

**Safe Harbor Agreement
With James W. Crosswhite
for Voluntary Enhancement and
Restoration Activities Benefitting the
Southwestern Willow Flycatcher and
Little Colorado Spinedace in
Nutrioso Creek, Arizona**

December 19, 2003

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1. INTRODUCTION/BACKGROUND

This Safe Harbor Agreement (Agreement) is entered into between James W. Crosswhite (Cooperator) and the U.S. Department of Interior, Fish and Wildlife Service (Service); hereinafter collectively called the “Parties”. The purpose of this Agreement is to facilitate the improvement of floodplain conditions, which will enhance the habitat for two federally listed species – the southwestern willow flycatcher (*Empidonax traillii extimus*) and the Little Colorado spinedace (*Lepidomeda vittata*) – along 2.5 miles of the Nutrioso Creek riparian corridor in Apache County, Arizona.

This Agreement follows the Service’s Safe Harbor Agreement Policy (64 FR 32717) and final regulations (64 FR 32706) and implements the intent to follow the procedural and substantive requirements of section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (Act). This final policy encourages property owners to voluntarily conserve threatened and endangered species without the risk of further restrictions pursuant to section 9 of the Act. In order to provide the necessary assurances to participating property owners, while providing conservation benefits to the covered species, accompanying permits to Safe Harbor Agreements are issued under section 10(a)(1)(A) of the Act as an enhancement of survival permit.

The term of this Agreement is 50 years and covers proposed management activities affecting lands owned by the Cooperator. The Agreement will cover 60 acres (Enrolled Lands) of stream and riparian habitat. The Cooperator will enhance and improve the Enrolled Lands by planting 10,000 to 21,000 riparian trees and shrubs, managed harvesting of cuttings of riparian vegetation, planting of grasses and shrubs along the flood plain terrace, and repairing old and installing new livestock and elk fence enclosures. This Safe Harbor Agreement encourages proactive conservation efforts by the Cooperator while providing him certainty that future property-use restrictions will not be imposed above those required to maintain current species baseline if those efforts attract southwestern willow flycatchers and Little Colorado spinedace to his Enrolled Lands. The requested permit term is 50 years. Without this cooperative government/private effort the Enrolled Lands would not otherwise be converted to and sustained as a high quality habitat for utilization by the species in the foreseeable future.

Although the Cooperator has no plans for removing the plantings in the future, he wishes to enter into a Safe Harbor Agreement in the event that an unforeseen need (e.g., a change in land use or a fire abatement action) necessitates the removal of some or all of the plantings.

When signed, this Agreement will serve as the basis for the Service to issue an enhancement of survival permit under the Endangered Species Act section 10(a)(1)(A) of the Act for the take of covered, listed species associated with operations conducted during the Agreement and the potential future return of the Enrolled Lands to the baseline condition described in this Agreement. The permit will authorize the Cooperator to incidentally take all individuals of the species, and their progeny, that have increased in numbers and/or distribution on those lands, as a result of the Cooperator's voluntary conservation activities. Permit issuance will not preclude the need for the Cooperator to abide by all other applicable Federal, State, and local laws and regulations that may apply.

2. LIST OF COVERED SPECIES

This agreement covers the following federally listed species, which are hereafter referred to as the "covered species".

Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Listed as endangered on March 29, 1995
Little Colorado spinedace	<i>Lepidomeda vittata</i>	Listed as threatened on September 16, 1987

3. DESCRIPTION OF ENROLLED LANDS

The property subject to this Agreement consists of 60 acres located within the EC Bar Ranch. This area, hereafter referred to as the "Enrolled Lands", is comprised of 2.5 miles of Nutrioso Creek and 100 feet on either side of the stream channel, including the riparian area and associated floodplain. The Enrolled Lands have been divided into six reaches (Reaches 1, 2, 2A, 3, 4, and 6) as illustrated in figure 1.

EC Bar Ranch is located approximately 15 miles south of Eagar/Springerville on Hwy 180 in the White Mountains of east-central Arizona in sections 20 and 29 of T. 7 N., R. 30 E. of the Gila and Salt River Base Line Meridian. The Ranch is comprised of 394 acres. Of these lands, 84 acres are not irrigated and 310 acres are irrigated upland pasture and crop lands. The property is used for farming and livestock production.

Grazing in the area dates back to the late 1800s. Due to overgrazing and poor range management, Nutrioso Creek has developed into a deeply incised stream channel in all six reaches on the ranch. Dencutting of the channel has caused a loss in flood plain area and loss of riparian vegetation. Overgrazing by large ungulates (livestock and elk) has also contributed to the loss of riparian vegetation. Without an adequate flood plain and associated riparian and streambank vegetation, streamflow is unrestricted causing an increase in flow velocity. As flow velocities increase, shear stresses acting on the stream banks also increase. These forces have caused streambed and bank erosion.

The Cooperator bought the EC Bar Ranch in 1996. He contracted to have the functional condition of the riparian area assessed using the Bureau of Land Management's *Process for Assessing Proper Functioning Condition* (1993). The assessment evaluated the portion of Nutrioso Creek that flowed through the EC Bar Ranch. The riparian area was assessed to be

“Functional-at-risk with a downward trend” in some reaches and “non-functional” in other reaches.

Since purchasing the property, the Cooperator has completed numerous projects that have improved habitat for species occupying the area. Some of the most notable past improvements include riparian fencing (installed in 1998 and 2001), which controls livestock grazing, allowing riparian conditions to improve. In 1998, several stream grade stabilization structures were installed in Nutrioso Creek to reduce stream velocity and encourage floodplain development. Elk enclosure fencing was installed in 2001 along 1.5 miles of Nutrioso Creek and off-channel drinkers were made available for ungulate use.

These improvements were made to address water quality issues. In 1992, 27 miles of Nutrioso Creek (from the headwaters to Picnic Creek) were listed by the Arizona Department of Environmental Quality (ADEQ) as impaired due to exceedances of the State’s numeric turbidity standard. High turbidity in a stream typically indicates excessive sediment loading. The listing required ADEQ to conduct a Total Maximum Daily Load (TMDL) analysis to determine sources of sediment loading from point and nonpoint sources.

In 2000, ADEQ completed and the Environmental Protection Agency (EPA) approved the “Nutrioso Creek TMDL For Turbidity” report (ADEQ 2000). Grant funds from ADEQ, as well as other agencies, have been used to implement best management practices to address sediment loading. The riparian area has improved. In 2002, all reaches of the riparian zone on the EC Bar Ranch were rated in “Functional At Risk in an upward trend”.

The EC Bar Ranch is located within the Nutrioso Creek watershed, which can be divided into three major areas: riparian, valley floor, and upland. The riparian area is supported by perennial/intermittent flows of Nutrioso Creek. Vegetation is comprised of sedges (*Carex* spp.), rushes (*Juncus* spp.), and bulrushes (*Scirpus* spp.) along with other grasses and shrubs. Nutrioso Creek, in the project area, is a deeply incised channel. Therefore, the floodplain in most areas is very narrow, supporting sparse vegetation with limited foliage density. The riparian trees established along the channel include coyote willow (*Salix exigua*); shiny willow (*S. lucida* ssp. *Lasiandra*); strapleaf willow (*S. ligulifolia*); narrowleaf cottonwood (*Populus angustifolia*); and thin-leafed alder (*Alnus tenuifolia*). These trees are growing as individuals or in small clumps.

The vegetation community on the valley floor, outside of the riparian area, is at an elevation of 7,600 feet and is comprised primarily of grasses such as blue grama (*Bouteloua gracilis*), western wheat grass (*Agropyron* spp.), and shrubs such as rabbitbrush (*Chrysothamnus nauseosus*) and skunkbush (*Rhus trilobata*).

Upland areas above 8,000 feet elevation are comprised of ponderosa pines and mixed conifers with some spruce fir in higher elevations. Nutrioso Creek valley extends from the town of Nutrioso to the confluence with the Little Colorado River.

4. BASELINE DETERMINATION

The Parties agree that the baseline conditions applicable to this Agreement are as follows.

Southwestern willow flycatcher

The baseline in the project area for the southwestern willow flycatcher is zero. The baseline is zero because there is currently no habitat for this species. This species is a riparian obligate and the riparian habitat has been almost completely eliminated by overgrazing on the property. The southwestern willow flycatcher it is not found at this time as a breeding species in the project area due the absence of suitable habitat. However, it is possible, although unlikely, that it could be present during migration, because migrating birds in general have been reported from a wide variety of habitats and locations.

The project area was surveyed for wildlife in January and June 2001. Although no southwestern willow flycatchers would be expected to be found during January because they are neotropical migrants, they would be expected to be found during June, which falls within their breeding period, if they were present in the project area. The results of the January and June 2001 surveys determined that no southwestern willow flycatchers were found to occupy the area. Because there is no suitable habitat in the area, no surveys were done in 2002 or 2003.

Preliminary results of surveys for 2003 in the White Mountain area have detected two territories, one pair, and one nest for this region. This is a decrease of 1-2 territories and 1-2 pairs and an increase of one nest from the 2002 second survey period.

The closest known breeding location for the southwestern willow flycatcher is approximately 15 miles west of the project area near the town of Greer, Arizona. The elevation of this site is approximately 8,500 feet. EC Bar Ranch is at an elevation of 7,600 feet. Surveys conducted in the summer of 2002 detected nests in Greer. However, preliminary surveys for 2003, have not detected southwestern willow flycatchers at the Greer site.

Little Colorado spinedace

The Arizona Game and Fish Department (AGFD) conducted a fish population survey on 1.27 miles of Nutrioso Creek on the Cooperator's property in October 1999 (AGFD 2001). Three sample stations, each 50 meters in length, were established. A total of 287 fish were collected in the three stations surveyed. Nonnative fathead minnow (*Pimephales promelas*) were the most abundant at 65.9% of the total fish collected. Little Colorado spinedace (*Lepidomeda vittata*) were next abundant at 14.3%, with speckled dace (*Rhinichthys osculus*) at 12.5% and bluehead sucker (*Pantosteus discobolus*) at 7.3%. Based on the information obtained, AGFD estimated that the 1.56 acres of aquatic habitat on the Crosswhite property (a width of 5 feet on either side of the 1.27 mile stream) supported a fish population of 619 Little Colorado spinedace at the date of sampling.

Streamflow for Nutrioso Creek is variable from year to year and from season to season. The large seasonal variation is due to snowmelt run-off and spring rain events. Peak flows occur from mid February to the beginning of May. In the TMDL report for Nutrioso Creek, ADEQ used discharge values from the USGS gauge station located above Nelson Reservoir for the years 1968 to 1989. The calculated average spring critical flow value (February to May) was 4.3 cubic feet per second (cfs) (ADEQ 2000). The average streamflow for the remaining 8 months was calculated to be 0.46 cfs, a considerably lower amount. Water diversions to support livestock grazing and agricultural activities in the area also reduce streamflow. Recent drought conditions in the watershed have at times caused Nutrioso Creek to have no streamflow (pers. comm).

James Crosswhite, EC Bar Ranch). The largest amount of perennial water for Nutrioso Creek, from the headwaters to the confluence of Picnic Creek, is found on EC Bar Ranch. This variability of streamflow directly effects fish populations in the stream.

The Safe Harbor Policy states that the baseline can be described using measurements of available suitable habitat components. Because data from fish surveys can vary due to the monitoring methods used as well as fluctuations in natural conditions (Minckley 1997), actual population levels will not be used to quantify baseline conditions. In addition, because of the variability of streamflow, this parameter will not be used to quantify baseline conditions. Instead, the baseline conditions for the Little Colorado spinedace are described as the number of woody riparian trees that are 3 feet or greater in height, that are present either as individuals or as clumps along the 2.5 miles of Nutrioso Creek on the EC Bar Ranch at the signing of this Agreement. Currently there are approximately 100 individual or clumps of woody riparian trees consisting of coyote willow, shiny willow, strappleaf willow, narrowleaf cottonwood, and thin-leafed alder in the project area that are 3 feet (1 meter) or greater in height.

Woody riparian trees indicate that existing riparian habitat conditions are supporting the existing fish population of the Little Colorado spinedace. Several studies have shown that riparian vegetation influences the physical stream habitat (Burgess, 1985; Federal Interagency Stream Restoration Working Group, 1998). In Nutrioso Creek, the reduction of riparian vegetation has contributed to excessive sediments, destabilized stream banks, and increased water temperatures. These conditions have most likely caused a reduction in dissolved oxygen, reduced allochthonous (brought in from an outside source) material causing a reduction in food source, and reduced streambank vegetation. The revegetation efforts of this project will improve the physical condition of the stream, which will likely be reflected in an improvement of the Little Colorado spinedace population.

For purposes of this Agreement, the baseline condition for fish habitat would be to maintain the 100 individual or clumps of woody riparian trees in the project area, unless loss of such vegetation results from events not within the Cooperator's control. If natural events such as scouring flood flows in the stream or forest fires occur in or near the project area, the Cooperator will not be held responsible for a reduction in woody riparian vegetation. In such events, the Service and Cooperator would evaluate the new circumstances and determine a revised baseline.

5. MANAGEMENT ACTIVITIES

The Service anticipates that implementation of the following management activities will produce net conservation benefits for the covered species by improving the riparian habitat along Nutrioso Creek. Vegetation planted along the stream is expected to grow well in this location due to the relatively high amount of rainfall in this area of the state and the increased soil moisture due to the proximity of Nutrioso Creek. The Service estimates that a 10-year growing period, which begins after the trees have been planted, is sufficient to establish net conservation benefits for the species covered by this Safe Harbor Agreement.

The Partners for Fish and Wildlife Program will provide funding for the following management activities that will be carried out by the Cooperator.

Restoration of Riparian Vegetation

Funding from ADEQ has been used by the Cooperator to develop a riparian restoration plan. The *EC Bar Ranch Riparian Restoration Implementation Plan for Nutrioso Creek* (Zeedyk, 2002) assesses planting locations and techniques for revegetating six stream reaches (reaches 1, 2, 2A, 3, 4, and 6). The Cooperator does not own reach 5. These reaches of the project area in Nutrioso Creek are identified in figure 1.

Within the Enrolled Lands the Cooperator plans to plant between 10,000 and 21,000 riparian trees and shrubs as well as sedges and grasses native to Arizona along 2.5 miles of Nutrioso Creek. Funds to purchase and plant vegetation materials will come from the Partners for Fish and Wildlife Program, the ADEQ (Section 319(h) Clean Water Act), as well as funds from the Cooperator. Riparian vegetation to be planted includes coyote willow, strap-leaf willow, shiny willow, narrowleaf cottonwood, thinleaf alder, and other native riparian species that are available.

Harvesting of Riparian Vegetation

In the Southwest, many riparian areas have been lost or degraded (Stromberg, 1993; Arizona Riparian Council, 1990; Szaro, 1989). In Arizona, efforts by landowners as well as local, State, and Federal agencies are being made to improve these areas through revegetation projects. However, the sources for riparian plant materials, especially in high elevations, are limited. For this reason, the Cooperator plans to make cuttings of the established riparian vegetation along Nutrioso Creek available for other proposed revegetation projects.

The harvesting of cuttings from the riparian vegetation would occur in two to four years following planting. At that time, the planted trees should have grown to a size that would allow the harvesting of cuttings without compromising the objectives of the project (pers. comm. David Dreesen, Agronomist – Natural Resources Conservation Service Plant Materials Center, Los Lunas, New Mexico). At the end of two years (after planting), the Service will meet with the Cooperator to determine if the riparian trees planted are of sufficient size and whether or not cuttings can be taken. Factors that will be used to make the determination include, but are not limited to, number of stems produced per tree, cutting length, stem diameter, and timing of harvest.

The harvesting of cuttings must not impede the achievement of the net conservation benefit of this project (net conservation benefit is described in Part 6). When it is determined that the planted trees have reached sufficient size, the Service will work with the Cooperator so that harvesting of cuttings will be conducted in such a manner to maintain both the riparian habitat that has been established and improved stream functions for native fish.

Exclosure Fencing and Buffer Strips for Erosion Control

Funds from the Partners Program will be used by the Cooperator to improve the existing elk exclosure fencing along segments of Nutrioso Creek. To maintain the existing plastic elk-proof fence, additional steel pipe braces will be installed. The fencing will improve control of ungulate foraging and promote riparian recovery and ecosystem health.

The floodplain terrace, the area between the exclosure fences and the stream bank, serves as a buffer strip. Buffer strips are areas or strips of land in permanent vegetation, designed to

intercept pollutants and control other potential environmental damage. Funds from the Partners program will be used to plant the buffer strip with native grasses, shrubs, and trees for the purpose of retaining sediment from eroding upland areas and preventing discharge into the creek as well as to improve existing habitat and provide additional habitat.

The objectives of the fence improvements and buffer strips are to reduce sediment load from upland sources and to manage livestock grazing in areas near stream banks. These measures should improve water quality as well as improve the physical stream condition.

Grazing Management

The Cooperator currently grazes livestock pursuant to a grazing management plan developed by the Natural Resources Conservation Service in 1998. The Cooperator has installed livestock and elk fencing in several areas of the EC Bar Ranch. Pastures have been created that exclude these large ungulates from foraging in many segments of the riparian area. The Cooperator intends to use funds from both the Partners Program and ADEQ to install additional fencing.

In the terms and conditions of the Private Lands Agreement, ungulates would be excluded from the project area for at least two growing seasons following project implementation to enhance vegetative recovery. At the end of two years the Service will meet with the Cooperator to determine if the majority of riparian trees planted display good health and vigor (physical features to be considered include new stem growth, additional leaf foliage, new stems sprouting). If the trees are not in good health and vigor, these parties will meet annually to determine when grazing can resume during the growing season. If the trees display good growth and vigor, grazing during the growing season can resume. The Cooperator may graze livestock during the dormant season providing the grazing is consistent with the recommendations contained in the riparian restoration plan and the established grazing management plan, and does not reduce woody vegetation below the baseline level.

6. NET CONSERVATION BENEFITS

“Net Conservation Benefit” means that the conservation measures identified in this Agreement provide for an increase in the covered species’ population and/or the enhancement, restoration, or maintenance of the covered species’ habitat. The net conservation benefit must be sufficient to directly or indirectly contribute to recovery of the covered species.

Planting of riparian vegetation along Nutrioso Creek will have a net conservation benefit to both listed species. The southwestern willow flycatcher is a riparian obligate species found in dense riparian habitat typically in an early seral stage, especially in cottonwood and willow habitats. In the higher elevations of Arizona (above 7,000 feet), which are similar to the elevation found in the project area, this species is found in nearly monotypic dense stands of willows, such as coyote willow or Geyer’s willow. There is usually very dense branch and twig structure in the lower 6.5 feet, with high foliage density from the ground to the canopy (USFWS 2002).

The existing riparian habitat along Nutrioso Creek has sparse vegetation. Hydrological and ecological processes are operating in this riparian system. Through the implementation of the management activities such as planting of riparian trees, fencing, and managing ungulate access, the riparian area should be restorable. Restored riparian habitat will benefit the southwestern

willow flycatcher. Should flycatchers disperse into this area, the planted trees will provide habitat which is not present at this time.

The activities proposed in this project support the recovery actions identified in the *Final Recovery Plan Southwestern Willow Flycatcher* (USFWS, 2002). Actions that will be supported are:

- 1.1 Secure and enhance currently suitable and potentially suitable habitat on Federal lands, lands affected by Federal actions, and cooperating non-Federal and Tribal lands.
 - 1.1.2.2 Restore adequate hydrogeomorphic elements to expand habitat, favor native over exotic plants, and reduce fire potential.
 - 1.1.2.2.3 Reactivate flood plains to expand native riparian forests.
 - 1.1.3.1.1. Manage livestock grazing to restore desired processes and increase habitat quality and quantity.
 - 1.1.3.2.3 Restore ecosystem conditions that favor native plants.
- 1.2 Work with private landowners, State agencies, municipalities, and non-government organizations to conserve and enhance habitat on non-Federal lands.
- 6.6 Determine the most successful techniques for creating or restoring suitable habitat to degraded or former riparian lands, such as abandoned agricultural fields in riparian corridors.

Restoration of riparian vegetation and improved floodplain conditions will also benefit the Little Colorado spinedace. Increased vegetation will trap sediments and reduce turbidity in the creek. Water infiltration will be enhanced thus increasing the amount and duration of flow in the stream. Base flow in the stream will increase in amount and duration, thereby reducing the number of reach lengths that dry during the dry summer season. An increase of riparian vegetation will provide thermal cover by shading the stream. Vegetation will increase the food base in the stream, especially the amount of allochthonous material. Vegetation will provide channel stability and minimize further channel incision by increasing the formation of flood plain materials. It is anticipated that the restoration of riparian vegetation will indirectly contribute to the recovery of the Little Colorado spinedace by maintaining and possibly increasing current population size and by maintaining and improving existing occupied habitat.

The activities proposed in this project also support the recovery actions identified in the *Little Colorado River Spinedace Recovery Plan* (USFWS, 1998). Actions that will be supported are:

- Protect existing populations of spinedace.
- Establish/maintain refugia in the Rudd-Nutriosos Creek drainage.
- Improve or restore habitats occupied by spinedace populations.
- Enhance habitat as necessary.

Net conservation benefits are expected to accrue in the Enrolled Lands as the riparian habitat develops along Nutriosos Creek. Vegetation planted along the stream is expected to grow well in this location due to the relatively high amount of rainfall this area of the state receives and the increased soil moisture due to the proximity of Nutriosos Creek. It is estimated that a 10-year growing period is sufficient to establish net conservation benefits for the species covered by this Safe Harbor Agreement.

7. INCIDENTAL TAKE

Section 9 of the Act and Federal regulation pursuant to Section 4(d) of the Act prohibits the take of endangered and threatened species, respectively, without special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. "Harm" is defined (50 CFR 17.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. "Harass" is defined (50 CFR 17.3) as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. "Incidental take" is defined as take that is incidental to, and not for the purpose of, the carrying out of an otherwise lawful activity. Incidental take is not considered to be prohibited taking under the Act, provided that such taking is in compliance with the terms and conditions of this incidental take statement.

Project activities will be conducted to minimize the possibility of incidental take. Planting of riparian vegetation will be conducted along the flood plain of Nutrioso Creek beginning in December of 2003. Planting activities will occur primarily on the flood plain with little to no disturbance occurring in the stream. The southwestern willow flycatcher does not currently occur in the project area and site potential for this species is currently limited. Spawning for the Little Colorado spinedace occurs in early summer, after planting activities are completed. Therefore, there should be no take of Little Colorado spinedace when planting activities are conducted.

8. RETURN TO BASELINE CONDITIONS

For this Agreement, "return to baseline conditions" means returning the southwestern willow flycatcher population back to the baseline of zero and returning the number of woody riparian trees back to the baseline of 100 individual or clumps of trees. The Cooperator reserves the right to take the Enrolled Lands back to baseline conditions at the end of this agreement. The Safe Harbor program allows for early termination of Agreements under certain circumstances (see Part 12). Therefore, the Agreement can be terminated prior to the expiration date and the Cooperator can return the land to baseline conditions even if the expected 'net conservation benefits' have not been realized. However, the purpose of this Agreement is to restore and enhance riparian habitat for the listed species to a more naturally occurring condition.

The Cooperator has stated that are no plans for removing the plantings or fencing in the future. If the landowner chooses to return the restored habitat to baseline conditions and habitat improvements have resulted in occupancy by any of the covered species, taking may occur. The Service requests reasonable advance written notice of 60 days minimum, if possible, for the opportunity to relocate affected, listed species.

Two possible activities have been identified that would cause the property to return to baseline conditions. One activity would be fire abatement actions to protect lives and property. This area of Arizona has experienced drought conditions for several years. The nearest town for fire assistance is Springerville which is 15 miles northwest of the EC Bar Ranch. Due to this distance, the Cooperator may need to reduce vegetation around his property to minimize

potential fire hazards. This may include riparian vegetation depending on the conditions at the time (e.g., drought causing vegetation to die or dry out).

Another activity is a change to the current land use of cattle grazing and agriculture to a use that regards riparian habitat as low value. Land use change could occur due to economic reasons forcing the Cooperator to change from ranching to some other activity to generate income. Other land use activities could include leasing or selling a portion of the property for a home site.

9. OTHER RESPONSIBILITIES OF THE PARTIES

A. In addition to carrying out the management activities set forth in Part 5, the Cooperator agrees to the following responsibilities.

1. The Cooperator will notify the Service 60 days in advance of any planned activity that the Cooperator reasonably anticipates will result in “take” (i.e., death, injury, or other harm) of the covered species on the Enrolled Lands, and provide the Service the opportunity to capture and/or relocate any potentially affected species, if appropriate.
2. The Cooperator will work cooperatively with the Service and AGFD to carry out monitoring of the Enrolled Lands in accordance with the strategy described in Part 11, Reporting and Monitoring.
3. The Cooperator will allow access to the Enrolled Lands upon reasonable notice by the Service or other agreed-upon party for purposes related to this Agreement, including any activities for which the party is responsible, including, but not limited to, monitoring and capture and relocation of the covered species.
4. The Cooperator will notify the Service of any prospective transfer of ownership, so that the Service can attempt to contact the new owner, explain the baseline responsibilities applicable to the Enrolled Lands, and seek to interest the new owner in signing the existing Agreement or a new one to benefit listed species on the Enrolled Lands. The Cooperator agrees to provide 30 days notice of future disposition of covered lands. The new landowner is not obligated to continue this Agreement. However, for the new landowner to receive assurances as stated in this Agreement, he or she must agree to the terms of the Agreement and sign a new Agreement and receive an enhancement of survival permit in his or her name.
5. The Cooperator will report to the Service any dead, injured, or ill specimens of the covered species observed on the Enrolled Lands within three working days of its finding. Notification must be made to the US Fish and Wildlife Service, Law Enforcement Office, 2450 W. Broadway Rd. #113, Mesa, Arizona 85202 (480/967-7900).

B. In consideration of the foregoing, the Service agrees to the following responsibilities.

1. Upon execution of the Agreement and satisfaction of all other applicable legal requirements, the Service will issue an enhancement of survival permit to the Cooperator in accordance with Endangered Species Act section 10(a)(1)(A), authorizing take of the

covered species as a result of lawful activities on the Enrolled Lands in accordance with the terms of the Agreement and permit terms and conditions. The term of the permit will be 50 years.

2. The Service will provide the Cooperator technical assistance, to the extent possible, when requested; and provide information on Federal funding programs.
3. The Service will assist in carrying out monitoring activities. The Service shall monitor wildlife habitat development and species on the EC Bar Ranch on a periodic basis.

10. AGREEMENT DURATION

The Agreement becomes effective upon issuance by the Service of the section 10(a)(1)(A) enhancement of survival permit described in Part 9 hereof, and will be in effect for 50 years.

11. REPORTING AND MONITORING

Compliance/Biological Monitoring

The Cooperator will work cooperatively with the Service and AGFD for monitoring and reporting activities related to implementation of the Agreement and fulfillment of its provisions, including verification of baseline maintenance, implementation of agreed-upon conservation measures, and take authorized by the permit.

The Cooperator will submit a Compliance/Biological Monitoring Report to the Service by December 31 of each year following the frequency specified in the following table.

Frequency of Compliance/Biological Monitoring Report	Years Report is submitted
First four years of project	2004
	2005
	2006
	2007
Every three years	2010
	2013
Every ten years	2023
	2033
	2043
	2053

The report will include an inventory of riparian trees, photo point monitoring, observation records, a description of the number of cuttings harvested, and an evaluation of the condition of riparian fencing.

The Cooperator will conduct an inventory of riparian trees 3 feet or greater in height, thus providing verification of the baseline. In addition, photo point monitoring of the riparian vegetation will be conducted by the Cooperator in September after the summer monsoon rains. This project will build on previous photo point monitoring the Cooperator has conducted since

1998. The photographs will be taken at specified locations along several reaches of the creek. During this time, the Cooperator will also record observations documenting plant vigor, insect damage, or herbivore utilization.

The harvesting of cuttings of the riparian vegetation may occur in two to four years following planting. At the end of two years (after planting), the Service will meet with the Cooperator to determine if the riparian trees planted are of sufficient size and whether or not cuttings can be taken. Factors that will be used to make the determination include, but are not limited to, number of stems produced per tree, cutting length, stem diameter, and timing of harvest. If the Cooperator harvests cuttings, a description of the number of cuttings harvested will be provided to the Service.

Monitoring of the southwestern willow flycatcher can be initiated when the riparian habitat developed by this project establishes the structure which is thought to be required for this species. AGFD conducts state-wide annual monitoring of breeding southwestern willow flycatchers. The Service, through the Arizona Partners for Fish and Wildlife program, will work with AGFD regarding flycatcher monitoring. When the habitat reaches a point where it is thought capable of supporting southwestern willow flycatchers, Partners will inform AGFD.

Monitoring will be conducted according to the survey protocol that has been established for the southwestern willow flycatcher (USFWS 2000, Sogge et al. 1997). If this monitoring protocol is revised, project monitoring will adopt the new format. A minimum of three surveys would be conducted. The first survey period would occur between May 15 and May 31. The second survey period would occur between June 1 and June 21. The third survey would occur between June 22 and July 17. Monitoring results for this site will be included in AGFD's annual report on the southwestern willow flycatcher.

Monitoring of Little Colorado spinedace will be conducted in cooperation with AGFD. The focus of the monitoring will be to evaluate changes in the species' population and the physical quality of aquatic habitat. AGFD plans to conduct monitoring on this portion of Nutrioso Creek in 2005.

Net Benefit Monitoring/Reporting

The annual Compliance/Biological Monitoring Report provided to the Service will provide data on the development and/or maintenance of the riparian habitat. This report will provide the data to indicate whether net benefits are accruing on the Enrolled Lands.

12. ASSURANCES TO THE COOPERATOR REGARDING TAKE OF COVERED SPECIES

Provided that such take is consistent with maintaining the baseline conditions identified in Part 4 hereof, the Section 10(a)(1)(A) permit referenced in Part 9 shall authorize the Cooperator to take the covered species in accordance with Part 7. Otherwise lawful activities that may result in possible take, as defined in Part 7, include the following circumstances:

1. Implementing the management activities identified in Part 5 hereof.

2. Carrying out any normal agricultural activity on or adjacent to the Enrolled Lands after management activities identified in Part 5 have been initiated.
3. Making any lawful use of the Enrolled Lands after the management activities identified in Part 5 have been fully implemented.

13. MODIFICATIONS

After approval of this Safe Harbor Agreement, the Service may not impose any new requirements or conditions, or modify any existing requirements or conditions applicable to the Cooperator or successor in interest to the Cooperator.

- 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 Party's written concurrence.
- B. Termination of the Agreement. As provided for in Part 12 of the Service's Safe Harbor Policy (64 FR 32717), the Cooperator may terminate the Agreement for circumstances beyond the Cooperator's control. In such circumstances, the Cooperator may return the Enrolled Lands to baseline conditions even if the management activities identified in Part 5 have not been fully implemented, provided that the Cooperator gives the Service the notification required by Part 9.A.1 above prior to carrying out any activity likely to result in the taking of the covered species. If the Cooperator terminates the Agreement for any other reason, the permit referenced in Part 9.B.1 above shall immediately cease to be in effect.
- C. Permit Suspension or Revocation. The Service may suspend or revoke the permit referred to in Part 9.B.1 above for cause in accordance with the laws and regulations in force at the time of such suspension or revocation. The Service also, as a last resort, may revoke the permit if continuation of permitted activities would likely result in jeopardy to 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 above may, by mutual agreement of the Parties, be adjusted if, during the term of the Agreement and for reasons beyond the control of the Cooperator, the utilization of the Enrolled Lands by the covered species or the quantity or quality of habitat suitable for or occupied by the covered species is reduced from what it was at the time the Agreement was negotiated.

Habitat impacts resulting from catastrophic events such as severe rainstorms, severe drought, forest fires, insect/disease epidemics, or other "acts of God" could occur. Such events are beyond the reasonable control of, and would not occur through the fault or negligence of the Cooperator. For such circumstances beyond the control of the Cooperator, the Parties may agree

to revise the Agreement's baseline conditions to reflect the new circumstances, rather than terminate the Agreement.

14. OTHER MEASURES

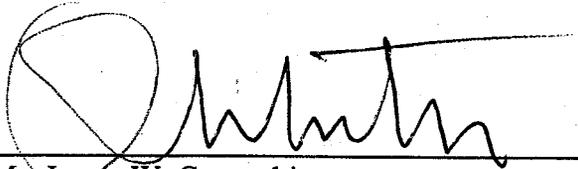
- A. Remedies. Each party shall have all remedies otherwise available to enforce the terms of the Agreement and the permit, except that no party shall be liable in damages for any breach of this Agreement, any performance or failure to perform an obligation under this Agreement, or any other cause of 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. If the Cooperator transfers his or her interest in the Enrolled Lands to a non-Federal entity, the Service will regard the new owner as having the same rights and responsibilities with respect to the Enrolled Lands as the Cooperator, if the new property owner agrees and commits in writing to become a party to this Agreement and the permit referenced in Part 9.A. above in place of the Cooperator.
- D. Availability of Funds. Implementation of this Agreement is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any funds from the U.S. Treasury. The Parties acknowledge that the Service will not be required under this Agreement to expend any Federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.
- E. Relationship to Other Agreements. The associated Private Lands Agreement (FWS Agreement No. 1448-20181-2-G598), which began July 2002, is in effect for 10 years. For that project, the Cooperator proposes to plant between 10,000 and 21,000 trees and shrubs at selected sites along the Ranch's 2.5 miles of Nutrioso Creek riparian corridor to further improve riparian conditions.
- F. 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.
- G. Other Listed Species, Candidate Species, and Species of Concern. Although the Service regards it as unlikely, the possibility exists that other listed, proposed, or candidate species, or species of concern may occur in the future on the Enrolled Lands as a direct result of the management actions specified in Part 5 above. If that occurs and the Cooperator so requests, the Parties may agree to amend the Agreement and associated permit to cover additional species and to establish appropriate baseline conditions for such other species.

H. 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:

Mr. James W. Crosswhite
P.O. Box 44
Nutrioso, AZ 85932
(928) 339-4840

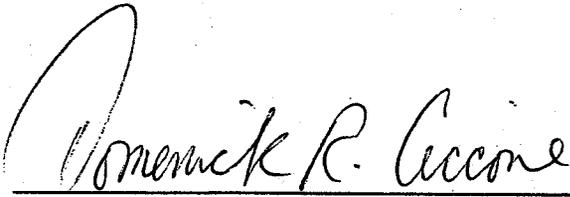
Field Supervisor
U.S. Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 W. Royal Palm Rd., Suite 103
Phoenix, AZ 85021-4951
Phone: 602/242-0210

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 referred to in Part 9.B.1 above.



Mr. James W. Crosswhite
Cooperator

12/20/03
Date



for Mr. H. Dale Hall, Regional Director
U.S. Fish and Wildlife Service
Albuquerque, New Mexico

1/16/04
Date

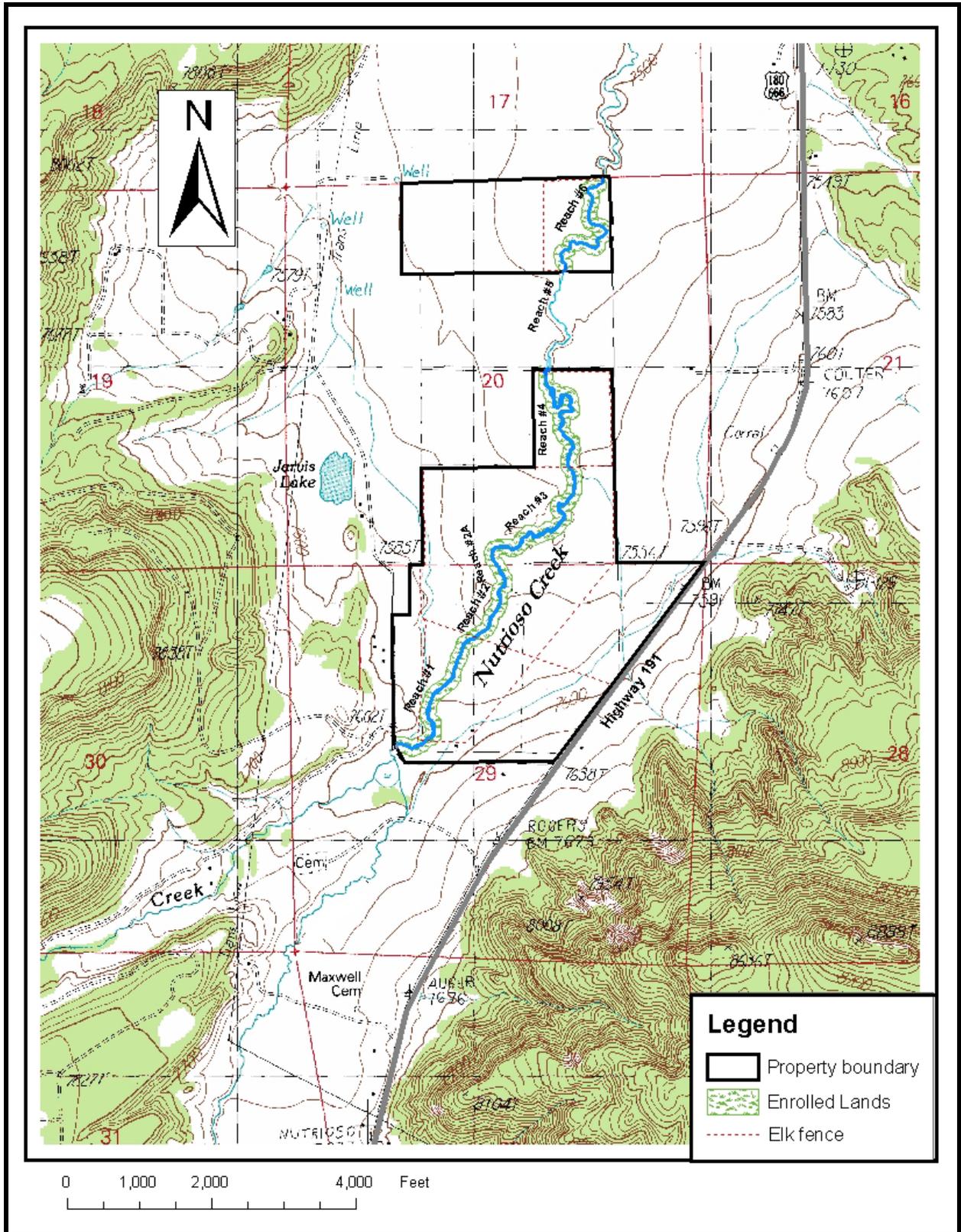


Figure 1. EC Bar Ranch Enrolled Lands on Nutrioso Creek for Safe Harbor Agreement.

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