled property is no longer necessary as a contribution to recovery efforts for LCT. Following that determination and notification to the Cooperator, NDOW, the Service, and/or their representatives (including the Humboldt DPS Team) shall remove LCT from the included properties in a manner and to an extent that is consistent with a return to baseline conditions within 60 calendar days at their own expense, and in coordination with the Cooperator, and release the Cooperator from any further obligations under the CA. Cooperators must then relinquish their CIs, and may otherwise return the enrolled property to established baseline conditions.

9.3 CA SUCCESSION AND TRANSFER OF CAS AND CIS

The rights and obligations under each CA shall apply to the owner of the enrolled property, and are transferable to subsequent non-Federal property owners pursuant to 50 CFR 13.25. After becoming a party to a CA and CI, the new owner(s) will have the same rights and obligations with respect to the enrolled property as the original owner. The new owner(s) also will have the option of receiving Safe Harbor assurances by signing a new CA and receiving a new CI. Cooperators shall notify NDOW of any transfer of enrolled land ownership; NDOW will attempt to contact the new owner, explain the baseline responsibilities applicable to the property, and seek to interest the new owner(s) in signing the existing CA or a new one to benefit LCT on the property. Assignment or transfer of the CA shall be governed by Service regulations in force at the time.

9.4 CI SUSPENSION OR REVOCATION

NDOW may suspend or revoke a CI if a Cooperator has breached obligations under this CA, has failed to cure the breach in a timely manner, and the effect of the breach diminishes the likelihood that the CA will achieve stated goals. Termination of a CA, and removal of LCT from the property, at the request of the Cooperator or NDOW for reasons identified in Section 9.2 shall also result in revocation of the Cooperator's CI.

9.5 REMEDIES

NDOW, the Service, and Cooperators shall have all remedies otherwise available to enforce the terms of the CAs and CIs, except that none shall be liable in damages for any breach, any performance or failure to perform an obligation, or any other cause of action arising from this CA.

9.6 EMERGENCIES

Emergency situations arising from natural disasters (e.g., fire, excessive rainfall, extreme drought, insect infestations, or epidemic disease) may require the initiation of land management actions that result in take of LCT. The Cooperator will notify NDOW within five working days of natural disasters, and make reasonable accommodations to NDOW, the Service, and/or their representatives for survey or relocation of LCT prior to initiation of land management actions. Other emergency situations, such as the failure of diversion or pond structures, may occur outside of the control or intention of the Cooperator, and could

result in the take of LCT. Under these situations, the Cooperator will notify NDOW as soon as is practicable to allow the salvage or relocation of affected LCT individuals. NDOW and the Service acknowledge that survey or relocation may be impracticable in certain situations.

10.0 NOTIFICATION

Communication and correspondence required by this CA should be directed to the addresses below, with a copy sent to the Service. Names and addresses may be changed upon written notice to all parties.

_____
_____
_____
_____
[Name and address of Cooperator]

Director
Nevada Department of Wildlife
1100 Valley Road
Reno NV 89512

Field Supervisor
U.S. Fish and Wildlife Service
1340 Financial Boulevard, Suite 234
Reno, Nevada 89512

IN WITNESS WHEREOF, each party hereto has caused this Cooperative Agreement to be executed by an authorized official on the day and year set forth opposite their signature.

COOPERATOR

By: _____

Date: _____

NEVADA DEPARTMENT OF WILDLIFE

By: _____
Director
Nevada Department of Wildlife

Date: _____

Attachment __. Photographs of the enrolled property.

[PHOTOGRAPHS OF ENROLLED PROPERTY AND RELEVANT FEATURES, E.G. PERENNIAL STREAMS]