CANDIDATE CONSERVATION AGREEMENT WITH ASSURANCES FOR COLUMBIA SPOTTED FROG AT SAM NOBLE SPRINGS, OWYHEE COUNTY, IDAHO

This Candidate Conservation Agreement with Assurances (CCAA), effective and binding on the date of last signature below, is between Idaho Department of Lands ("Property Owner"), Idaho Department of Fish and Game (Cooperator), and the U.S. Fish and Wildlife Service ("Service") collectively referred to as the "parties" in this agreement:

Property Owner: Idaho Department of Lands

Cooperator: Idaho Department of Fish and Game

Service: **The Service designates the following individual as the Agreement Administrator:** Jeffery L. Foss, Field Office Supervisor, Snake River Basin Fish and Wildlife Office, Boise, Idaho 83709 (Phone: 208-378-5243)

Tracking Number: TE109603-0

1. Responsibilities of the Parties

Idaho Department of Lands ("IDL"):

The Idaho State Board of Land Commissioners ("Land Board"), consisting of the Governor, Secretary of State, Attorney General, State Controller, and Superintendent of Public Instruction, is the trustee of state endowment lands. The Land Board was established by Article 9 § 7 of the Idaho Constitution and has been charged with the direction, control and disposition of state endowment lands. It also has the duty to provide for the management of the school endowment lands "in such a manner as will secure the maximum long term financial return to the institution to which [the land is] granted." Idaho Constitution, Art. IX, § 8.

The IDL is established by Idaho Code § 58-101 and it is the instrumentality through which the Land Board exercises its constitutional functions. The mission of the IDL, consistent with the Idaho Admissions Act, the State Constitution, the state Statutes, and the policies of the Land Board, includes, but is not limited to, exercising the management, protection, control and disposition of the state endowment lands and resources thereon. These lands are to be administered to maximize revenues over time to the endowment funds for the beneficiary institutions consistent with sound long-term management practices based on land capabilities to maintain a healthy, sustainable, productive land base.

IDL envisions that Idaho's ever increasing growth will create a stronger demand to utilize state land for various agricultural, residential, commercial and environmental enterprises

and an equally strong demand to protect our natural resources and preserve our quality of life. Leasing state land will provide the means to maintain or increase revenue to the beneficiaries, keep pace with inflation, and protect Idaho resources by retaining state management and control. IDL is dedicated to preserving Idaho's resources so that it can generate revenue for the beneficiaries, now and into the future. IDL is the owner and manager of the enrolled lands described below.

The goal of the IDL in implementing this CCAA is to ensure that the management of state endowment lands does not contribute to the listing of Columbia spotted frog under the Endangered Species Act of 1973, as amended ("Act").

Idaho Department of Fish and Game ("IDFG"):

The IDFG is established by Idaho Code § 36-101 as an executive department of state government to preserve, protect, perpetuate, and manage the fish and wildlife of the state (Idaho Code § 36-103). Idaho Code § 36-202 defines wildlife as any form of animal life, native or exotic, generally living in a state of nature.

The goal of the IDFG is to ensure the long-term persistence of Columbia spotted frogs by providing assistance to private and government landowners on conservation, restoration, and enhancement. IDFG holds a 25-year lease for a portion of the enrolled lands (Appendix 1).

2. Enrolled Land

For purposes of this Agreement, the "enrolled land" includes a portion of the upper Rock Creek drainage in Owyhee County, Idaho (Figure 1). The enrolled land includes 680 acres of State Endowment land owned by the State of Idaho, and managed by the IDL commonly referred to as the Sam Noble Springs parcel, to-wit: N½SE¼, SE¼SE¼ Section 22; S½, S½N½ Section 23; SW¼NW¼, NW¼SW¼ Section 24 Township 9 South, Range 2 West. The land is not irrigated and the dominant agricultural use is livestock grazing.

3. Authority and Purpose

Sections 2, 7, and 10 of the Act allow the Service to enter into this CCAA. Section 2 of the Act states that encouraging interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs is a key to safeguarding the Nation's heritage in fish, wildlife, and plants. Section 7 of the Act requires the Service to review programs that it administers and to utilize such programs in furtherance of the purposes of the Act. By entering into this CCAA, the Service is utilizing its Candidate Conservation Programs to further the conservation of the Nation's fish and wildlife. Lastly, section 10(a)(1)(A) of the Act authorizes the issuance of permits to "enhance the survival" of a listed species.

The purpose of this CCAA is for the Service to join with the IDL and the IDFG to implement conservation measures on the enrolled lands to improve breeding, foraging, dispersal, and hibernating habitat, as well as migration corridors, for Columbia Spotted Frogs (*Rana luteiventris*) while allowing continued livestock use.

4. Description of Existing Conditions

For a general description see the Conservation Assessment for the Columbia spotted frog in Owyhee County, Idaho (Appendix 2). The population of Columbia spotted frogs on the enrolled lands has been in a general downward trend, and has varied from 230 to 93 adults between 1998 and 2003 (Lingo and Munger 2004) and is one of the largest known local populations of the species in Owyhee County. The enrolled lands are occupied year-round by Columbia spotted frogs and provide habitat meeting all spotted frog life history requirements.

General Description of Enrolled Land

The enrolled land is a 680-acre parcel made up of a wet meadow and sagebrush uplands. The enrolled land includes a complex of several natural springs, known as Sam Noble Springs, which form the headwaters of Rock Creek. Nine man-made livestock watering ponds have been constructed to provide water for livestock on the enrolled land. Six of these ponds are fed by Sam Noble Springs and are occupied by Columbia spotted frogs (Figure 2). These six ponds were built in the 1970's. They were refurbished by excavating in the late 1980's. These ponds have gradually filled in over the fifteen years since they were refurbished.

The Sam Noble Springs complex (all springs combined) produces from 10 to 30 gallons per minute and may drop to less than 10 gallons per minute during periods of extreme drought (Karl Gebhart, pers. comm., 2003; Tim Duffner pers. comm. 2004). The flow from the springs varies from year to year and appears to be affected, at least in part, by snow pack. Flow from the springs also decreases over the course of the season. The flow is highest in the spring and decreases during the summer. By late summer when livestock grazing typically occurs, total flow from the springs decreases substantially, and some of the springs are reduced to a trickle, particularly during periods of drought (Tim Duffner, pers. comm., 2004).

Vegetation

The Sam Noble Springs drain into and form a wet meadow complex dominated by sedges (*Carex* spp.). Willows (*Salix* spp.) are present around some of the ponds and springs. There is an isolated clump of willows in the wet meadow. The wet meadow and spring complex occupies about 32 acres of the enrolled land.

The remaining acres of the enrolled land are sagebrush steppe upland dominated by sagebrush and bitterbrush (*Artemisia tridentata/Purshia tridentata*) overstory with a moderately diverse understory of native forbs and grasses dominated by Idaho fescue and bluebunch wheatgrass (*Festuca idahoensis/Agropyron spicata).* Cheatgrass (*Bromus tectorum*) is present in an old burn on the eastern end of the area but is not dominant and

does not appear to be moving to new sites. Rocky mountain juniper (*Juniperus scopulorum*) is increasing in the upland areas and encroaching into the fringes of the meadow.

Columbia Spotted Frogs

Columbia spotted frogs occupy the wet meadow, ponds, and spring complex on the enrolled land. Columbia spotted frogs are aquatic amphibians; they need to be in or very near water at all times. As such, they occupy the ponds, watercourses, and meadow where free water is present. Frogs hibernate in the springs and emerge in April. Breeding and egg deposition take place in the six ponds fed by Sam Noble Springs during late April and tadpoles hatch during May. Columbia spotted frogs transform from tadpoles to frogs from late July into September. Frogs forage in the wet meadow and along the margins of the ponds and watercourses. The wet meadow and associated watercourses serve as dispersal corridors and are important for short-distance seasonal migrations from hibernacula in the springs to foraging and breeding habitat in the ponds, wet meadow and associated watercourses.

The population of Columbia spotted frogs on the enrolled land may be part of a metapopulation on Rock Creek and its tributaries. The wet meadow is a linkage zone potentially connecting the frog population on the enrolled land with frog populations on Rock Creek and its tributaries.

Livestock Grazing

The enrolled land is leased to an adjacent landowner for livestock grazing. The enrolled land is part of a 1240 acre pasture, called the "Big Field", composed of the enrolled land (680 acres), private land owned by the lessee (360 acres), and land administered by the Bureau of Land Management (200 acres) (Figure 3). There are no division fences between these ownerships or within the big field. The grazing lease has authorized 254 Animal Unit Months (AUM) of livestock grazing to take place on the enrolled land portion of the big field from late July through October. Livestock have grazed in the Big Field an average of 30 days per year.

There are three livestock watering ponds on the private land in the big field in addition to nine ponds on the enrolled land (Figure 3). Livestock have used all nine ponds on the enrolled lands for water during the grazing season.

During the late summer (July through October) when livestock have grazed the enrolled land, the upland vegetation is curing rapidly or has cured and very little green forage exists in the Big Field except for the wet meadows. Livestock have tended to congregate in the wet meadows due to the presence of green vegetation and water. On the enrolled land portion of the Big Field, livestock use has been concentrated in the wet meadow and adjacent to the six livestock watering ponds occupied by Columbia spotted frogs. The wet meadow vegetation has been grazed very close. The margins of the ponds have been heavily grazed and trampled, often denuding pond margins of all vegetation. The trampling around ponds is exacerbated in dry years when some of the ponds have dried up, concentrating livestock use at the few remaining ponds with water.

Livestock grazing coincides with the time of year that flow from the springs has naturally decreased. Livestock have consumed a significant proportion of the free water available in the wet meadow part of the enrolled land; particularly in periods of drought when flow from the springs is low and other ponds have dried up forcing livestock to concentrate on the ponds fed by Sam Noble Springs.

Livestock grazing on the enrolled land typically begins about the same time Columbia spotted frogs are transforming from tadpoles to young frogs (metamorphs) and emerging from the ponds. The amount of overlap depends on the timing of grazing and phenology of frog emergence. There is some evidence that fewer young frogs are produced at ponds that have been intensively used by livestock at the same time emergence is taking place (Lingo and Munger 2004).

Threats to Columbia Spotted Frogs

Livestock grazing of the wet meadow and spring complex of the enrolled land poses several potential threats to Columbia spotted frogs. Grazing removes a large portion of the vegetation in the wet meadow reducing vegetative cover in habitat used by frogs for foraging, dispersal, and seasonal migrations. This loss of cover reduces the quality and suitability of frog habitat in the wet meadow and the area around the ponds. Vegetative cover protects frogs from desiccation and predators and provides habitat for the insects that are the primary food source for frogs. Removal of vegetation also slows the ecological process of accumulation of organic matter in the wet meadow. The lack of organic matter accumulation may have reduced the ability of the wet meadow to hold water thereby decreasing the size and duration of the wet area in the meadow that is utilized by frogs. Livestock consumption of water reduces the amount of free water available in the ponds, watercourses and wet meadow, thereby reducing the amount of suitable frog habitat.

In addition, livestock trampling around the ponds and in portions of the wet meadow could result in direct mortality of frogs, particularly metamorphs. The potential for direct mortality from trampling is greatest when livestock are grazing at the same time metamorphs are emerging from the ponds.

5. Conservation Measures

Conservation of Columbia spotted frogs on the enrolled land will be accomplished by improving spotted frog habitat and eliminating the potential for direct mortality from livestock trampling. The nine Specific Commitments and four Conservation Measures described in this section are designed to improve habitat by increasing vegetative cover and increasing the amount, duration and extent of free water in the springs, ponds and wet meadow. The four Conservation Measures will improve habitat and reduce mortality through the following approaches:

First, rest vegetation, restore vegetative cover and eliminate potential for mortality from livestock trampling by eliminating livestock grazing from the occupied habitat by

constructing a fence to exclude livestock from a 104-acre portion of the enrolled land that includes the wet meadow, spring complex, and the six ponds fed by Sam Noble Springs.

Second, increase the amount of water available in occupied habitat during the period livestock would be grazing on the enrolled lands. By reducing AUM's 43% from 254 to 144 and piping water outside the enclosure for use by remaining livestock on the enrolled lands, more water will be available for frogs.

Third, improve and provide potential additional breeding and hibernation habitat (ponds and springs) for Columbia spotted frogs on the western end of the enrolled lands, outside the enclosure, by constructing a new pond and excluding livestock from a springhead on the enrolled land outside the enclosure, and refurbishing two ponds outside the enclosure. This action will also facilitate livestock grazing for the remaining 144AUM's on the 576 acres of the enrolled lands outside the enclosure.

Fourth, improve the quality of and increase the amount of occupied frog habitat within the enclosure by manipulating vegetation in the wet meadow and spring complex through a process of monitoring and adaptive management, and by refurbishing some or all of the ponds inside the enclosure, as needed to benefit frogs.

There are nine Specific Commitments for managing the enrolled lands to implement these four Conservation Measures to benefit frogs while maintaining livestock grazing opportunities on the enrolled lands, consistent with the purpose of this plan as described in Section 3. These nine Specific Commitments are described in the numbered paragraphs, below, under the four different Conservation Measure headings "A" through "D" that describe the anticipated frog habitat conservation benefits.

Conservation Measures and Specific Commitments:

A. Rest vegetation, restore vegetative cover and eliminate potential mortality from livestock trampling in occupied frog habitat.
    1. Lease to the IDFG for 25 years a 104-acre portion ("Enclosure") of the enrolled land that contains the springs, the six livestock watering ponds and the wet meadow occupied by Columbia spotted frogs (Figure 2, Appendix 1).
    2. IDFG will fence the enclosure with a 4-wire fence designed to exclude livestock for 25 years, yet allow access by wildlife. (Figure 2).
B. Increase water availability for frogs within the enclosure
    1. Reduce the number of AUMs on the enrolled land by 43% by reducing the grazing permit from 254 to 144 AUMs and exclude livestock grazing from the enclosure by implementing the provisions under "A", above.
    2. Develop a subsurface water collection system in the wet meadow below pond 3 inside the enclosure and deliver water to troughs located outside the enclosure to facilitate the reduction in water use (Figure 2, Appendix 3). Water will only be collected and delivered outside the enclosure when livestock are actually grazing in the big field. When livestock are not

grazing in the big field, the system will be shut off so that no water is collected.

C. Enhance spotted frog habitat on the western end of the enrolled lands while maintaining livestock watering opportunities.
    1. Construct a new pond adjacent to a springhead used by Columbia spotted frogs at the western boundary of the Sam Noble Springs parcel to benefit frogs and livestock (Figure 2, number 14; Figure 4).
    2. Construct a livestock exclusion fence around a portion of the pond and all of the springhead described in Specific Commitment C.1 (Figure 4).
    3. Refurbish two existing livestock watering ponds not occupied by Columbia spotted frogs outside the enclosure by excavating to increase depth and/or size (Figure 2, numbers 12 & 13). Refurbished ponds will have a gently sloping north shore to facilitate potential future use by frogs.

D. Implement a monitoring and adaptive management program to ensure frog conservation
    1. Maintain and/or refurbish ponds occupied by Columbia spotted frogs within the enclosure described under "A", above. Ponds inside the enclosure will be rehabilitated if it is determined that excavation (e.g., with a backhoe) to increase depth and/or size will benefit Columbia spotted frogs. When pond refurbishing is needed to benefit Columbia spotted frogs, ponds will be scheduled for maintenance in a manner that will minimize impacts to spotted frog populations and habitat.
    2. Manipulate vegetation inside the enclosure described under "A", above, to optimize habitat for Columbia spotted frogs.
    3. Implement monitoring as described in section 10.
    4. Inspect, remove, and destroy any noxious plants/seeds detected on equipment prior to entering the Big Field parcel. Noxious weeds will be controlled on the Big Field parcel, including within the enclosure, by appropriate measures.

Conservation measures have been or will be implemented as specified in Table 1.

Table 1: Conservation Measure Implementation Schedule

Conservation Measure & Specific Commitment	Description	Party(s) Responsible	Completion Date
A.1	Lease	IDFG, IDL	January 1, 2003
A.2	Fence enclosure	IDFG	July 2003
B.1	Reduce AUMs	IDL	Annually for term of lease and CCAA
B.1	Eliminate livestock grazing in enclosure	IDFG, IDL	July 2003
B.2	Develop water collection and delivery system	IDL	September 2004
B.2	Operate and maintain water collection and delivery system	IDL	Annually for term of lease and CCAA
C.1	Excavate new pond	IDL	November 2003
C.2	Fence spring and new pond	IDFG	May 2005
C.3	Rehabilitate two livestock ponds	IDL	October 2003
D.1	Rehabilitate spotted frog ponds	IDFG	As needed
D.2	Manipulate vegetation	IDFG, IDL	As needed

6. Expected Benefits

Conservation Measure A will eliminate livestock grazing in the occupied Columbia spotted frog habitat on enrolled lands, except for conservation purposes. Eliminating livestock grazing in the enclosure is expected to have several benefits to Columbia spotted frogs.

Removal of livestock from the enclosure will eliminate any potential for direct mortality of Columbia spotted frogs from trampling by livestock.

The annual removal of vegetation in the wet meadow area by grazing livestock reduced shade, hiding and foraging cover for Columbia spotted frogs at a particularly critical time of the year when the metamorphs were leaving the ponds and dispersing. The removal of vegetation also reduced habitat for insects. Elimination of annual grazing will increase availability of cover, food and therefore foraging habitat for Columbia spotted frog metamorphs, sub-adults and adults. These improvements in habitat should improve survival of all age classes of frogs by reducing mortality from predators, desiccation and

intraspecific competition for food. In addition, increased vegetative cover, in combination with improvements in other habitat components described below should, over time, increase the likelihood of connecting the population of frogs on the enrolled land with other populations downstream in Rock Creek.

In the absence of livestock grazing, organic matter recruitment to the wet meadow will increase. Over time, the accumulation of organic matter should increase the capacity of the wet meadow to hold and release water. As a result, the surface water flow should increase and persist for a longer period of time each year. The anticipated net result of these changes is an increase in the extent, duration, and quality of Columbia spotted frog habitat.

Conservation Measure B (in addition to Conservation Measure A) will increase the amount of water available to frogs in occupied habitat within the enclosure. Reducing the number of AUMs by 43% will likely reduce water demand by livestock on the enrolled lands. Construction of the water collection and conveyance system will still allow remaining livestock on the enrolled lands to use water from occupied frog habitat, but less water will likely be used. Since frogs depend so heavily on available surface water, especially in late summer when livestock graze on the enrolled lands, making more water available for frogs in occupied habitat is expected to provide benefits for frogs. Elimination of livestock grazing in the enclosure will increase the amount of free water flowing out of the ponds and through the wet meadow. This will increase the duration and extent of free water in the wet meadow thereby increasing the amount of suitable spotted frog habitat.

Quantifying this benefit, and the potential reduction in water use, resulting from implementing the Specific Commitments in this plan, is difficult because of a lack of quantitative data on the number of livestock consuming water in the area now excluded from livestock grazing and the total amount of water emanating from springs in the area now excluded from livestock grazing.

However, an estimate can be made based on the number of AUMs in the area now excluded from livestock grazing and the estimated flow from the springs inside the enclosure. Karl Gebhardt, BLM hydrologist familiar with Sam Nobel Springs, estimates that the flow from the springs during the months of July, August, and September (the period during which livestock are grazed on the enrolled lands) is 10-15 gallons per minute (gpm) and may go as low as 7 gpm in dry years. The estimated number of AUMs in the area now excluded from livestock is 110 AUMs. An AUM consumes 20 gallons of water per day. Livestock grazed the area now enclosed for approximately 30 days each year. Using these figures, the estimated water savings is 10% when the spring flow is 15 gpm; 15% at 10 gpm and 22% at 7 gpm. These water savings estimates only apply to the 30 day period when livestock grazing takes place and assumes that the number of livestock watering in the now enclosed area is proportional to the number of AUMs inside the enclosure. This assumption is likely not completely true; it is likely that more livestock watered at the now enclosed area than grazed in it. Therefore, the aforementioned water savings estimates are likely underestimates of the actual savings.

These estimates of water savings do not take into account the amount of water consumed by livestock that originates inside the enclosure and is piped to troughs outside the enclosure. It is expected that the amount of water consumed at the troughs will be a small fraction of the water that was consumed by livestock prior to excluding livestock from the enclosure because there is relatively little livestock forage adjacent to the troughs.

The combination of increasing the capacity of the wet meadow to store and release water resulting from implementation of Conservation Measure A, and the increase in water availability resulting from reducing livestock consumption resulting from implementation of Conservation Measure B should increase the duration and extent of surface flow of water in the wet meadow. It is possible that over time, water will flow through the entire wet meadow for a longer period of the year and connect it to flowing water in a Rock Creek tributary outside the enrolled lands. This could link the spotted frog population on the enrolled land with populations in Rock Creek to a greater extent than in the recent past.

Conservation Measure C will protect and enhance spotted frog habitat on the west end of the enrolled lands, and will mitigate the limited access of livestock to water from inside the enclosure resulting from implementing Conservation Measure A, above. Columbia spotted frogs will benefit because these measures will protect an already-occupied springhead, and create or enhance potential frog habitat by creating and protecting a portion of a new pond, and refurbishing two already-existing ponds to facilitate use by frogs. Improving the amount and distribution of water outside the enclosure should also reduce livestock pressure on the enclosure fence and improve livestock distribution over the entire big field. Overall, this conservation measure is intended to increase frog abundance at the west end of the enrolled land by providing habitat suitable for all life-history stages of frogs (i.e., there is no known breeding of frogs occurring at the springhead). In addition, this conservation measure is intended to increase the potential occurrence of spotted frogs on portions of the enrolled lands that currently are unoccupied. This measure may also increase the potential for movement of frogs within occupied frog habitat on and adjacent to the enrolled lands.

Conservation Measure D will maintain or improve Columbia spotted frog breeding and reproduction through a monitoring and adaptive management approach to ensure maintenance of high-quality frog habitat. The ponds inside the enclosure are all man-made excavations surrounded by a berm constructed from the removed soil. Over time the ponds gradually fill in, reducing the surface area and the depth of the water. The ponds inside the enclosure were built in the early 1970s and were last refurbished in the mid-1980s. Ponds will be refurbished periodically to optimize their depth and surface area to increase breeding habitat. Ponds will be reconstructed with gently sloping sides to increase the size of the littoral zone for tadpoles and basking adults. Increasing the depth of the ponds may also provide additional hibernacula and improve over winter survival.

Conservation Measure D is also intended to benefit frogs by manipulating vegetation to improve frog habitat. Vegetation manipulation will be considered if research and/or monitoring indicate that treatments will improve Columbia spotted frog habitat. An example includes removing junipers that are encroaching on the springs and wet meadow. Juniper removal will improve spring flow, ground water moisture, and the extent of the wet meadow vegetation, thereby improving Columbia spotted frog habitat.

7. Level/Type of Take/Impacts

Management of the enrolled lands could result in take from:

1. The Specific Commitments in Conservation Measure B, including operation of the water collection and delivery system, could result in reducing the size of the wet meadow below pond 3 and/or altering the vegetative composition by reducing the amount of subsurface water. Take could result from reduced foraging habitat for Columbia spotted frogs, reduced rearing area for young emerging from ponds 3 and 4, and from the loss of connectivity between ponds 3 and 4. Take will be minimized by operating the water collection system only during the time that livestock are grazing in the big field, usually less than 30 days cumulative between late July and October each year and substantially reducing livestock use of water inside the enclosure. Water troughs served by the collection system are equipped with float valves so the water shuts off when the troughs are full; thereby only delivering the amount of water consumed by livestock and evaporation. When not in use, the water collection system will not collect water, and is designed to return water to the wet meadow immediately down slope of the collection area. The troughs have an overflow and drain designed to return water to the stream channel in the meadow (Appendix 3). A vegetation transect will be established below pond 3 to determine if the water collection and delivery system is having an effect on spotted frog habitat.

2. Livestock grazing outside the enclosure on the enrolled lands could result in take by reducing the amount of herbaceous cover available in the uplands, potentially affecting dispersing frogs; however, Columbia spotted frogs have not been observed to occupy the upland habitat on the enrolled land in six years of intensive study of the area. Nor has any direct or indirect evidence been collected to date to support the idea that successful dispersal across the uplands has taken place. Recent research at Sam Noble Springs suggests that Columbia spotted frog dispersal from ponds is dependent on weather rather than the ground cover around the ponds (Munger pers. com., 2004). Lingo and Munger (2004 in prep.) found that frogs dispersed from ponds during rainstorms regardless of the presence or absence of vegetation. It therefore seems unlikely that livestock grazing outside of the enclosure would have any effect on Columbia spotted frogs or their habitat. The authorized Animal Unit Months (AUMs) for the enrolled land have been set to maintain the uplands in their current condition.

3. Conservation Measure C, rehabilitating ponds inside the enclosure, could result in direct mortality of spotted frog adults, sub-adults and/or tadpoles. The following protocol will be used to minimize take. Ponds will be rehabilitated in the fall after the metamorphs have emerged but before the Columbia spotted frogs are hibernating. When a pond is rehabilitated as many individuals as practical of each life stage of Columbia spotted frogs will be captured and held in cages or aquaria designed to keep them alive and healthy for the length of time necessary to refurbish the pond and allow the turbidity to subside, usually one day (24 hours). The Columbia spotted frogs will be returned to the rehabilitated pond the day after the work is completed. These measures should nearly eliminate take of tadpoles and minimize take of adults, sub-adults and metamorphs.

4. Eliminating livestock grazing inside the enclosure is expected to result in changes in the species composition, height, and density of the vegetation in the wet meadow. These changes in the vegetative component of the wetland may reduce habitat suitability for Columbia spotted frogs. This seems unlikely because Columbia spotted frogs inhabit and prosper in ungrazed wet meadow habitat in other parts of their range. Columbia spotted frog populations will be monitored on the enrolled lands and if population declines are attributed to increased vegetation density, an adaptive management process will be initiated to experimentally manipulate vegetation to improve habitat conditions for Columbia spotted frogs.

The Service recognizes that the level of take outlined above is consistent with the overall goal of precluding the need to list the species, and that if the Conservation Measures were implemented on other necessary properties, where appropriate, there would be no need to list the species.

8. Assurances Provided

Through this CCAA, the Service provides the IDL assurances that no additional conservation measures or additional land, water, or resource use restrictions, beyond those voluntarily agreed to and described in the "Conservation Measures" section of this CCAA, will be required should the Columbia spotted frog (*Rana luteiventris*) become listed as a threatened or endangered species in the future. Unless otherwise stated, these assurances will be authorized with the issuance of an enhancement of survival permit under section 10(a)(1)(A) of the Endangered Species Act. The application for the enhancement of survival permit is included as Appendix 5 to this CCAA.

9. Assurances Provided to Property Owner in Case of Changed or Unforeseen Circumstances

The assurances listed below apply to the Property Owner. The assurances apply only where the enhancement of survival permit associated with the CCAA and the CCAA itself are being properly implemented, and only with respect to species adequately covered by the CCAA.

(1) *Changed circumstances provided for in the CCAA.*
If additional conservation measures are necessary because the man-made ponds inside the enclosure have deteriorated to the point that they no longer provide breeding and reproducing habitat or the absence of livestock grazing inside the enclosure has resulted in degradation of Columbia spotted frog habitat, the Property Owner will respond to changed circumstances by implementing the measures specified in the CCAA.

(2) *Changed circumstances not provided for in the CCAA.*
If additional conservation measures not provided for in the CCAA's operating conservation program are necessary to respond to changed circumstances, the Service will not require any conservation measures in addition to those provided for in the CCAA without the consent of the Property Owner.

(3) *Unforeseen circumstances.*

(A) If additional conservation measures are necessary to respond to unforeseen circumstances, the Service may require additional measures of the Property Owner, but only if such measures are limited to modifications within the CCAA's conservation strategy for the affected species, and only if those measures maintain the original terms of the CCAA to the maximum extent possible. Additional conservation measures will not involve the commitment of additional land, water, or financial compensation, or additional restrictions on the use of land, water, or other natural resources available for development or use under the original terms of the CCAA without the consent of the Property Owner.

(B) The Service will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of the affected species. The Service will consider, but not be limited to, the following factors:

(1) Size of the current range of the affected species;
(2) Percentage of range adversely affected by the CCAA;
(3) Percentage of range conserved by the CCAA;
(4) Ecological significance of that portion of the range affected by the CCAA;
(5) Level of knowledge about the affected species and the degree of specificity of the species' conservation program under the CCAA; and
(6) Whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

10. Monitoring Provisions

Compliance and biological monitoring will be conducted by IDL and IDFG as indicated in Table 2. The Service may participate in or assist with monitoring.

Table 2: Compliance and Biological Monitoring Implementation Schedule

Monitoring Measure	Description	Party Responsible	Frequency	Completion Date	Reporting Date
Compliance	Conservation measure A.1- IDFG lease	IDL	Once	August 2003	CCAA signing
Compliance	Conservation measure A.2- fence enclosure	IDL & IDFG	Annual	October	January 30
Compliance	Conservation measure B.1- reduce AUMs	IDL	Once	July 2003	CCAA signing
Compliance	Conservation measure B.1- eliminate livestock grazing	IDL & IDFG	Annual	November	January 30
Compliance	Conservation measure B.2- build water system	IDL	Once	September 2004	January 30
Compliance	Conservation measure C.1- build new pond	IDL	Once	November 2003	CCAA signing
Compliance	Conservation measure C.2- fence spring and new pond	IDFG	Once	April 2005	January 30
Compliance	Conservation measure C.3- refurbish ponds, not occupied	IDL	Once	October 2003	CCAA signing
Compliance	Conservation measure D.1- refurbish occupied ponds as needed	IDFG	Annual	November	January 30
Compliance	Conservation measure D.2- vegetation manipulation as needed	IDFG	Annual	November	January 30
Compliance	Conservation measures A.2 & C.2- monitor and maintain fences	IDFG & IDL	Annual	June	January 30

Monitoring Measure	Description	Party Responsible	Frequency	Completion Date	Reporting Date
Biological	Count egg masses	IDFG	Annual for first 5 years	June	January 30
Biological	Check ponds outside enclosure	IDFG	Annual for first 5 years	June	January 30
Biological	Total population estimate	IDFG	Every 5 years	July	January 30
Biological	Search for metamorphs	IDFG	Annual for first 5 years	August	January 30
Biological	Monitor water collection and delivery system and livestock use of troughs	IDL	Annual	Grazing season	January 30
Biological	Green line transect, wet meadow	IDL	Every 5 years	August	January 30
Biological	Cross section transect	IDL	Every 5 years	August	January 30
Biological	Pond 3 cross section transect	IDL	Every year for the first 3 years, every 5 years thereafter	August	January 30
Biological	Monitor depth of ponds inside enclosure	IDFG	Every 3 years	June	January 30

11. Compliance Monitoring

The IDL and IDFG will be responsible for monitoring and reporting specified herein related to implementation of the CCAA and fulfillment of its provisions, including implementation of agreed-upon conservation measures, and take authorized by the permit. The Service may assist in monitoring, and after reasonable prior notice to the Property Owner, may enter the enrolled lands to ascertain compliance with the CCAA.

12. Biological Monitoring and Adaptive Management

IDFG will monitor the population of Columbia spotted frogs on the enrolled lands as follows:

1. Columbia spotted frog egg masses will be counted on the enrolled lands both inside and outside the wet meadow enclosure. Egg masses will be counted during April and early May each year of the first five years of the agreement. At the end of the first five years the IDFG will evaluate this population monitoring

methodology. In consultation with the parties to the agreement, the IDFG may modify this population monitoring methodology and schedule.

2. Ponds outside the enclosure on the enrolled lands will be checked to determine if spotted frogs are present each year for the first five years of the agreement. At the end of the first five years the IDFG will evaluate this population monitoring methodology. In consultation with the parties to the agreement, the IDFG may modify this population monitoring methodology and schedule.
3. A total Columbia spotted frog population estimate on the enrolled lands will be made every five years to determine the size and structure of the population.
4. A survey will be conducted to determine if metamorphs are present each year for the first five years of the agreement. At the end of the first five years the IDFG will evaluate this population monitoring methodology. In consultation with the parties to the agreement, the IDFG may modify this population monitoring methodology and schedule.
5. The size and depth of the six man-made ponds inside the enclosure will be measured at least every three years. This information in conjunction with egg mass counts will be analyzed to determine if the ponds need to be refurbished.
6. Monitoring results will be analyzed to determine if the expected benefits of the conservation measures are realized and if additional measures identified in the CCAA need to be implemented (Conservation measures D.1 and D.2).

IDL will monitor the effects of the enclosure fence and the water collection and delivery system on vegetation and hydrology within the enclosure as follows (see also Appendix 4 and Figure 5):

1. The Rock Creek Meadow Green line transect is designed to detect changes in species composition of the wet meadow.
2. The Rock Creek Meadow Cross-Section Transect measures the width of the wet meadow and the presence of free water in a series of transects and is designed to determine if the implementation of Conservation measures A, B, and C increases the size of the wet meadow and the extent of the wetted area.
3. The Pond 3 Meadow Cross section Transect will specifically monitor the effect of the water development system on the wet meadow immediately below pond 3. If measurable effects are detected on species composition and meadow size, and these measurable effects have an adverse impact on frogs, the parties will determine the appropriate adaptive management steps to mitigate adverse impacts to Columbia spotted frogs, including reducing the amount of water withdrawn from the enclosure for livestock use.

Vegetation and spotted frog population monitoring results will be analyzed to determine if the expected benefits of the conservation measures are realized. Particular attention will be paid to the density of vegetation and frog abundance and distribution. If opportunities for improvements in frog habitat are identified, then additional measures identified in the CCAA will be implemented (Conservation measure D.2).

The CCAA will grant the Service and/or responsible party, after reasonable prior notice to the Property Owner, the right to enter the enrolled lands to conduct implementation and effectiveness monitoring.

Reports will be due January 30 of the year following the biological monitoring surveys and copies will be made available to all Parties.

13. Notification of Take Requirement

By signature of this CCAA, the Idaho Department of Lands agrees to provide the Service with an opportunity to rescue individuals of the covered species before any authorized take occurs. Notification that take will occur must be provided to the Service at least 30 days in advance of the action.

14. Duration of CCAA and Permit

The CCAA, including any commitments related to funding under Service programs, will be in effect for the duration of the IDFG lease (Appendix 1) following the CCAA's approval and signing by the Parties. The section 10(a)(1)(A) permit authorizing take of the species will become effective on the date of the final rule listing a species and will expire when this CCAA expires or is otherwise suspended or terminated. The permit and CCAA may be extended beyond the specified terms prior to permit expiration through the permit renewal process and with agreement of the Parties.

15. Modifications

After approval of the CCAA, the Service may not impose any new requirements or conditions on, or modify any existing requirements or conditions applicable to, a landowner or successor in interest to the landowner, to compensate for changes in the conditions or circumstances of any species or ecosystem, natural community, or habitat covered by the CCAA except as stipulated in 50 CFR 17.22(d)(5) and 17.32(d)(5).

16. Modifications of the CCAA

Any party may propose modifications or amendments to this CCAA by providing written notice to, and obtaining the written concurrence of, the other Parties. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will use their best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Parties' written concurrence.

17. 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 Endangered Species Act, the National Environmental Policy Act, and the Service's permit regulations at 50

CFR 13 and 50 CFR 17. The party proposing the amendment shall provide a statement describing the proposed amendment and the reasons for it.

18. Termination of the CCAA

As provided for in Part 8 of the Service's CCAA Policy (64 FR 32726, June 17, 1999), the Property Owner may, for good cause, terminate implementation of the CCAA's voluntary management actions prior to the CCAA's expiration date, even if the expected benefits have not been realized. If the CCAA is terminated without good cause, however, the Property Owner is required to surrender the enhancement of survival permit at termination, thus relinquishing his or her take authority (if the species has become listed) and the assurances granted by the permit. The Property Owner is required to give 60 days written notice to the other Parties of its intent to terminate the CCAA, and must give the Service an opportunity to relocate affected species within 10 days of the notice.

19. 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 (50 CFR 13.28(a)). The Service may also, as a last resort, revoke the permit if continuation of permitted activities would likely result in jeopardy to covered species (50 CFR 17.22/32(d)(7)). The Service will revoke because of jeopardy concerns only after first implementing all practicable measures to remedy the situation.

20. Remedies

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

21. Dispute Resolution

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

22. Succession and Transfer

This CCAA shall be binding on and shall inure to the benefit of the Parties and their respective successors and transferees, (i.e., new owners) in accordance with applicable regulations (50 CFR 13.24 and 13.25). The rights and obligations under this CCAA shall run with the ownership of the enrolled property and are transferable to subsequent non-Federal property owners pursuant to 50 CFR 13.25. The enhancement of survival permit issued to the Property Owner is also transferable to the new owner(s) pursuant to 50 CFR 13.25. If the CCAA and permit are transferred, 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 CCAA assurances by signing a new CCAA and receiving a new permit. The Property Owner shall notify the Service in writing at least 60 days in advance of any transfer of ownership, so that the Service can 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 CCAA or a new one to benefit listed species on the property. Assignment or transfer of the permit shall be governed by Service regulations in force at the time.

23. Availability of Funds

Implementation of this CCAA is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this CCAA 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 CCAA 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.

24. Relationship to Other Agreements

The IDFG, a party to this agreement, has a full authority Section 6 Cooperative Agreement with the USFWS that authorizes the take of endangered and threatened species for conservation purposes without a permit.

25. No Third-Party Beneficiaries

This CCAA 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 CCAA to maintain a suit for personal injuries or damages pursuant to the provisions of this CCAA. The duties, obligations, and responsibilities of the Parties to this CCAA with respect to third parties shall remain as imposed under existing law.

26. Notices and Reports

Any notices and reports, including monitoring and annual reports, required by this CCAA shall be delivered to the persons listed below, as appropriate:

Property Owner:

Director
Idaho Department of Lands
954 W. Jefferson
P.O. Box 83720
Boise, Idaho 83720-0050

Cooperator:

Director
Idaho Department of Fish and Game
600 S. Walnut
P.O. Box 25
Boise, Idaho 83707

Director
Governor's Office of Species Conservation
300 North Sixth Street, Suite 101
Boise, Idaho 83720-0195

Field Supervisor
U.S. Fish and Wildlife Service
1387 S. Vinnell Way, Rm. 368
Boise, Idaho 83709

IN WITNESS WHEREOF, THE PARTIES HERETO have, as of the last signature date below, executed this Candidate conservation Agreement with Assurances to be in effect as of the date that the Service issues the permit.

Director
Idaho Department of Lands

10-3-06
Date

Director
Idaho Department of Fish and Game

9/18/06
Date

Director
Governor's Office of Species Conservation

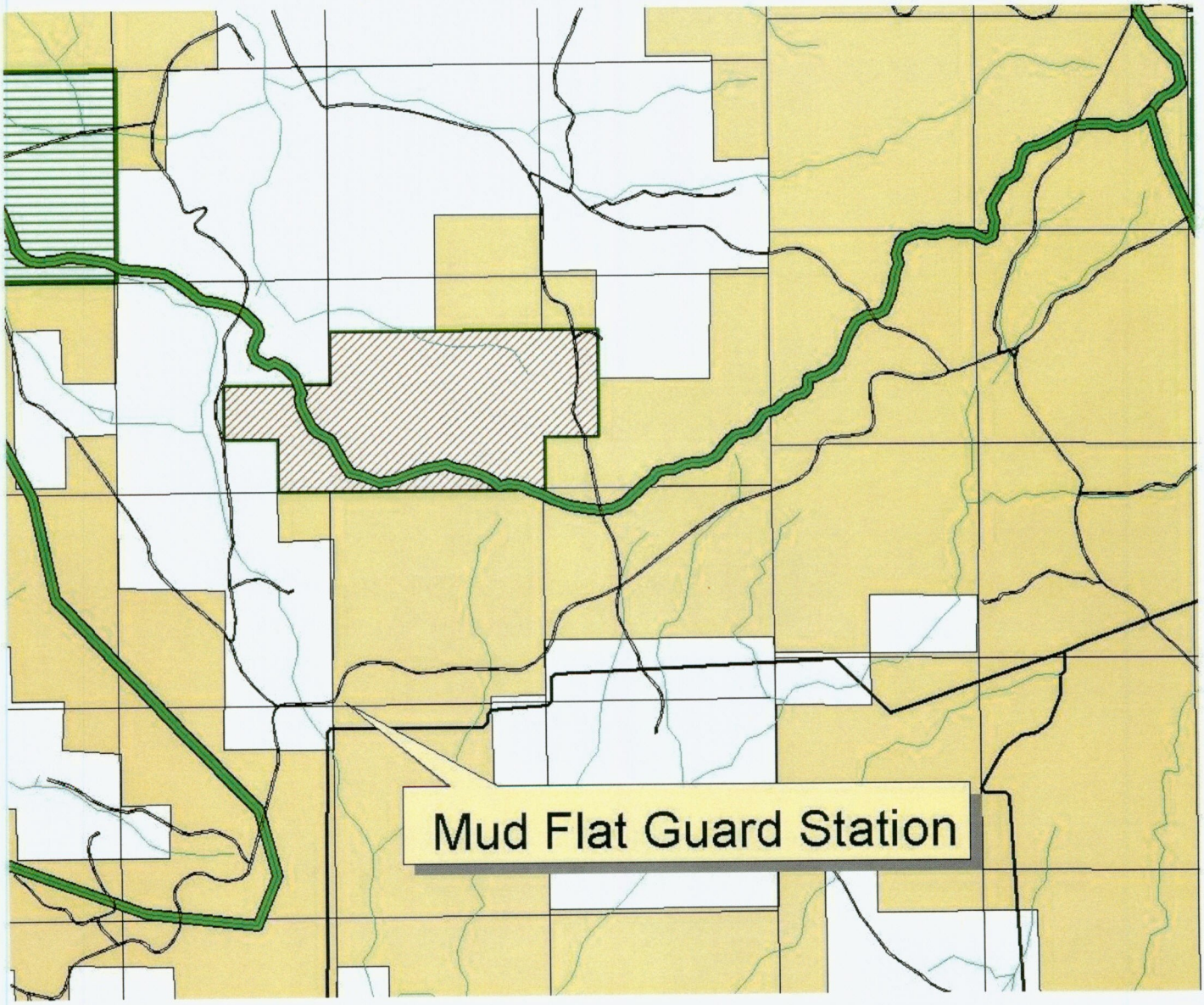
9/18/06
Date

Deputy (or) Regional Director
U.S. Fish and Wildlife Service

9/29/06
Date

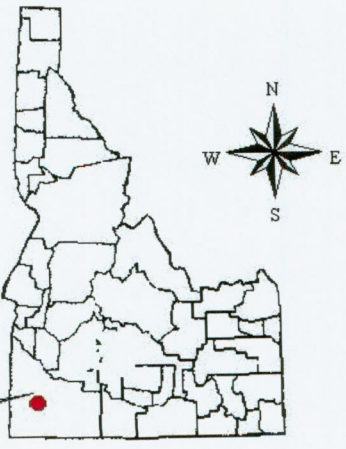
Figure 1

ENROLLED LANDS



0.6 0 0.6 1.2 Miles

Stream
Watershed Bndy
Enrolled Lands
Allotment Boundaries
Endowment Land
BLM



IDAHO DEPARTMENT OF LANDS

7/21/04

Figure 2. Sam Noble Springs

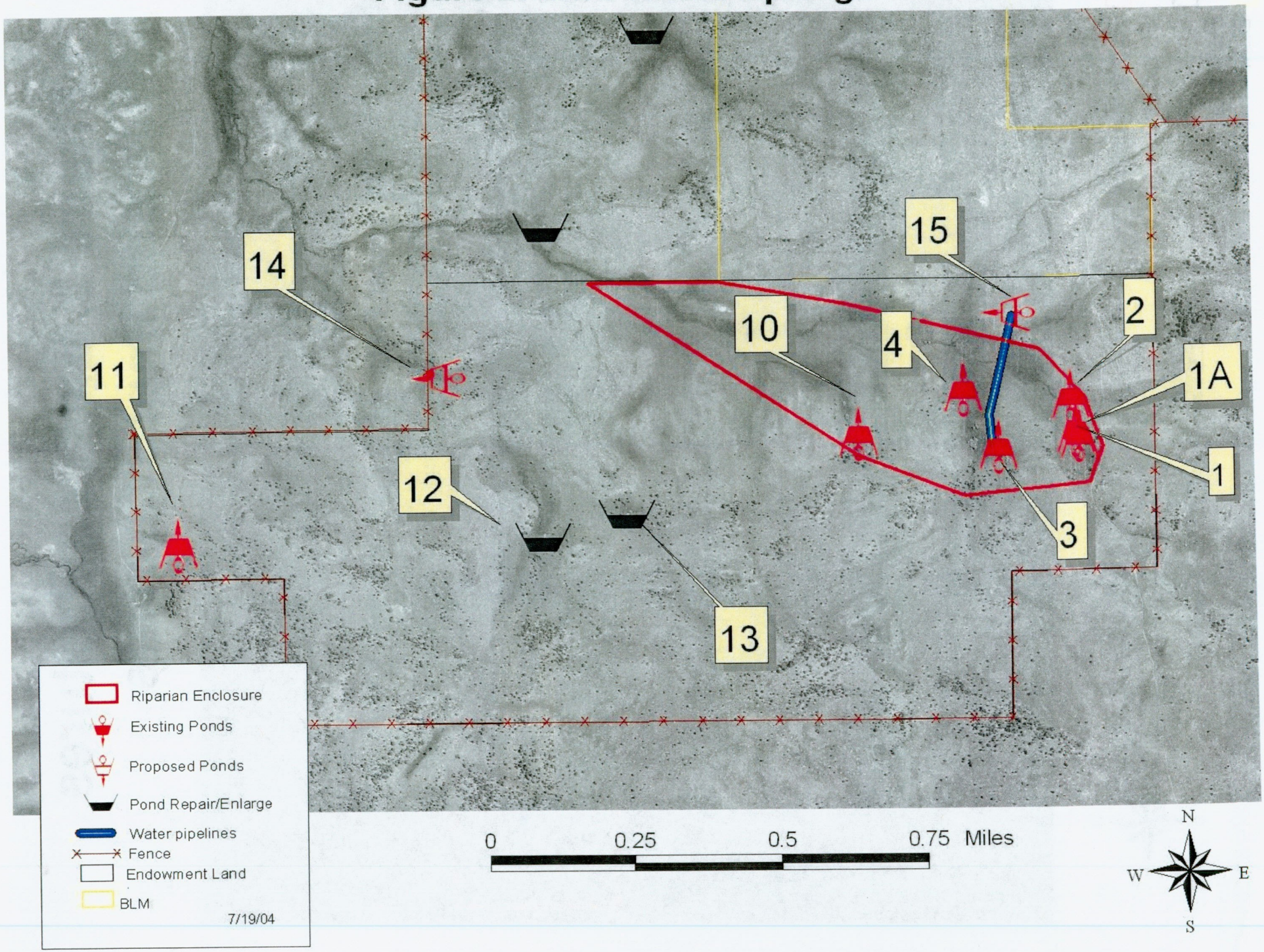
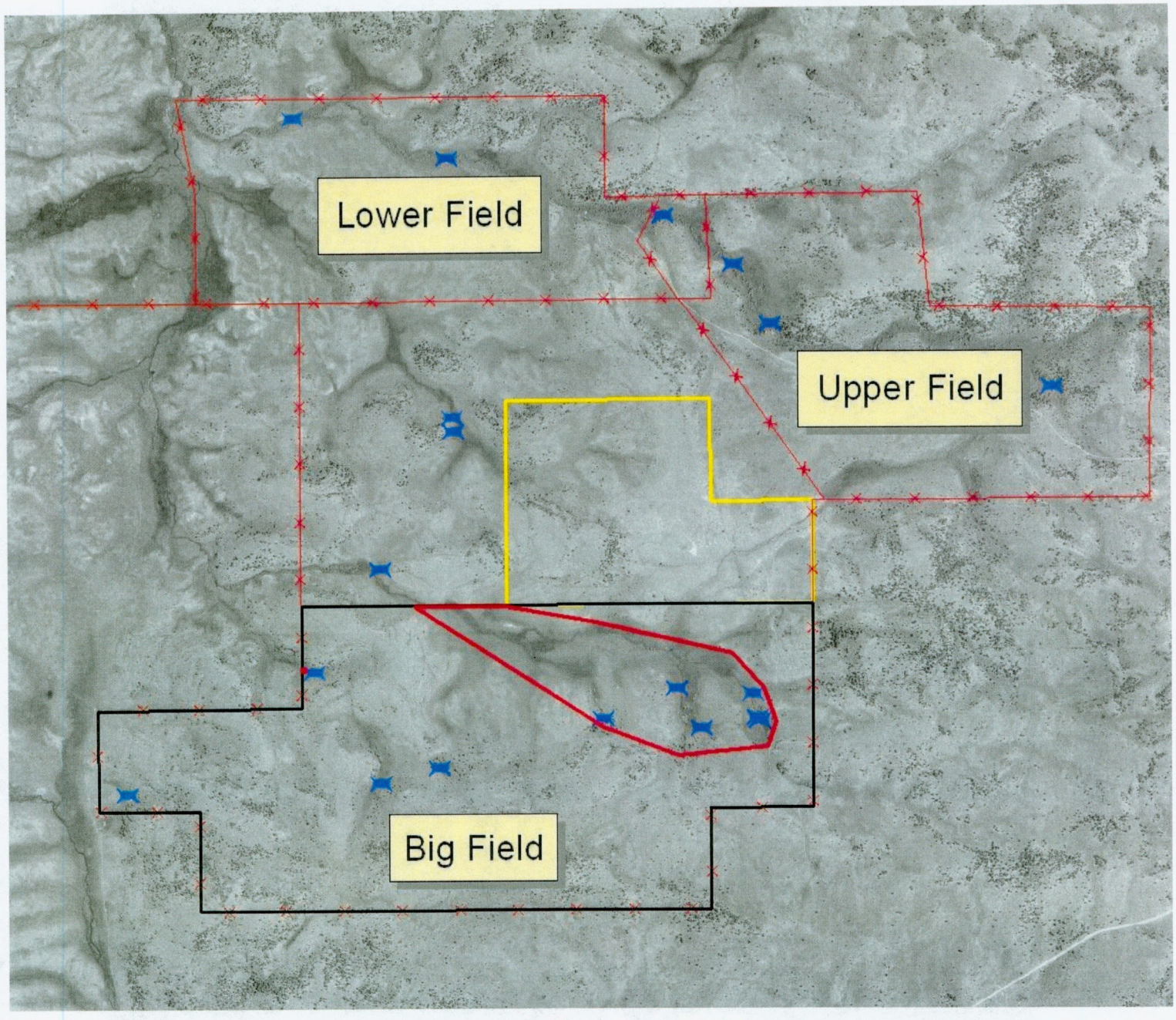


Figure 3. Existing Pastures and Improvements



Riparian Enclosure
Stock Ponds
Endowment Land
Fence
BLM

0 0.25 0.5 0.75 1 Miles

N
W E
S

Figure 4. Pond 14 Design

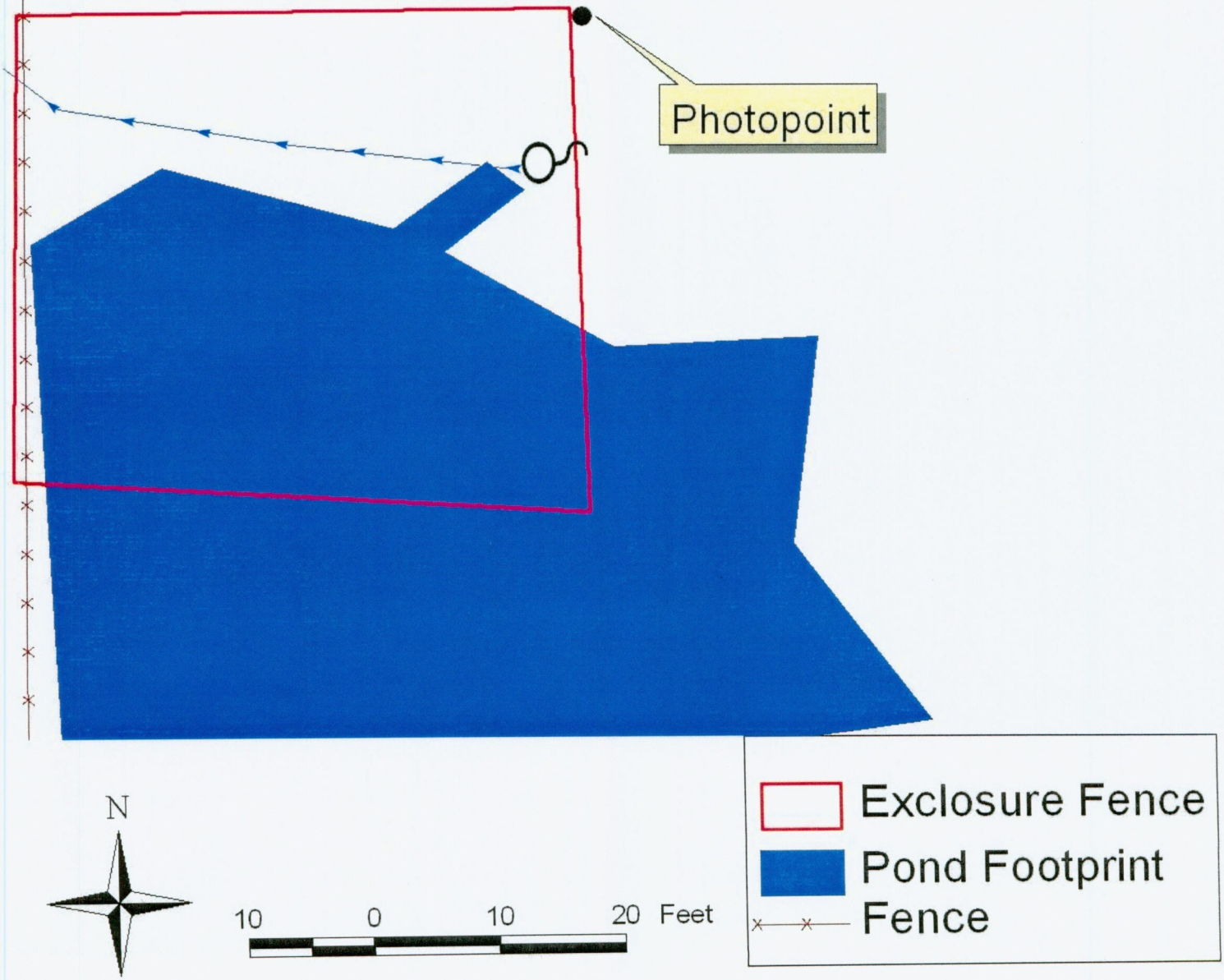
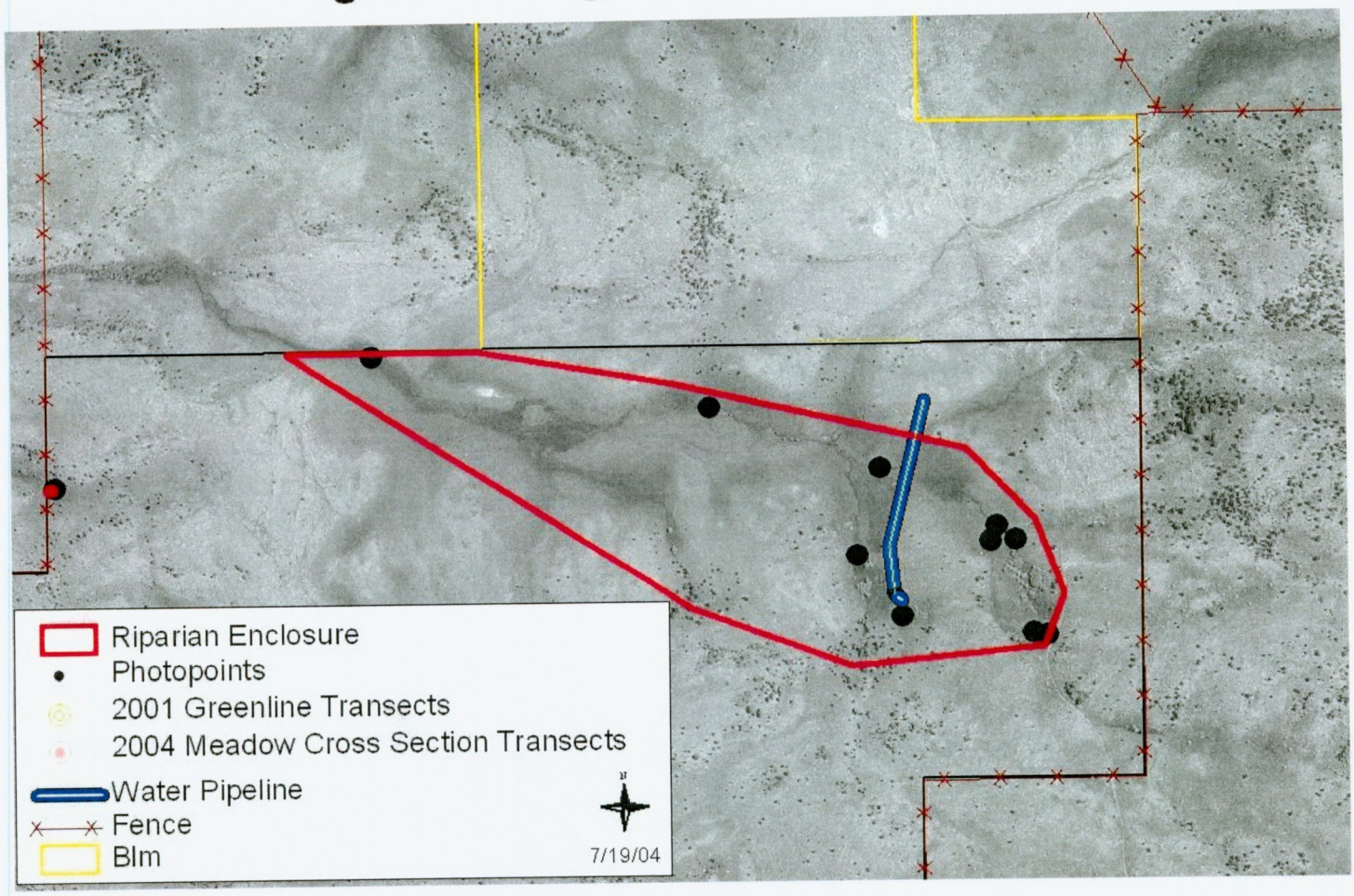
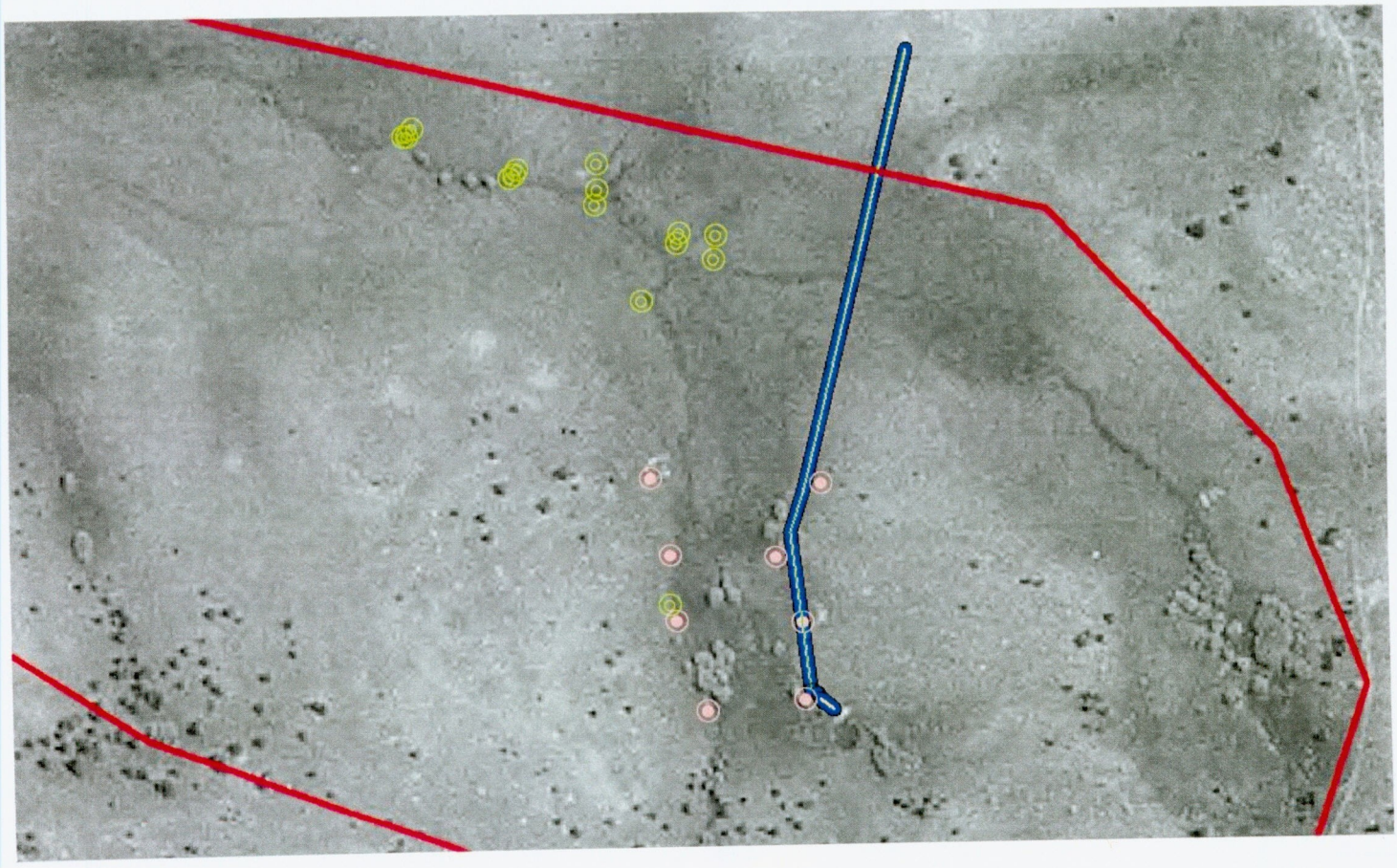


Figure 5. Vegetation Monitoring





APPENDIX 1

IDAHO DEPARTMENT OF LANDS

JUL 31 2003

MISCELLANEOUS LEASE
No. M-6071
Idaho Department of Fish & Game

This lease agreement is made and entered into by and between the State of Idaho, acting by and through the State Board of Land Commissioners (LESSOR) and Idaho Department of Fish & Game, (LESSEE), 600 South Walnut, Boise, ID 83707 collectively referred to herein as the "Parties." In consideration of the mutual covenants and conditions contained herein, the Parties agree as follows:

This lease shall commence **JANUARY 1, 2003**, and terminate **DECEMBER 31, 2027** .

The LESSOR does hereby lease and demise unto the LESSEE, at the rate and for the use specified herein, the lands described as follows:

Pts N2SE (17 ac), pts SENW (10 ac), pts S2NE (58 ac) 85 Acres Sec. 23 T9S R2W
Pts SWNW (9 ac), pts NWSW (10 ac) 19 Acres Sec. 24 T9S R2W
All within the riparian meadow fence and includes ponds 1, 1a, 2, 3, 4 and 10 (See Attachment B).

In consideration of the foregoing, the covenants, restrictions and conditions in the attached, herein incorporated by reference as Attachment A, are hereby agreed to by LESSEE and LESSOR.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

IDAHO STATE BOARD OF LAND COMMISSIONERS

Secretary of State

President of the State Board of Land Commissioners
Governor of the State of Idaho

Director, Department of Lands

STATE OF IDAHO, COUNTY OF ADA

On this 29 day of August in the year 2003, before me, a Notary Public in and for said State, personally appeared Dirk Kempthorne, known to me to be the President of the Idaho State Board of Land Commissioners and the Governor of the State of Idaho; and Ben Ysursa, known to me to be the Secretary of the State of Idaho and Winston A Wiggins, known to me to be the Director, Department of Lands, that executed the within instrument, and acknowledged to me that the State Board of Land Commissioners of the State of Idaho and the State of Idaho executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year last above written.

Notary Public — Residence — Commission Expires 12-06-2007

LESSEE

(LESSEE)

STATE OF Idaho COUNTY OF Ada

On this 7th day of August in the year 2003, before me, a Notary Public in and for said State, personally appeared Steven M. Huffaker known to me to be the LESSEE that executed the within instrument, and acknowledged to me that they executed same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year last above written.

Notary Public — Residence: Boise, Idaho — Commission Expires: 11/15/2005

ATTACHMENT A

1. **Payments.**

   A. Lessee agrees to pay the Lessor, a one time lump sum of **thirty eight thousand five hundred dollars ($38,500.00)** for a twenty-five (25) year lease. Said lease payment is due and payable in full upon Lessee's signature of this Lease.

   B. Lessee agrees to reimburse prior lessee, Joe Black and Sons, **one thousand nine hundred and ten dollars ($1,910.00)** for Black's existing improvements to the leased area. At the expiration of this lease term, Lessee is entitled to receive payment pursuant to section 8D of this lease.

   C. Lessee agrees to reimburse the Lessor for the actual costs of developing a livestock water system that allows water to be routed outside of the meadow enclosure identified as P-3 on Attachment B. At the expiration of this lease term, Lessee is entitled to receive payment pursuant to section 8D of this lease.

2. **Fencing.**

   Lessee agrees to construct and maintain a fence around the 104 acre meadow enclosure lease area. Lessee also agrees to construct and maintain a fence around a springhead and across a part of a newly constructed pond in the SWNW of section 23 T9S R2W.

3. **Use of Premises.**

   A. The primary purpose of this lease is to conserve Columbia Spotted Frogs, a candidate species for listing under the Endangered Species Act, and its habitat. The lease will also provide the opportunity to enhance habitat for other species.

   B. Lessee is authorized to use tools such as cutting, mowing, planting, prescribed fire, grazing or herbicide application to stimulate and diversify plant communities and improve frog habitat. Lessee is responsible for controlling noxious weeds on the leased lands. All improvements or vegetation manipulation/modification projects beyond controlling noxious weeds will require prior written authorization from the Lessor.

   C. Lessee agrees to allow access to the premises for spotted frog research and monitoring activities.

4. **Pond Maintenance & Stock Water Diversions.**

   A. Maintenance of the existing ponds within the meadow enclosure lease area shall take place only to benefit spotted frogs. Maintenance activities shall only occur after the Lessor and Lessee agree on the activities and commit the specific details of their agreement to writing.

   B. Lessor may divert additional stock water from the meadow enclosure lease area only upon prior written approval of both Lessee and Lessor.

5. **Sublease and Assignment.**

   This lease may not be subleased or assigned without Lessee first obtaining the prior written consent of Lessor, or Lessor's designee.

6. **Lessee's Compliance with Applicable Laws and Rules.**

   Lessee's use of the leased site shall fully comply with all statutes, rules, regulations and laws of applicable federal and state governmental authorities

7. Environmental, Safety, and Sanitary Requirements.

A. Sanitary Requirements. Lessee shall at all times keep the leased site in a clean and sanitary condition, free of trash, noxious weeds, garbage and litter, so that the leased site is maintained in as nearly natural state as possible. Lessee shall not dispose of sewage except in conformity with applicable federal, state, and local law, rules and regulations pertinent to Lessee's use. The Lessee shall store and dispose of all trash and garbage in conformity with all legal requirements. Lessee is responsible for all costs associated with sewage, garbage and litter disposal.

B. Fire and Safety Regulations. Lessee shall comply with all applicable state laws and rules of the Department of Lands for fire protection and prevention. Lessee agrees to keep the leased site free from fire hazards. Lessee is prohibited from burning of garbage or household trash. The burning of wood or other debris requires the prior written permission of Lessor and must comply with applicable federal, state, or local law, regulation, rule, or ordinance.

C. No Hazardous Materials. Lessee shall neither commit nor permit the use, placement, transport or disposal of any hazardous waste such as oil or gasoline or any other substance that is or is suspected to be a hazardous substance or material except as provided by federal, state or local law, regulation or ordinance of manufacture. Lessee shall be responsible, at its own expense, for removing or taking other appropriate remedial action regarding such wastes, substances, or materials which Lessee may cause to be introduced, in accordance with applicable federal, state, or local law, regulation, or ordinance.

8. Construction and Improvements.

A. Water Development. Lessee shall not drill or use a new water well, nor develop any use of any water source, without first obtaining the prior written consent of the Lessor and the applicable governmental authorities responsible for adjudicating and developing water rights.

B. Construction of Improvements. Lessee may construct fences, as outlined in section 2. All other improvements must have prior written approval by Lessor prior to any construction.

C. Non-Approved Improvements. Any improvements to the leased site which are not approved by Lessor shall be removed by the Lessee at the Lessee's sole cost and expense. Upon the expiration of the lease term, if unapproved improvements remain on the leased site, then Lessor may remove such unapproved improvements and charge the cost of removal and restoration to the Lessee. Lessee shall also be responsible for all collection costs including legal fees and interest.

D. Treatment of Approved Improvements Upon Lease Expiration. In the event this lease expires without Lessee having made application to renew, Lessor agrees to pay Lessee for approved improvements at fair market value (replacement cost less depreciation) of said improvements at the time of the lease expiration.

9. Insurance.

Lessee is insured through Administration, Office of Insurance Management (Risk Management). So long as the Lessee hereunder remains insured through Risk Management, Lessee shall be exempt from the insurance requirements set forth in this Agreement; provided, however, losses under this Agreement attributable to Lessee shall apply to Lessee's loss history. Lessee agrees to reimburse Lessor for any increase in the amount of Lessor's insurance premium or risk assessment that results from Lessee's occupation of, or construction of improvements on, the leased premises. For purposes of attributing loss, any loss that would be covered under the Lessee's insurance requirements under this Agreement shall be deemed to be attributable to Lessee.

10. Inspection Rights.

Lessee shall permit Lessor or Lessor's authorized agent or designee to inspect and enter the leased site and any improvements at any reasonable time.

11. **Reservations by Lessor**.

The Lessor expressly reserves and excepts the following rights from the lease:

A. Fee title to the leased site, and title to all appurtenances and improvements placed thereon by the Lessor.

B. To reserve, as its sole property, any and all water from any source arising on state land and to hold the water rights for any beneficial use that may develop as a result of this lease.

12. **Termination**.

A. Lessee's breach of any of the terms of this lease is a basis for termination of the lease. Lessor shall provide Lessee written notice of the breach for violation and, if applicable, the corrective action required of Lessee. The notice shall specify the reasonable time to make a correction or cure the violation or breach. If the corrective action or cure is not taken within the specified time or does not occur, then the Lessor or Lessor's designee shall cancel the lease effective on the date specified in the written cancellation notice, provided, however, that the notice shall be provided to Lessee no later than thirty (30) calendar days prior to the effective date of such cancellation. After cancellation, if Lessor is unable to lease the parcel, Lessor is entitled to the monetary proceeds associated with the remaining term of the lease. However, if Lessor leases the parcel for an equal or greater amount than the dollar amounts listed in Attachment C for the remaining term of the lease, Lessee shall receive payment according to Attachment C for the remaining term of the lease.

B. In the event this lease is terminated by Lessor for any reason besides breach of the terms of this Lease, Lessee shall receive, according to the schedule of Attachment C, payment for the remaining term of lease and payment for improvements as outlined in section 8D of this lease.

C. In the event this lease is voluntarily terminated by Lessee, Lessor is entitled to retain the entire one-time lump sum payment and Lessor is not obligated to offer any improvement credits.

D. In the event that this Lease is mutually terminated by Lessee and Lessor due to a land purchase or exchange between Lessee and Lessor, the rental rate of the remaining term of the lease (Attachment C) shall be applied to the purchase price of the land purchase or exchange.

13. **Notices**.

Any notice given in connection with the lease shall be given in writing and shall be delivered either by hand to the other party or by certified mail, return receipt requested, to the other party at the other party's address stated herein. Either party may change its address stated herein by giving notice of the change in accordance with this paragraph. Until changed by notice in writing, notice, demands and communications shall be addressed as follows:

TO: Idaho Department of Lands (LESSOR)
954 W. Jefferson St.
P.O. Box 83720
Boise, ID 83720-0050

TO: Idaho Department of Fish & Game (LESSEE)
600 South Walnut
P.O. Box 25
Boise, ID 83707

14. **Waiver**.

The waiver by the Lessor of any breach of any term, covenant, or condition of this lease shall not be deemed to be a waiver of any past, present, or future breach of the same or any other term, covenant, or condition of this lease. The acceptance of rent by the Lessor hereunder shall not be construed to be a waiver of any term of this lease. No payment by the Lessee of a lesser amount than shall be due according to the terms of this lease shall be deemed or construed to be other than a part payment on account of the most recent rent due, nor shall any endorsement or statement of any check or letter accompanying any payment be deemed to create an accord and satisfaction.

15. **Miscellaneous**.

A. Modification. This lease may be modified only by the prior written consent of the authorized representatives of the Lessor and Lessee.

B. Paragraph Headings. The section headings, titles, and captions used in this lease are for convenience only and are not part of this lease.

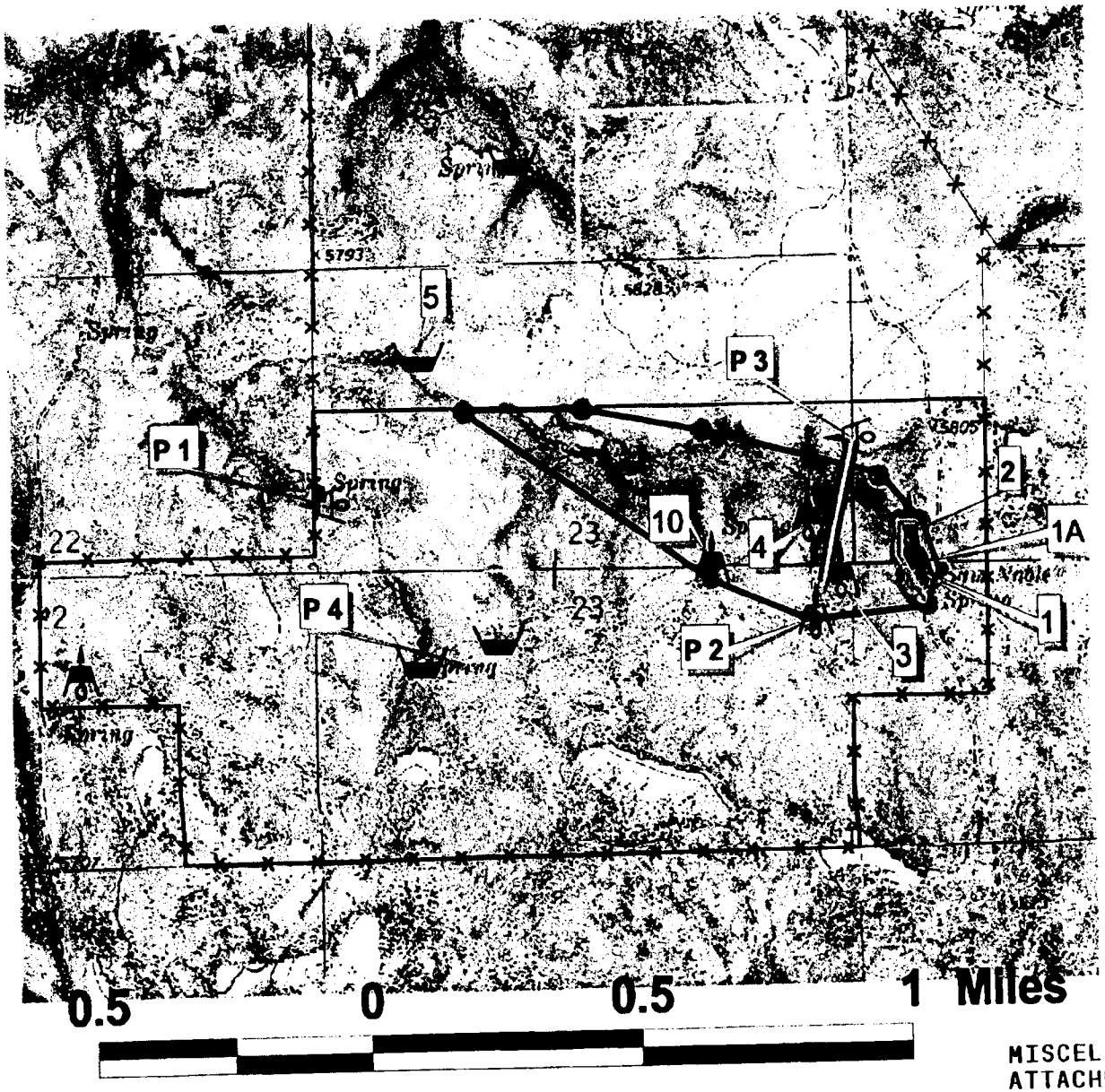
C. Entire Agreement. This lease contains the entire agreement between the parties as of the date concerning the subject matter hereof and supersedes all prior agreements whether oral or written.

D. Governing Law and Forum. This lease shall be construed in accordance with and governed by the laws of the State of Idaho and the parties consent to the jurisdiction of Idaho State Courts located in Ada County in the event of any dispute with respect to this lease.

E. Binding on Heirs and Successors. It is understood and agreed that all terms, covenants, and conditions hereof shall be binding upon the approved subleases, approved assignees and Lessee's heirs or successors in interest.

F. Severability. In the event any provision of this lease shall be held invalid or unenforceable according to law, for any reason whatsoever, then the validity, legality or enforceability of the remaining provisions shall not in any way be affected or impaired.

Attachment B
Lease M-6071
Meadow Enclosure and Water Developments



- Fence Corners
- Meadow Enclosure Fence

Water Developments

- Existing Ponds
- Proposed Developments
- Proposed Pipeline
- Pond Repair/Enlarge
- Existing Fence
- Existing Exclosure
- State Endowment Land
- BLM

N
W
E
S

7-28-03
TCD

MISCELLANEOUS LEASE NO. M-6071
ATTACHMENT B

ATTACHMENT C

YEAR	TERM		DOLLAR AMOUNT
2003	1	2465	2370
2004	2	2465	2279
2005	3	2465	2191
2006	4	2465	2107
2007	5	2465	2026
2008	6	2465	1948
2009	7	2465	1873
2010	8	2465	1801
2011	9	2465	1732
2012	10	2465	1665
2013	11	2465	1601
2014	12	2465	1540
2015	13	2465	1480
2016	14	2465	1423
2017	15	2465	1369
2018	16	2465	1316
2019	17	2465	1265
2020	18	2465	1217
2021	19	2465	1170
2022	20	2465	1125
2023	21	2465	1082
2024	22	2465	1040
2025	23	2465	1000
2026	24	2465	962
2027	25	2465	925
			38508

APPENDIX 2

Conservation Assessment for the Columbia Spotted Frog

A. Taxonomy

Thompson (1913) originally divided the spotted frog *Rana pretiosa* into two subspecies, *R. p. pretiosa* and *R. p. luteiventris*. This taxonomic subdivision was generally ignored by the scientific community (58 FR 27261). Nussbaum et al. (1983) considered the spotted frog a monotypic species, *R. pretiosa*. Based on more recent genetic analysis, Green et al. (1997) divided the species into two distinct species, *R. pretiosa* and *R. luteiventris*. *Rana pretiosa* (the Oregon spotted frog) ranges from the extreme southwestern portion of British Columbia, Puget Sound, southwestern Washington, and the Oregon Cascades (Green et al. 1997). Green et al. (1997) further sub-divided *Rana luteiventris* (the Columbia spotted frog) into at least four populations; the Northern, Great Basin, West Desert, and Wasatch. Green et al. (1997) determined the division of the populations based on genetic differences. The Great Basin population range includes eastern Oregon, southwestern Idaho, and the Mary's, Reese, and Owyhee River drainages of Nevada (Green et al. 1997).

B. Ecology and Life History

Habitat appropriate for spotted frogs occurs on both public and private lands. Past studies have shown that frogs require four major habitat components (IDFG et al. 1995, Munger 2003, Munger and Lingo 2003). First, frogs require shallow pond margins and the tall grasses of wetlands for feeding habitat. Second, hibernacula with oxygenated water and sufficient interstitial spaces for frogs to seek protection are required for successful overwintering. Third, successful frog breeding requires sites that have sufficient water to allow young to complete the larval phase. Fourth, frogs need movement corridors containing water and vegetation for cover that allow safe travel among required habitat components.

Munger (2003) observed that five types of hibernacula were used by Columbia spotted frogs: undercut banks, spring openings, the interior of beaver dams, water-flooded burrows associated with Geyer's willow, and the bottoms of ponds. (See also IDFG et al. 1995). Bull and Hayes (2000) found that overwintering patterns were linked to local environmental variations and observed overwintering at aquatic sites.

After emergence, adults move to breeding areas. Breeding usually occurs in pooled water (e.g., oxbows, lakes, stock ponds, beaver-created ponds, springs, seeps in wet meadows, backwaters) with floating vegetation and some emergent vegetation (IDFG et al. 1995; Reaser 1997; Munger et al. 1997). Breeding areas may be located hundreds of meters away from overwintering sites (Turner 1962), thus the ability to move between breeding and hibernation sites is critical. Successful egg production and the viability and metamorphosis of spotted frogs are susceptible to habitat variables such as water temperature, water depth, pH, desiccation, over-hanging vegetation, and the

presence/absence of non-native fishes and bullfrogs (Morris and Tanner 1969; Reaser 1996; Munger et al. 1996). Following breeding, frogs may remain at the same site or may move to other feeding areas.

C. *Historic population status and range within Minidoka and Owyhee County*

Today, Columbia spotted frog of the Great Basin Population occur at remnant, isolated sites in Nevada, southwestern Idaho, and eastern Oregon. Historically, the range of the Great Basin Population included the Raft River and Goose Creek drainages in Minidoka County and the Owyhee Mountains in Owyhee County in southern Idaho. Recent surveys conducted in the Raft River and Goose Creek drainages in Idaho failed to locate spotted frogs (Reaser 1997; Shipman and Anderson 1997; Turner 1962). In 1994 and 1995 the Bureau of Land Management (BLM) conducted surveys in the Jarbidge and Snake River Resource Areas in Twin Falls County, Idaho. These efforts were also unsuccessful in locating spotted frogs (McDonald 1996).

Currently, Great Basin Columbia spotted frogs within Owyhee County appear to be isolated from each other by either natural or human induced habitat disruptions. The largest local known population of spotted frogs in Idaho occurs in Owyhee County in the Rock Creek drainage (Engle 2000).

D. *Current Population Status*

Prior to 1993, spotted frog occurrence in the Owyhee Mountain range of southwestern Idaho was only recorded for six historic sites (Munger et al. 1996). However, extensive BLM-funded surveys since 1993 (Munger et al. 1994, 1995, 1997, 2002) have led to a substantial increase in the number of sites in southwest Idaho known to be occupied by spotted frog. Although these surveys increased the available information regarding known species locations, most of these sites support small numbers of frogs. Of the 46 known local populations in southern Idaho as of 2000, 61 percent had 10 or fewer adult frogs and 37 percent had 100 or fewer adult frogs (Engle 2000; Idaho Conservation Data Center (IDCDC) 2000). The largest known local population of spotted frogs occurs in the Rock Creek drainage of Owyhee County and supports under 250 adult frogs (Engle 2000). Monitoring at 10 of the 46 occupied sites since 1997 indicates a general decline in the number of adult spotted frogs encountered (Engle 2000; Engle and Munger 2000, Lingo and Munger 2003). All known local populations in Owyhee County appear to be functionally isolated (Engle 2000; Engle and Munger 2000, Lingo and Munger 2003).

The Great Basin population of Columbia spotted frog is classified as a priority 3 candidate species by the FWS, that is, it has been petitioned for listing under the Endangered Species Act and the listing was determined to be warranted but precluded. Spotted frogs are classified as a priority species of special concern by the IDFG and are ranked as S2 (imperiled) by the IDCDC.

E. *Habitat and Range*

Spotted frog habitat degradation and fragmentation is probably a combined result of decreased vegetation and water source alterations. Activities that can influence vegetation and water sources include past and current spring development, agricultural development, and heavy livestock grazing. Spotted frog habitat in Owyhee County occurs in areas where these activities are likely to occur, or where these activities have occurred in the past. The effects of habitat degradation and fragmentation include, but are not limited to: (1) the elimination of vegetation necessary to protect frogs from predators and UV-B radiation avoidance; (2) reduction of soil moisture; (3) undesirable changes in water temperature, chemistry, and water availability; and (4) restructuring of habitat zones through trampling, rechanneling, or degradation, causing the loss of breeding, feeding, and hibernation sites (IDFG et al. 1995; Munger et al. 1997; Reaser 1997, Munger 2003).

Natural fluctuations in environmental conditions tend to magnify the detrimental effects of these activities, just as activities that alter vegetation and water sources may magnify the detrimental effects of natural environmental events. Multiple consecutive years of less than average precipitation may result in a reduction in the number of suitable sites available to spotted frogs (Lingo and Munger 2003). Local extinctions eliminate source populations from habitats that in normal years are available as frog habitat (Gotelli 1995; Lande and Barrowclough 1987; Schaffer 1987). These climatic events are likely to exacerbate the effects of other threats, thus increasing the possibility of stochastic extinction of subpopulations by reducing their size and connectedness to other subpopulations (see Factor A for additional information). As movement corridors become more fragmented, due to loss of surface flows within riparian or meadow habitats, local populations will become more isolated (Engle 2000). Increased fragmentation of the habitat can lead to greater loss of populations due to demographic and/or environmental stochasticity.

Springs serve an important role in spotted frog habitat. Springs provide a source of water for frog breeding, feeding and winter refuge (IDFG et. al. 1995). Springs provide deep, protected areas for spotted frogs in cold climates, which serve as hibernacula. Springs also provide protection from predation through underground openings (IDFG et al. 1995; Patla and Peterson 1996). Spring developments alter the source of water in desert ecosystems, which may lead to the loss of associated riparian habitats and wetlands used by spotted frogs. Many of the springs in southern Idaho, eastern Oregon, and Nevada have been developed.

Protection of wetland habitat from loss of water to irrigation or water development may be difficult in some situations because water developments have already occurred within much of the known habitat of spotted frogs. Federal lands may have water rights that are approved for wildlife use, but these rights are often superceded by upstream or downstream water rights that do not provide for minimum flows. Also, most public lands are managed for multiple use and are subject to livestock grazing,

silvicultural activities, and recreation uses that may be incompatible with spotted frog conservation unless adequate mitigation measures are instituted.

Vegetation and surface water along movement corridors provide protection from high temperatures and arid environmental conditions, as well as protection from predators. Loss of vegetation and/or lowering of the water table in movement corridors can pose a significant threat to frogs moving from one area to another. Fragmentation and loss of habitat can prevent frogs moving between hibernation, breeding, and feeding sites, and can prevent them from colonizing suitable sites elsewhere.

Fragmentation of habitat may be one of the most significant barriers to spotted frog recovery and population persistence. Recent studies in Idaho indicate that spotted frogs exhibit breeding site fidelity (Patla and Peterson 1996; Engle 2000; Munger and Engle 2000; J. Engle, IDFG, pers. comm. 2001). Zones of unsuitable habitat may impede movement of frogs from hibernation ponds to breeding ponds. As movement corridors become more fragmented due to loss of flows and vegetation within riparian or meadow habitats, local populations will become more isolated (Engle 2000). Although a direct causal effect between livestock grazing and declines in spotted frog populations has not been demonstrated in the Owyhees, negative effects of heavy grazing on the components of habitat important to spotted frogs (that is, the vegetation, hydrology, and structure) in riparian areas have been documented (Kaufman et al. 1982; Kaufman and Kreuger 1984 and 1985; Skovlin 1984; Schulz and Leininger 1990). Lingo and Munger (2003) speculate that grazing the margins of ponds may decrease the successful metamorphosis of spotted frogs.

F. Disease/predation

Predation by fish is likely an important threat to spotted frogs in general, but probably not in most parts of the Owyhees, including upper Rock Creek. The introduction of nonnative salmonid and bass species for recreational fishing may have negatively affected frog species throughout the United States. The negative effects of predation of this kind are difficult to document, particularly in stream systems. However, significant negative effects of predation on frog populations in lacustrine systems have been documented (Hayes and Jennings 1986; Pilliod et al. 1996). One historic site in southern Idaho no longer supports spotted frog although suitable habitat is available perhaps because of the presence of introduced bass in the Owyhee River (IDCDC 2000).

The bullfrog (*Rana catesbeiana*), a nonnative ranid species, occurs within the range of the spotted frog in the Great Basin. Bullfrogs are known to prey on other frogs (Hayes and Jennings 1986). They are rarely found to co-occur with spotted frogs, but whether this is due to habitat preferences or due to predation or competitive exclusion is unknown at this time. Bullfrogs do not occur in the Owyhee mountains in areas where spotted frogs occur.

Other species that present possible negative interactions with spotted frogs include reptiles (snakes), amphibians (salamanders, frogs), gulls, herons, sandhill cranes,

and egrets (Ross et al, 1994; UDWR 1998). Under normal situations, predation or competition from these sources would not injure healthy populations of spotted frogs. The effects of interactions with the mentioned predators/competitors could result in further depletions of already fragile populations.

Chytrid fungus, (*Chytridiomycosis*), is a fungal disease responsible for catastrophic amphibian population declines (Daszak 1999). Chytrids are ubiquitous fungi that develop without hyphae and are found in aquatic habitats and moist soil, where they degrade cellulose, chitin, and keratin (Powell 1993). It is believed that in hot or desert regions, outbreaks generally occur during winter (hibernation) or early spring (Wood, pers. comm. 2001). Humans (fieldworkers and tourists), freshwater fish, and amphibians are known transmitters of the fungus. Livestock have not been identified as a carrier, although it is possible. Chytrid has the ability to cause local population declines resulting in local host extinction. Chytrid fungus has been discovered within Owyhee County, although not specifically found within the Sam Noble Springs spotted frog population.

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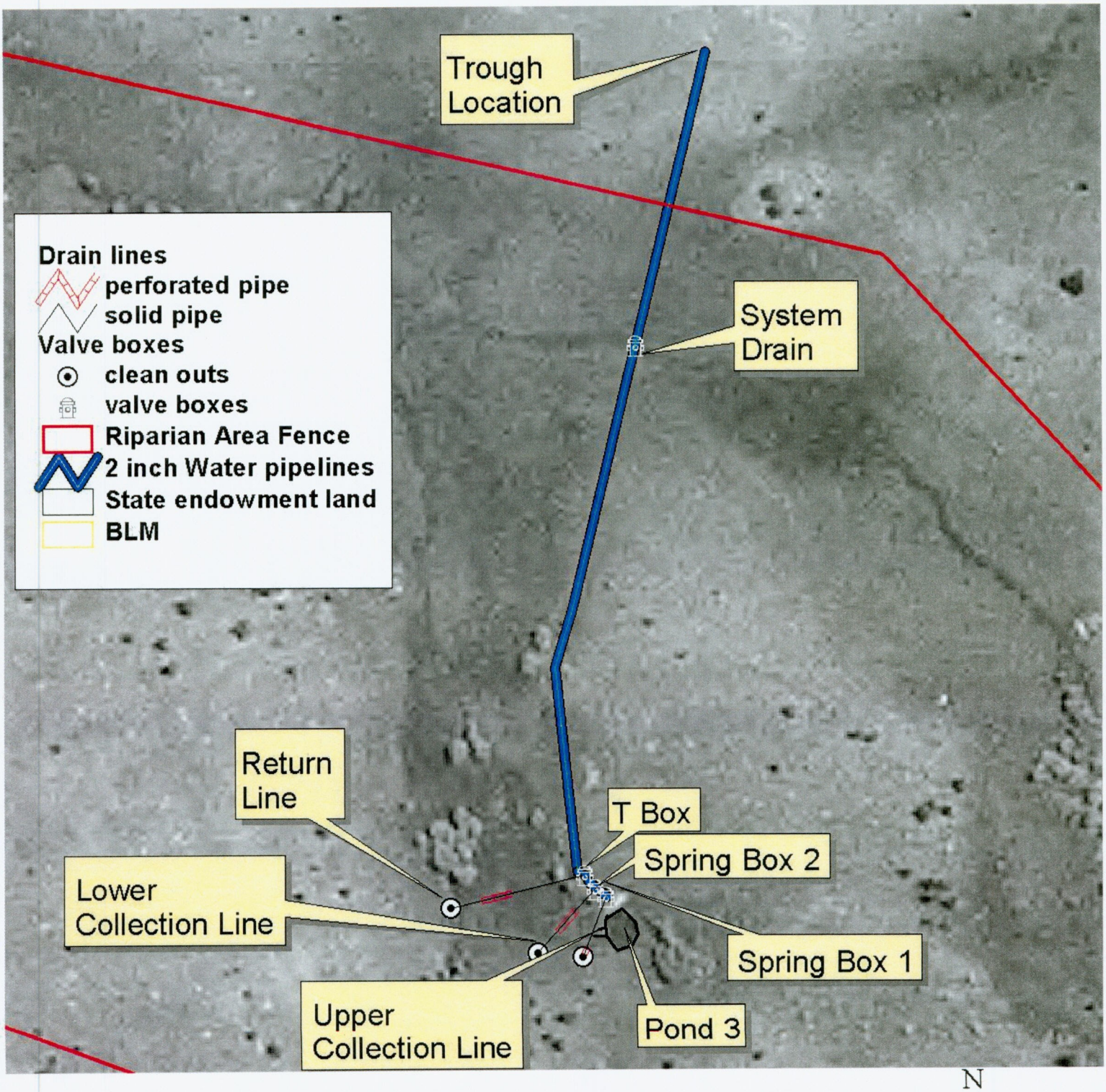
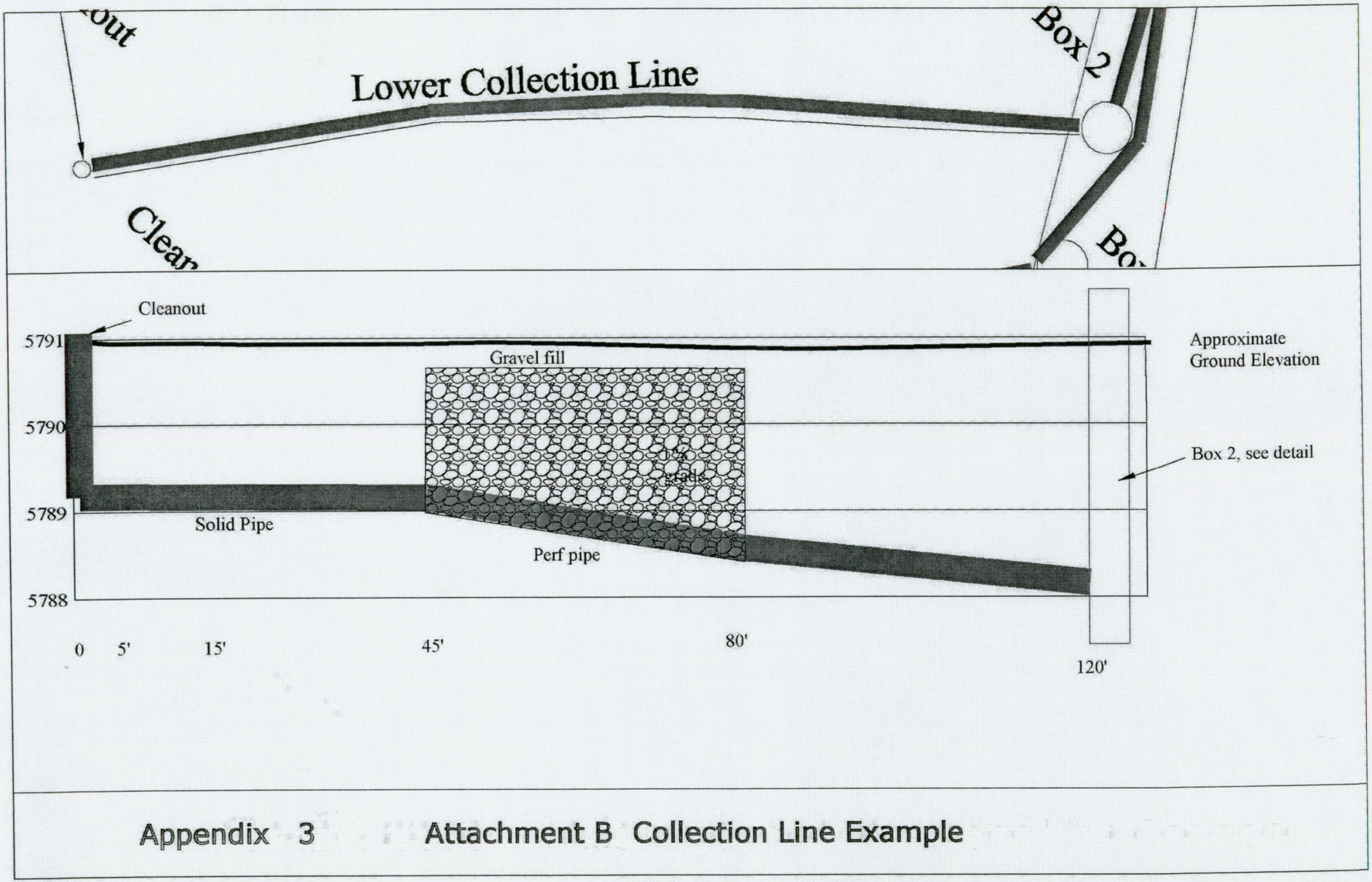
Appendix 3. Attachment A
Water Collection and Delivery System

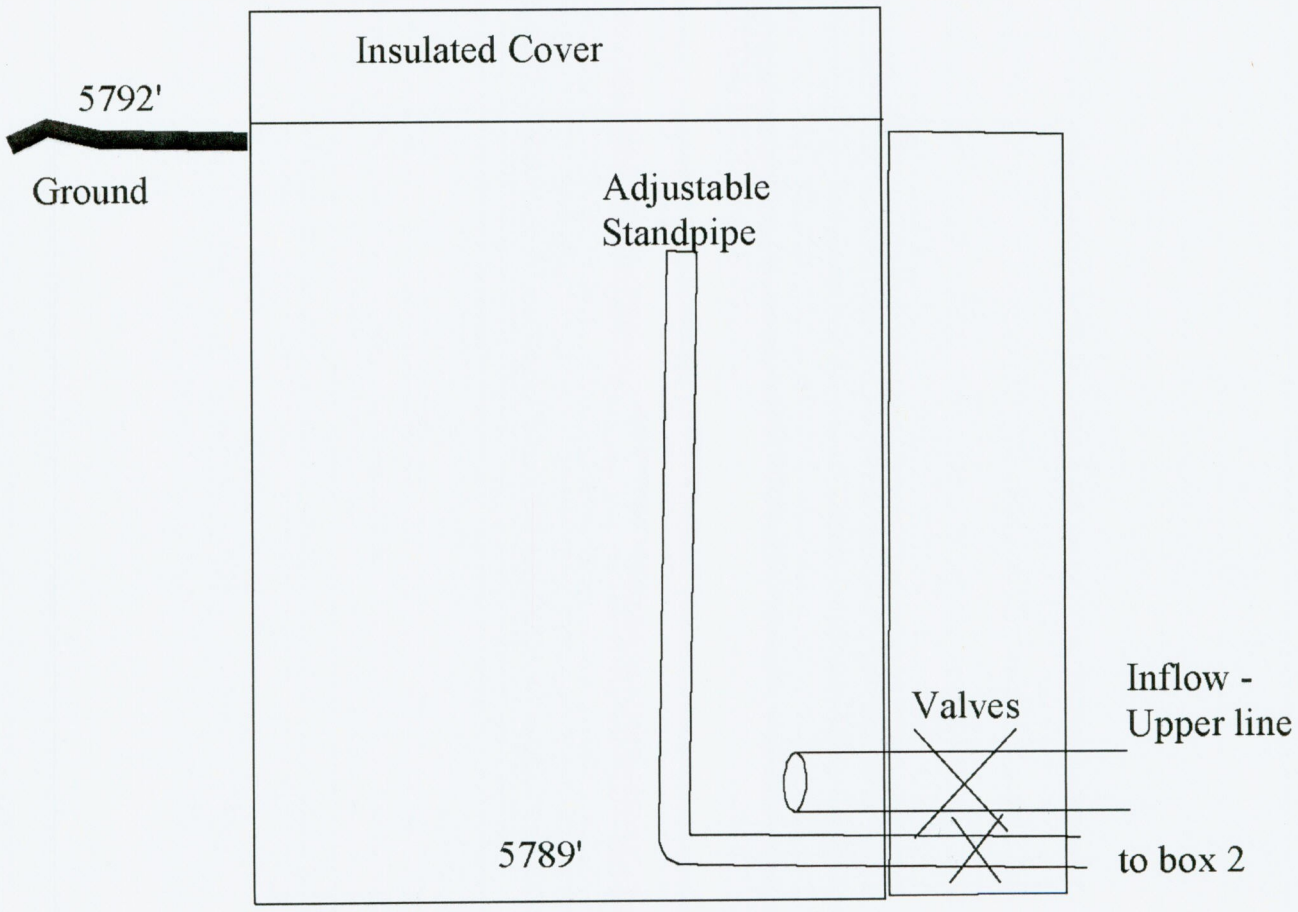




Appendix 3 Attachment B Collection Line Example

Appendix 3

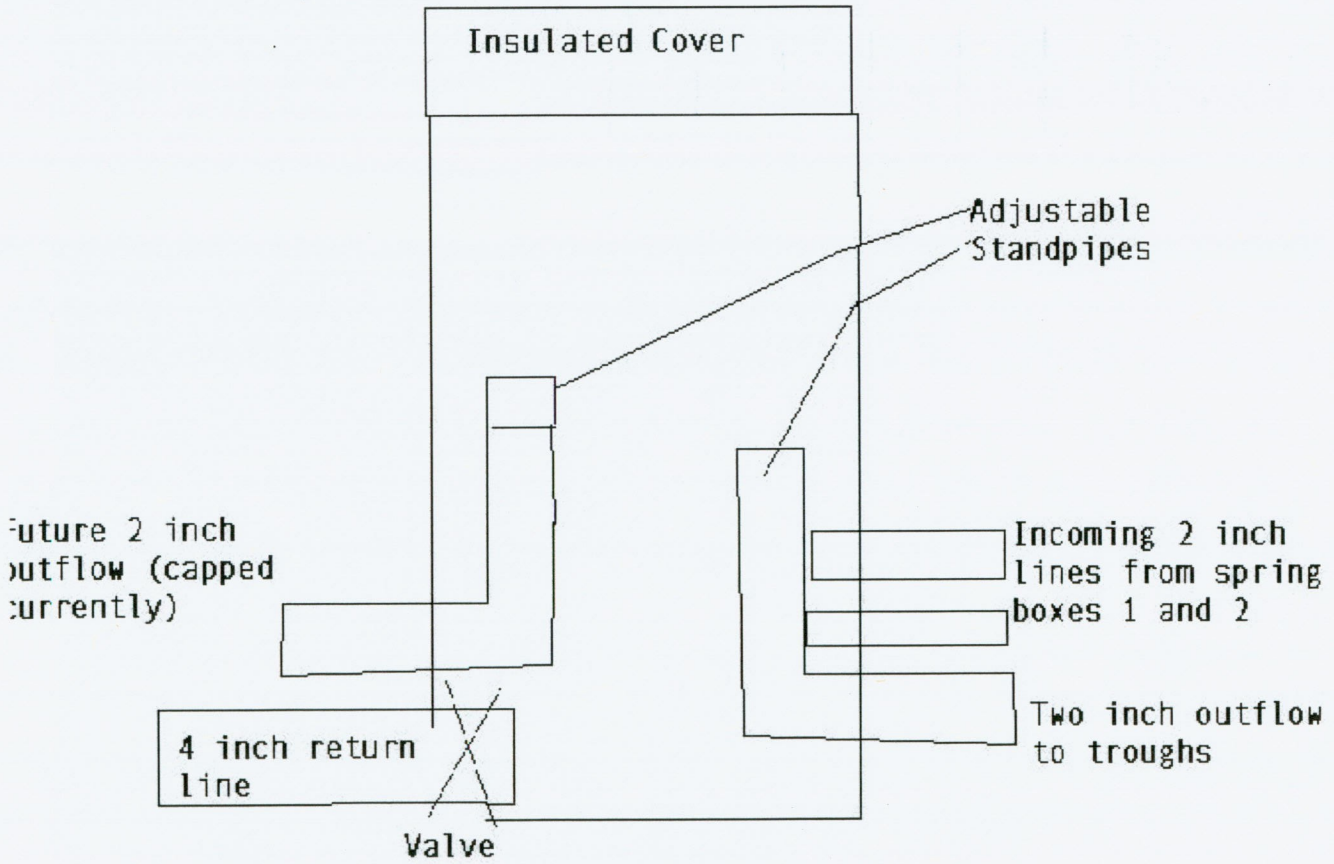
Attachment C Spring Box Example



Spring Box 1

Appendix 3

Attachment D T Box



APPENDIX 4

Vegetation Wetland Monitoring

Three monitoring techniques will be employed to assure changes in wetland vegetation and area are recognized and documented. Transect and photopoint locations are shown on Figure 5. The techniques are reported in Winward,Alma H. 2000. Monitoring the vegetation resources in riparian areas. Gen. Tech. Rep. RMRS-GTR-47. Ogden, UT: U.S. Dept. of Agric., Forest Service, Rocky Mountain Research Station. 49p.

1. Level III Greenline Transect identifies plant species composition along the stream greenline. This information is used to determine successional status of the stream bank community. Streambank stability is also determined and provides a good indication of the health of the watershed above the sampling area. A greenline transect was established in July 2000. This transect, established along the stream channel in the area of the "willow patch," will be read every 5 years with its first repeat made in 2004. The location was selected because both stream channel types found on this parcel occur here and can be monitored with the same transect. Most of the stream channel is characterized as not entrenched, with a high width/depth ratio, fairly sinuous, low gradient with a sand and gravel bed. A short segment in the vicinity of the "willow patch" is moderately entrenched, with a little wider and shallower channel. Sinuosity is reduced in this segment and the gradient is a little steeper, being about 2-3 percent. Bed material remains a sand and gravel mix.

Woody species regeneration will be monitored at the same time the green line is done. This information provides relative density and trend of the woody component in a belt on each side of the channel. At this time the woody species along the green line are all willow.

2. Riparian Cross Section Transect measures breadth of the meadow reflecting expansion or reduction in meadow coverage. A previously established riparian cross section transect overlays the greenline transect at the "willow patch" and was first established in 2001. This transect will be read every 5 years beginning with a reading in 2004. A second cross section transect will be established below pond 3 in 2004 to monitor any effects from using the wet meadow as a source for livestock water.

These transects identify and monitor vegetation community types. The percentage of meadow area in each community type can be quantified and monitored for changes. Also size of the meadow itself can be established and monitored.

3. Photo Points. Photographs will be taken at the same time every year at established locations and from consistent directions that clearly show vegetation and other features to monitor their condition.

4. Riparian Cover Height Transect. If the meadow enclosure were grazed by livestock at any time, a cover height transect would be performed after the

grazing period and at the end of the growing season. This transect would measure the height of residual vegetation along the stream channel. The measurement is the height of the nearest plant to a toe point every 10 steps along a transect beginning at the Sam Noble headwater spring and ending at the fence/private property line. Readings are taken on alternate banks through out the transect. The technique is described further in Idaho Bureau of Land Management. Technical Bulletin No. 99-01 Feb. 1999. Photographic Guide to Median Stubble Heights. 23p.