

CONSERVATION

AGREEMENT AND STRATEGY

**COLUMBIA SPOTTED FROG
(*RANA LUTEIVENTRIS*)**

GREAT BASIN POPULATION

NEVADA

NORTHEASTERN SUBPOPULATIONS'

**JARBIDGE - INDEPENDENCE
AND
RUBY MOUNTAIN**

SEPTEMBER 2003

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GLOSSARY OF TERMS

Adaptive management: Adaptive management is designed to bring new information immediately into management decisions. The effectiveness of all conservation measures and monitoring methods will be periodically reviewed and evaluated by the implementing cooperators and by CSFTT. Based on such evaluation, appropriate modifications to methods, actions, and strategies will be made to ensure scientific rigor and the efficacy of conservation measures.

Candidate species: Those species for which the USFWS has, on file, sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded by higher listing priorities.

Co-lead responsibility: Participant and signatory to the CAS with shared responsibility with one or more other participants to insure an identified conservation action or activity will be implemented.

Connectivity: Pathways across and through aquatic or terrestrial blocks of habitat which facilitate and maintain the interchange of individual animals among sub-populations.

Conservation action: An action taken to conserve or preserve natural resources.

Conservation unit: A group of *population units* that either exhibit connectivity or are not separated by known barriers. Connectivity can be perennial or intermittent flowing water or by landscape features that permit dispersal.

Disease: Pathogenic infection of an organism from an external source which may have a chronic or acute negative effect on that organism at an individual or population level.

Distinct population segment: A *population unit* that can be defined as geographically and/or genetically discrete and distinct for the purpose of listing consideration under the Endangered Species Act.

Fragmentation: The disruption of extensive habitats into isolated and/or small patches.

Historic range: An area inhabited by Columbia spotted frogs at the time of modern exploration and settlement, as verified by museum voucher.

Inventory: The process of conducting surveys to determine the total distribution and abundance.

Isolated population unit: A population that is geographically separated from other populations, and in which interbreeding occurs.

Lead responsibility: Participant and signatory to the CAS with primary responsibility to insure an identified conservation action or activity will be implemented.

Lentic: Standing water habitats, including natural and beaver ponds, wetlands and impoundments.

Lotic: Flowing water habitats such as streams and rivers.

Metapopulation: A *conservation unit* in which metapopulation characteristics, such as a source/sink relationship, have been demonstrated to occur or *population units* that are interconnected within the same drainage systems and are interdependent.

Monitoring: Study of the abundance of individuals in one or more populations of a species at a site through time.

Native: A species that historically occurred in a specific area or habitat.

Non-native: A species that historically did not occur in a specific area or habitat and that now inhabits as a result of human actions. Also known as an “exotic” species.

Occupied habitat: Areas of habitat where the presence of Columbia spotted frogs has been documented within 1 to 10 years, recognizing that year-to-year occurrence can be highly variable dependent upon metapopulation dynamics and other factors.

Participant/cooperator: Any entity which assists in the development and implementation of conservation actions, whether or not a signatory to the CAS.

Population: A particular species in a particular group or in a definable place (i.e., the Great Basin *population* of Columbia spotted frogs).

Population unit: A local population of randomly breeding individuals. A population unit typically occupies a single breeding site, such as a single or a small group of ponds.

Potential habitat: Areas which contain one or more key elements of Columbia spotted frog habitat or to which those elements could be restored, but which are not now occupied habitat, including areas which have not been surveyed to determine frog presence.

Predation: The capture and consumption of one animal by another, which applies to all life stages of the organism.

Protocol: A procedure for monitoring or other activity which conforms to standard biological practices and has been identified by the CSFTT as an accepted standardized methodology for conducting that activity.

Relict: A persistent remnant of an otherwise extinct (locally or globally) organism.

Restoration: Specific actions taken to improve or restore habitat or associated ecosystems to potential natural conditions.

Sentinel Site: Specific location for defined, periodic monitoring of animals or habitat which provides benchmark data for assessing changes in status or condition.

Sink: A habitat in which local mortality exceeds local reproductive success.

Source: A habitat in which local reproductive success exceeds local mortality.

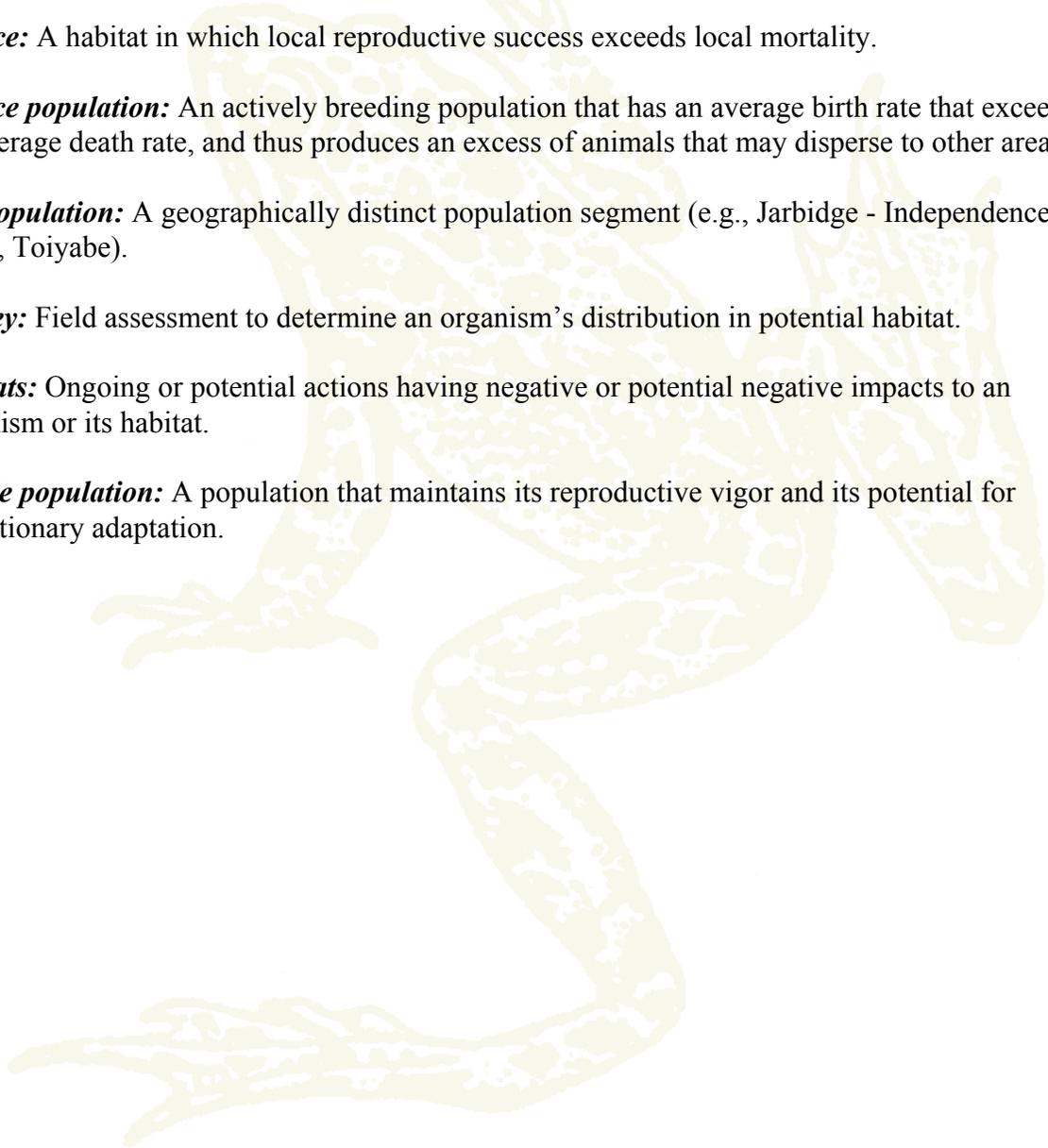
Source population: An actively breeding population that has an average birth rate that exceeds its average death rate, and thus produces an excess of animals that may disperse to other areas.

Subpopulation: A geographically distinct population segment (e.g., Jarbidge - Independence, Ruby, Toiyabe).

Survey: Field assessment to determine an organism's distribution in potential habitat.

Threats: Ongoing or potential actions having negative or potential negative impacts to an organism or its habitat.

Viable population: A population that maintains its reproductive vigor and its potential for evolutionary adaptation.



ACKNOWLEDGMENTS

The final Conservation Agreement for the Northeastern Nevada subpopulations of the Columbia spotted frog was prepared by the Columbia Spotted Frog Technical Team (CSFTT). Each member of the CSFTT provided valuable information and assistance in development of the document.

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University of Nevada Cooperative Extension: Kent McAdoo
Brigham Young University: Kent Hatch

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CONSERVATION AGREEMENT FOR THE NORTHEASTERN NEVADA SUBPOPULATIONS OF THE COLUMBIA SPOTTED FROG (*RANA LUTEIVENTRIS*)

PURPOSE

This Conservation Agreement (Agreement) has been developed to expedite implementation of conservation measures for the Columbia spotted frog (*Rana luteiventris*) in the Jarbidge - Independence and the Ruby Mountain subpopulation areas, northeastern Nevada, as a collaborative and cooperative effort among resource agencies, governments, and land owners. The desired outcome is to ensure the long-term conservation of the northeastern Nevada (NENV) Columbia spotted frog within its historic range, and to contribute to development of statewide conservation efforts for the Great Basin population of the species. The parties to this Agreement believe implementing the conservation measures herein defined will benefit NENV subpopulations of the Columbia spotted frog and could reduce the likelihood for its listing under the Endangered Species Act of 1973, as amended (ESA). Threats that could lead to spotted frog listing as threatened or endangered under ESA should be significantly reduced or eliminated through full implementation of this Conservation Agreement and Strategy (CAS). This Agreement may provide additional measures to enhance NENV Columbia spotted frog subpopulations that would not be required under ESA.

CONSERVATION GOALS OF THE AGREEMENT

Conservation measures needed to ensure the long-term viability and conservation of NENV Columbia spotted frog focus on two goals:

- Goal 1. To reduce threats to Columbia spotted frogs and their habitat to the extent necessary to prevent population units from becoming extirpated throughout all or a portion of their historic range.**
- Goal 2. To maintain, enhance, and restore a sufficient number of population units of Columbia spotted frogs and their habitat to ensure their continued existence throughout their historic range.**

These goals will be achieved through implementation of specific measures set forth below and in the Conservation Strategy (Strategy). The status of the Columbia spotted frog will be evaluated annually by the Columbia Spotted Frog Technical Team (CSFTT), composed of signatories to this agreement and other interested parties, through an adaptive management framework to assess program progress.

CONSERVATION OBJECTIVES

The following conservation objectives will be implemented to reach the goals of the CAS stated above. The related goals that will be achieved follow the objectives in parenthesis. Included with the objective is a statement on how the objective will benefit NENV Columbia spotted frogs and a standard to determine whether the objective was successful in achieving the goal. The conservation actions and commitments by the Cooperators as described in CAS will be implemented as proposed in the Strategy.

Objective 1. Determine the overall distribution of Columbia spotted frogs. (Goal 2)

Benefit: Understand range and habitat conditions in which Columbia spotted frogs exist (baseline for Objective 2).

Success Standard: Complete inventories for all known and historical sites using standard protocol, and data entered into a centralized database. Inventories will be documented in annual reports. This objective will be completed within the first 5 years of CAS implementation.

Objective 2. Assess the abundance of Columbia spotted frogs, habitat conditions, and existing and potential threats at occupied sites. (Goal 1)

Benefit: Enable biologists and managers to identify changes in Columbia spotted frog populations, implement appropriate management to reverse declines in Columbia spotted frog numbers, and correlate habitat degradation with declining Columbia spotted frog populations.

Success Standard: Develop and implement a long-term Columbia spotted frog population and monitoring program for the purpose of establishing population and habitat baselines and initial population and habitat trends within the known range of this subspecies. Surveys are conducted annually and on a long-term basis. The range of habitat conditions which are optimum to allow Columbia spotted frog persistence are identified. Monitoring and assessment activities are documented in annual reports. This objective will be ongoing throughout the 10 year life of CAS.

Objective 3. Ensure that viable populations and their habitats are managed and enhanced to ensure the continued existence of Columbia spotted frogs throughout their historic range. (Goal 2)

Benefit: Long term persistence and viability of Columbia spotted frog metapopulations and suitable habitat across the range of the Columbia spotted frog.

Success Standard: Maintain appropriate level of legal protection. Enforce public land management regulations and policies. Implement identified strategies and modify them as needed based on new information using adaptive management. Validate potential threats and implement strategies to reduce or eliminate their effects. Maintain source populations and key occupied habitats. Restore habitat conditions conducive to establishment of new Columbia spotted frog population units and that encourage connectivity. This objective will be ongoing throughout the 10 year life of the CAS.

Objective 4. Conduct research that directly supports conservation and management of Columbia spotted frogs and their habitat. (Goal 2)

Benefit: Provide information on basic ecology, threats, and evaluation of management practices needed for adaptive management.

Success Standard: Maintain active research program focused on needs identified by the CSFTT. Findings are evaluated and applied to management strategies. Document research findings and their applications in annual reports. This objective will be ongoing throughout the 10 year life of the CAS.

Objective 5. Implement through administrative procedures the CAS and incorporate provisions of the conservation strategy into agency planning documents and budgets to ensure the conservation goals and objectives are met in a consistent manner. (Goal 2)

Benefit: Ensure consistent implementation and funding of CAS actions and activities according to time line. Prioritize Columbia spotted frog conservation actions into land use planning and land use decisions.

Success Standard: Ensure that land use plans are consistent with CAS actions. Funding is consistently allocated towards Columbia spotted frog conservation actions. Cooperators are actively participating in administrative requirements of the CAS. This objective will be ongoing throughout the 10 year life of the CAS.

Objective 6. Develop and implement an adaptive management framework partnership. (Goal 2)

Benefit: Provide focused management and the basis for adaptive management by periodically assessing the effectiveness of conservation actions. Modify strategies and actions as necessary to achieve the conservation goals and objectives of the CAS.

Success Standard: Cooperators are involved in conservation efforts pursuant to the CAS. The CSFTT is meeting semiannually as defined in the Agreement to provide management and conservation recommendations through the adaptive management process. Adaptive management implementation will be documented annually. This objective will be ongoing throughout the 10 year life of the CAS.

Objective 7. Support the CAS by increasing public awareness and appreciation for Columbia spotted frogs and their habitat, and by making data and information available to interested parties and decision makers. (Goal 2)

Benefit: Enhanced public awareness and appreciation may increase conservation of Columbia spotted frogs and habitats on public and private lands. A central repository will enable cooperators to have access to the same information and will benefit the coordination of research and conservation efforts.

Success standard: Cooperators implement and maintain information delivery on the Columbia spotted frog as identified in the Strategy to landowners and the general public. Cooperators implement and maintain an active program to encourage volunteer public and private land conservation efforts. A central data repository is established and maintained for the life of the program. Management and conservation of the Columbia spotted frog is coordinated with actions for other sensitive and resident wildlife species. This objective will be ongoing throughout the 10 year life of the CAS.

OTHER SPECIES INVOLVED

The primary focus of this Agreement is the conservation and enhancement of the Columbia spotted frog and the ecosystems upon which it depends. The needs of listed species and other species of concern (Appendix A), as well as species that are native to the area will be considered in planning and designing management actions to benefit the Columbia spotted frog.

SIGNATORY PARTIES

Bureau of Land Management (BLM), 1340 Financial Boulevard, Reno, Nevada

Nevada Department of Wildlife (NDOW), 1100 Valley Road, Reno, Nevada

Nevada Natural Heritage Program (NNHP), 1550 East College Parkway, Suite 145, Carson City, Nevada

U.S. Fish and Wildlife Service (USFWS), 1340 Financial Boulevard, Suite 234, Reno, Nevada

U.S. Forest Service (USFS), Humboldt-Toiyabe National Forest (H-T NF), 1200 Franklin Way, Sparks, Nevada

University of Nevada Cooperative Extension (UNCE), 1500 College Parkway, Elko, Nevada

ADDITIONAL PARTICIPANTS/COOPERATORS

Biological Resources Research Center, University of Nevada, Reno, Nevada

Brigham Young University, Provo, Utah

Elko County, Nevada

Separate agreements will be developed with additional parties as necessary to ensure implementation of specific conservation measures. Additional populations of the Great Basin Columbia spotted frog exist in Idaho and Oregon. NDOW holds regulatory authority for management of the Columbia spotted frog in Nevada as resident wildlife. USFS and BLM will maintain their Federal land management role in the implementation of habitat conservation and restoration activities for the Columbia spotted frog. The CSFTT will cooperate and coordinate with other states, and with other Columbia spotted frog conservation efforts in Nevada as needed in the implementation of this Agreement.

AUTHORITIES

The signatory parties hereto enter into this Agreement under federal and state laws as applicable, including but not limited to, section 6(c)(1) of ESA, and sections 501.351 and 503.584 of Nevada Revised Statutes (NRS). This Agreement is subject to and is intended to be consistent with all applicable federal and state laws.

Section 6(c)(1) of ESA provides encouragement to the states and other interested parties, through federal financial assistance and a system of incentives, to develop and maintain conservation programs which meet national and international standards. This is a key to meeting the United States' international commitments and to better safeguard, for the benefit of all citizens, the Nation's heritage in wildlife and plants.

NRS 501.351 provides authority for the Director of NDOW to enter into cooperative agreements for the purpose of managing native wildlife. NRS 503.584 recognizes the state's obligation to conserve and protect imperiled native species. Nevada Administrative Code (NAC) 503.075 extends protected wildlife status to certain native amphibians, including the Columbia spotted frog.

Nevada BLM sensitive species are designated by the BLM Nevada State Director and are protected by the policy described for candidate species as a minimum. BLM shall carry out management, consistent with the principles of multiple use, for the conservation of candidate species and their habitats and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of the species as threatened or endangered (BLM Manual section 6840.06 C).

Under U.S. Department of Interior Secretarial Order 3206 (Department of Interior 1997), the USFWS shall coordinate with affected Indian tribes in order to fulfill trust responsibilities and encourage meaningful tribal participation in the conservation of candidate species under the ESA by (1) soliciting and utilizing the expertise of affected Indian tribes when designing and implementing candidate conservation actions to remove or alleviate threats so that the species' listing priority is reduced, or listing as endangered or threatened is rendered unnecessary; and (2) providing technical advice and information to support tribal efforts and facilitating voluntary tribal participation in implementation measures to conserve candidate species on Indian lands.

The National Forest Management Act (NFMA) requires the Secretary of Agriculture to specify "guidelines for land management plans developed to achieve the goals which provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives" [16 U.S. Code 1604 (g)(3)(B)]. In accord with this diversify provision, the Secretary promulgated a regulation that provides in part: "fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area" (36 CFR 2199.19, 1982 edition).

The Forest Service Manual provides specific direction for managing sensitive species on National Forest Lands (Forest Service Manual sections 2670.22, 2670.32). The Forest Service will develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service actions. The Forest Service will maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats

distributed throughout their geographic range on National Forest System lands. The Forest is also directed to establish objectives for Federal candidate species, in cooperation with the U.S. Fish and Wildlife Service and the States.

This Agreement is subject to and is intended to be consistent with all applicable Federal and State laws and interstate compacts.

REQUIRED CONSERVATION TASKS AND RESPONSIBILITIES BY COOPERATOR

To meet the goals of this Agreement, the parties agree to undertake specific conservation actions, as described in the Strategy. Table A-1 summarizes tasks and responsibilities of each cooperator as identified in more detail in the attached Strategy. Lead and co-lead responsibilities for specific tasks are identified by agency. Where responsibility for undertaking a specific action has not yet been assigned, the parties agree to determine appropriate actions to implement through modifications to the Strategy, based on outcomes of reviews as proposed in the Agreement.

CONSERVATION SCHEDULE AND ASSESSMENT

Coordinating conservation activities, implementing conservation activities, funding, and reviewing progress will be conducted as follows:

Coordinating Conservation Activities

Administration of the Agreement will be conducted by the CSFTT. The CSFTT will consist of a designated representative from signatories to the Agreement and may include technical and legal advisors and other members as deemed necessary by the signatories.

The designated leader of the CSFTT is the Area Natural Resources Specialist, Elko Nevada, University of Nevada Cooperative Extension (UNCE).

The CSFTT will meet at least twice annually to review progress in implementing conservation actions, develop an annual action plan, implement adaptive management, and review budgets.

The CSFTT will revise the Strategy as needed, and upon agreement of all parties.

The CSFTT meetings will be open to interested parties. Meeting minutes and progress reports will be distributed to all CSFTT members, technical advisors, and other interested parties, upon request. The duties for taking and developing meeting minutes and developing progress reports will be rotated among team members or on a volunteer basis by any team member.

The CSFTT will provide annual and five-year reports on conservation status and accomplishments under the Agreement, and will review and revise the Strategy as needed. The duties for developing annual and five-year progress reports will be rotated among team

members or on a volunteer basis by any team member.

Implementing Conservation Activities

A total of 10 years is anticipated for completion of all actions identified in the Strategy. The timetable for completion of specific actions is included in Table S-2 of the Strategy. Where no time for completion is stated, the timing of such actions will be determined by the CSFTT. The timing of certain actions may not be determinable at this time or may be dependent on the completion of other identified activities.

As leader of the CSFTT, UNCE will coordinate and monitor progress in achieving outcomes identified in the Agreement.

Funding Conservation Activities

Funding for the Agreement will be provided by a variety of sources. Federal, state, and local sources will pursue and secure funding to initiate actions identified in the Strategy.

In-kind contributions such as, personnel, field equipment, supplies, etc., will be provided by participating agencies, partners, and volunteers. In addition, each agency will identify specific tasks, responsibilities, and proposed actions/commitments related to their in-kind contributions, as outlined in the Strategy.

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

An annual progress report and assessment will be completed by the CSFTT using the adaptive management framework, and provided to signatories to the Agreement. The assessment will consider the effectiveness of conservation activities in achieving the desired outcome and conservation goals and objectives of the Agreement, and whether modifications to the Strategy are needed.

DURATION OF AGREEMENT

The duration of the Agreement is for 10 years following the date of final signatures. The parties involved will review the Strategy and its effectiveness at least annually to determine whether it should be revised. During the last year in which it is valid, the Agreement must be reviewed and either modified, renewed, or terminated. If some portion of the Agreement cannot be carried out or if cancellation is desired, the party requesting such action must notify the other parties, within 45 days, of the changed circumstances.

Nothing in this agreement shall be construed as obligating any party hereto in the expenditure of funds, or for the future payment of money, greater than appropriations authorized by law.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

The CAS is being developed for planning purposes. Before any Federal actions can occur on National Forest or public lands, a determination must be made whether or not additional NEPA analysis is required. Certain actions by the State of Nevada are not subject to NEPA analysis unless Federal funds are provided.

FEDERAL AGENCY COMPLIANCE

During the performance of the Agreement, the participants will abide by the terms of Executive Order 11246 on non-discrimination and will not discriminate against any person because of race, color, religion, gender, or national origin.

No member of, or delegate to, Congress or resident Commissioner, shall be admitted to any share or part of this agreement, or to any benefit that may arise therefrom. Nevertheless, this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.