

96-0012 WPF

1 Cover Page Instruction

Cover Page: Application Inf

WPF/00

Fill in all blanks on the cover page. Devise a short descriptive title for the proposal. Your project may fall into more than one of the four primary project types. If so, select all categories that apply. For #12 below, only list other grants that are secured at the time of application submittal. For #13c below, you may list the total of both secured and unsecured money that is committed at the time of application submittal. The difference between #13c and #12 should represent the total of unsecured money needed to complete your proposal.

1. Title of project: **EAGLE CREEK WATERSHED AND RIPARIAN STABILIZATION**

2. Type of Project: XXX Water Acquisition XXX Capital Project or other XXX Perennial XXX Intermittent XXX Ephemeral  
XXX Water Conservation  
XXX Research

4. Date submitted 7-29-96

5. Date received by ADWR \_\_\_\_\_

6. Applicant Name James F Holder

7. Applicant address (city, county, zip code)  
Horseshrings Management Team  
825 20th Ave  
Safford Graham 85546

8. In an AMA \_\_\_\_\_ Outside AMA x  
\_\_\_\_\_ Phoenix  
\_\_\_\_\_ Tucson  
\_\_\_\_\_ Prescott  
\_\_\_\_\_ Pinal  
\_\_\_\_\_ Santa Cruz

9. Contact person/title and phone/fax number: James F Holder  
\_\_\_\_\_ day  
\_\_\_\_\_ night  
520 428 7272 FAX

10. Type of application:  
New (X) Continuation ( )

11. Project start date: February 1997  
End date: February 2000

12. Other grants obtained and secured:

Grant type	Amount
Rocky Mountain Elk	<u>\$10,000.00</u>
Az Game & Fish	<u>\$10,000.00</u>
U S Forest Service	<u>\$10,810.00</u>
_____	
_____	
Total	<u>\$30,810.00</u>

13. Estimated funding:

a. AWPf	<u>\$80,626.00</u>
b. Applicant	<u>\$12,147.00</u>
c. Other	<u>\$ 0.00</u>
d. Total	<u>\$92,773.00</u>

14. Tax ID number: \_\_\_\_\_

The grants applied for but not secured. The Forest Service is secured. Az. Game and Fish and Rocky Mountain Elk are not secured but word is expected prior to WPF interview in September.

15. The undersigned hereby offers and agrees to perform in compliance with all terms, conditions, specifications and scope in the application. Signature certifies understanding and compliance with the attached application. Signature certifies that all information provided by the applicant within this application is true and accurate. The Arizona Water Protection Fund Commission may approve grant award agreements with modifications to scope items, methodology, schedule, final products, and/or budget.

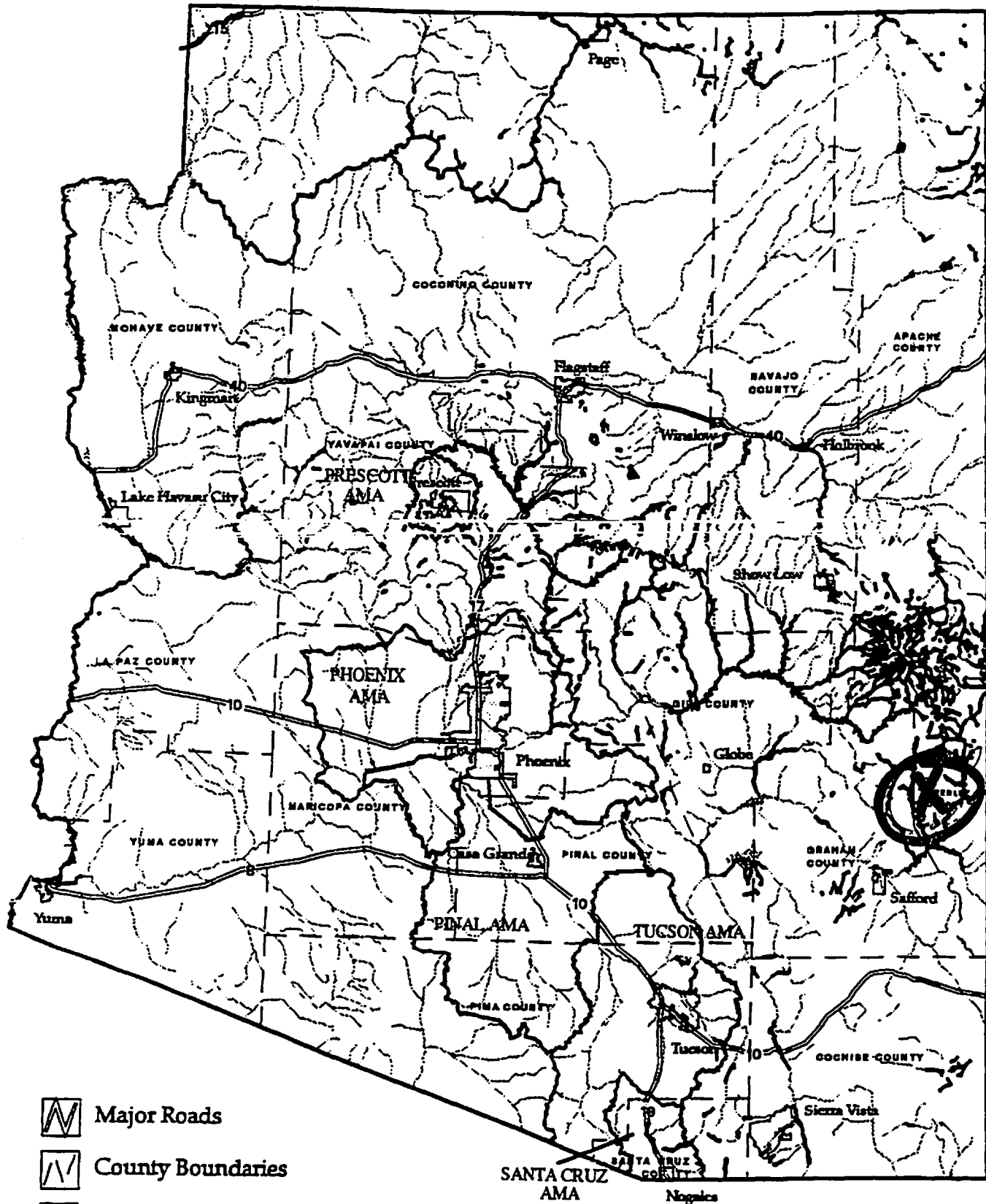
James F. Holder  
Typed Name of Authorized Representative

Ranch Owner  
Title and Telephone No.

Signature

7 28 96  
Date Signed





Major Roads



County Boundaries



Perennial Streams



Intermittent or Ephemeral Streams



Active Management Areas



0 10 20 30 40 50 100 150  
MILES

PROJECT NAME:

Eagle Creek Watershed & Riparian Stabilization



ARIZONA  
DEPARTMENT  
OF WATER  
RESOURCES

## 2 Narrative Summary Page Instructions

Begin this summary with a single sentence clearly stating the purpose of the project. List objectives, describe methods to be used, and indicate the significance of the proposed work to the maintenance, enhancement or restoration of Arizona's rivers, streams and associated riparian or aquatic habitats. [this is sent out to people requesting summary information about submitted projects]

### **Expansion of current pipeline into upland range to restore and improve riparian community of Eagle Creek and feeder canyons.**

#### **Summary**

The major purpose of this project is to improve our watershed, upland range, and the riparian communities of Eagle Creek on the Horsesprings and Baseline allotments. These improvements will increase habitat for increasing wildlife numbers, reduce erosive runoff and potential down stream silting and flooding, restoring riparian habitat and stabilizing Eagle Creek.

Eagle Creek becomes an intermittent stream 2 miles above our allotment to 1 mile below. This intermittent portion bisects our private land. Our Forest Service (USFS) permit, the Baseline and Horsesprings allotments, consists of 10,000 acres. There is also 300 acres of private land. Fences divide the Forest Service allotments into 11 pastures. The applicant has fenced the 2.5 mi. of private riparian area and we are presently resting it. In 1988 using natural barriers, we divided the two allotments into 32 grazing areas. Currently we are able to use only 13 of the 32.

With adequate watering points, other attractants, and temporary fencing and/or day herding we can expand our intensive allotment management plan into a large part of the allotments that are unusable now.

Elevation is 4800' to 6500', annual rainfall can vary from 8" to 17". Lack of watering points and management options prevent an estimated 55-60 % of the range from planned use. Dependence on unreliable tanks located in riparian zones and ephemeral canyons further reduces usable range during a dry year and increases the density of livestock and wildlife to a level that has damaged the eco-system. New watering points will be added, but only in the upland, and increased in number to allow planned rest for the overused areas. Increased wildlife numbers include increased population of mule deer and new herds of both antelope and elk, absent for the past 50-60 years. Increased watering points offers a better distribution and maintenance of wildlife numbers.

The long term objectives of this project are to continue restoration and improvement of riparian and upland biodiversity; including wildlife habitat; to complete objectives that move the land towards the goals (attachment 1) set by Horsesprings Management Team (HMT) (attachment 2). Objectives for each grazing area, tools to achieve those objectives and resource limitations for each grazing area have been planned (attachment 3).

#### **Methods:**

Fences, electric and standard 4-wire, to increase rest and isolate special areas of interest and attention. Expansion of current pipeline to distribute wildlife and livestock, drinkers with float valves to control use and extended rest. Continuation of biological planning by team and applicant. Replace diesel deep pump with solar voltaic pump and add ram pump to lift water to higher elevation.

Fencing and pond construction done to Forest Service Standards, including wildlife protection aspects. Maintenance is the responsibility of the applicant and will be added to our maintenance schedule (attachment 4).

#### **Monitoring:**

Project implementation monitoring will be done by the applicant and ranch manager. Results will be reported to Water Protection Fund (WPF) quarterly.

The effects of the project in the upland community will continue to be monitored for improvement at 9 plant frequency plots established by team in 1989 (attachment 5).

Riparian succession, water quality and channel width monitoring will be added within the project area and at points to be determined, above and below the project.

This data will be evaluated and added to our past 7 years collection. Other monitoring points include 6 Parker Three Step plots and 18 photo points. A comprehensive management system, Holistic Resource Management, (HRM) tested over the past 7 years, will be expanded to include the larger whole, keying on planned rest and increased water resource.

Both the management system and the monitoring will continue, by the applicant and HMT, post-project. For the 3 year term of the project monitoring will be done by two third parties, Round River Conservation Studies and Resource Management International. These results will also be included in quarterly reports to the WPF.

**Significance of project:**

**Improvement of watershed is critical for ecosystem(s) health.**

Quality of water is an important issue to our state, as is the aesthetic value. Soil erosion is a huge concern. This project will reverse downward trends.

Eagle Creek, being considered as a wild and scenic river, provides habitat for more native fish species than any other stream in Arizona. It is the home for the long fin dace, speckled dace, round-tailed chub, Gila chub, loach minnow, spikedace, desert sucker, and Sonora sucker (See attachment 7). Eagle Creek is an important recreational site for Greenlee County.

It also is supporting rural families and increasing wildlife population. At least one stock tank still harbors the spotted leopard frog. Another tank that contained the spotted leopard frog dried up during the drouth. Improving the watershed of Eagle Creek will increase production of large game animals, photo opportunities for birders, aesthetic beauty for visitors and locals, and revenue production for applicant and neighboring communities.

As the watershed improves it adds to the stabilization of Eagle Creek, feeder canyons and increasing biodiversity.

**LOCATION INFORMATION SHEET/LAND OWNERSHIP FORM**

1. County Greenlee                      2. Section : 1-24                      3. Township: 8 S
4. Range: 28E                      5. Stream Name: Eagle Creek, Pine Creek, Bear Canyon, Horsesprings, Big Dry
6. Landownership of project area: US Forest Service, Holder Family
7. Current land use of project area: Cattle, wildlife, recreation and water farming
8. Length of stream through project area: Eagle Creek 2.5 miles
9. Size of project area (in acres): 10,300
10. Is the project area fully defined at this time: Y/N? Yes
11. Provide directions to the project site from the nearest town. List any special access requirements.  
Coming from Clifton - Morenci: Highway 191 north 40 mi. to M.P. 188, turn left (west) on gravel road for 12 mi. to Eagle Creek School. The headquarters can be seen 1/4 mi. south of the school. Ranch area runs due east from ranch house. Four-wheel drive is needed to cross Eagle Cross when flooding.
12. Describe the agreements which give you legal access to the project area throughout the project period. Include signed copies of any agreements already in effect.

Forest Service Livestock Grazing Permit.

### **3 Narrative Introduction Instructions**

List the problem or problems that you address in your proposal, list the cause or causes of these problems, and list the remedies or solutions that you will implement.

#### **Statement of problem/s:**

1. Wildlife and cattle, for years have concentrated in riparian and potential riparian habitat, due to location and inadequate number of unreliable rain dependant watering points. This produces poor management and utilization of our resource, which is over used in the lowlands and over rested in the upper watershed. Adding to the problem, the healthy diverse plant life in the 13 grazing areas we have advanced, attracts increased livestock, deer, antelope, and elk. This successional community needs rest to advance.
2. Degraded upland rangeland resulting in poor forage production, watershed degradation and decreased wildlife habitat and bio-diversity.
3. Hazards of chemical spill and expense of deep water pumping associated with current water delivery system.
4. Similar to the 13 grazing areas appeal, the too few ponds also attract and concentrate wildlife and livestock, damaging the eco-system connected to that pond. There is no aquatic life and the banks are bare soil.

#### **Statement of cause/s of the problem/s:**

1. and 2. Unavailable water sources in the uplands. Inadequate rest and use of beneficial intensive grazing management, poor water and mineral cycles and history of poor grazing management.
3. Diesel powered generator. Rough and potential dangerous road, risking contamination from spillage. Abnormally deep well.
4. Failure to rest ponds and immediate area. Livestock and wildlife dependance on an insufficient number of ponds.

#### **Statement of remedies or solutions:**

1. Expansion of our pipeline into the uplands and establish 11 new water points, with troughs and float valves.
2. Holistic Resource Management (HRM) planning to include improvement of water, mineral cycles, and advancement of plant succession towards team's goals. Portable electric fences will aid containment in the upland. Rest is the key tool to achieve objectives. Use of grazing areas and their rest are carefully planned each year in our Biological Plan (attachment 6), an important part of the HRM planning process.
3. Replace consumptive diesel system with cost effective, clean, "renewable" solar voltaic and pump from ponds supplied by the Phelps Dodge pipeline.
4. Planned use and rest to advance the aquatic community in both the existing and proposed ponds. Construct 2 new ponds similar to the demonstration ponds at the ranch (see photos in attachment 10) at strategic upland sites. Permanent fencing and planned use/rest to add aquatic appeal and biodiversity to uplands.

## **Introductory Information (continued):**

### **Introductory Information:**

Since the mid 1800's, herbivores have been increasingly "managed" by man, restricting their natural tendency to graze a plant & then move on. Highways, fences, towns, and decreased predators restrict these migratory patterns that evolved with the plants and animals. The migration reduced overgrazing while at the same time assuring bio-effective use. Our family connected with the Horsesprings allotment in 1909 and added the Baseline in the 1960's. Rest rotation grazing has been the program most recommended in the past. This system was a step in the right direction but still restricted grazers to one area too long, allowing preferred plants to be repeatedly, overgrazed and land to deteriorate. We were seeing sheet and gully erosion, poor water, mineral cycles and decreased production from land, including loss of plants and animals (biodiversity).

Our concern for the land sent us searching. Researchers like Voisen, Leopold, Savor, & Berry caught our attention. In 1988 we removed all cattle from both Horsesprings and Baseline for a two year rest during a drought. We also decided to introduce the teachings of these men to our ranch.

The most comprehensive guidance comes from A. Savory's Holistic Resource Management. Successful applications range from a small acre plot on the Babbitt ranch in Northern Arizona to the large Deseret ranch in Idaho and Utah (See attachment 9).

In 1989 our team was formed and since we have established a 7 year track record in high intensity grazing and planning. As seen by enclosed monitoring data, plant frequency was increasing and bare soil decreasing. Mule deer, antelope, elk, turkey as well as javelina were more apparent, especially in the areas where new plants were available. Areas of the ranch that were exposed to planned use succeeded.....but other areas with resource limitations, usually water, remain unchanged and degrading. Wildlife and livestock have, during this past drought, concentrated around the private land where our improved ponds and biodiversity are located. This is a nice sight to see, but on the land, improvements are reversing.

A coop agreement with Phelps-Dodge Mining Company (PD) and the Forest Service allowed us to start a pipeline and pump from an exploratory, 1800' deep well, established by PD. Storage consists of a 30,000 gallon steel rim at the elevation of 5,900 feet and 3 miles from the diesel pump and 5 miles of gravity feed pipeline. This of course allowed us to move more of the land towards the teams goals that could not be served before, but only in 13 of the 32 grazing areas.

### **Problems remaining:**

Stock tanks located in riparian and ephemeral areas are too few in number to distribute grazers.

Much of ranch remains unutilized by wildlife and livestock and the variety of life forms that accompany increased biodiversity. Basically, resources to allow us to expand the initial results we have seen on a portion of our place, by providing rest to the watershed, are lacking.

PD has developed more deep wells (1800-2000 feet), pumping the water to the surface and placing it in a 24 " pipeline, which runs by our place into lower Eagle Creek which then carries it to the mine in Morenci. Our agreement with Phelps Dodge allows domestic and livestock use. Moving our pumping source to our demonstration ponds, which are fed by the PD pipeline, would eliminate our deep pumping expense, hazardous road use, and also allow us to use cost effective clean solar energy. A rum pump on the east end of the pipeline will lift the water to our higher elevations. The current system will serve as backup.

Since these improvements in community dynamics are naturally self perpetuating with holistic planning, we expect the results to be beneficial for a very long term, much longer than 20 years. Benefits will increase in direct proportion to time. Improvements in watershed, decreased erosion, increased biodiversity, and improved quality of life for the people resource. Holistic planning emphasizes goal setting, planning, monitoring of the plan to insure advancement towards goals and testing tools as well as decisions before implementing them. The biological or grazing plan is done every year and is monitored and changed as events dictate. Ranch manager monitors the resource daily. Observation on plant health, speed of growth and amount available for use are done every day possible.

I have added reports from current literature( See attachment 9)

#### 4 Scope of work: Objectives and Benefits

Objectives are specific, measurable outcomes of the project. List these objectives in numbered order, with number one being the most important outcome. After each objective, list the benefits to the riparian or aquatic habitat that accomplishing this objective will provide. (An example scope of work with listed objectives and benefits is available as a separate document to be used in conjunction with this manual)

##### Objective #1:

Improve current water distribution.

##### Benefits:

Rest for upland, riparian zones and ephemeral canyons. It will also expand usable range for wildlife and livestock. Planned rest will increase plant frequency, slowing runoff and reducing erosion. Management has a wider variety of options for restoration strategies. All contributing to an improved watershed and Eagle Creek.

##### Objective #2 :

Expansion of high intensity, low duration grazing program into unused portions of the allotment.

##### Benefits:

Allows management to plan for whole land base. Extended rest for overused areas. Succession towards landscape goals.

##### Objective #3

Replace diesel system with solar voltaic.

##### Benefits:

Cost effectiveness of solar pays off in 6.5 years. We would be reducing our use of a non-renewable resource, diesel, risk of spill is eliminated and road particulates are not disturbed on eroding roads. Use of ancient water from deep wells will not weaken the current water table of neighbors.

##### Objective #4

Non-biased monitoring of results of project for re-planning and compliance.

##### Benefits:

Assurance project is proceeding in the desired direction and within projected time frame. That capital is used per plan. Gathering and sharing of very important knowledge for those who realize the importance of the resource to their water supply, food source and recreation.

##### Objective #5:

Comprehensive planning. Inclusion of objectives and monitoring in applicant's annual planning process.

##### Benefits:

Insures wise use of all resources and direction of project towards teams goals and objectives, long term. holistic planning and management addresses the whole of the Horseshrings-Baseline allotments. Benefits are realized in soil, plant, insect, animal and people communities. Directly in our area and indirectly down stream.

## 5 Scope of work: Task Descriptions

Tasks: Describe in detail the tasks you will perform to accomplish your objectives and achieve your desired results. If you have completed a **common task form** for a specific task, you may refer to the information in that form in your task description rather than repeating it in this section. These tasks must be exactly the same tasks as the tasks you will list later in your task timetable. Please use the same task numbering on each form. Consider the acquisition of permits, monitoring, and data analysis to all be tasks within your overall project. After your task description, provide the AWPf task cost (this includes all costs associated with that task; e.g. administrative, materials, personnel, etc., that the AWPf will pay for), include a description of any deliverables the Commission will receive from that task, and the date those deliverables will be submitted to the Commission. A deliverable is a product produced from a task, which is submitted to the Commission and proves that the task was completed as described within the scope of service. Deliverables are often reports. They are sometimes photos, lists of data, invoices for materials, etc. **(An example scope of work with task descriptions is available as a separate document to be used in conjunction with this manual)**

### **Task #1 Description:**

Obtain necessary clearances, permits and authorizations.

**AWPF task cost:** \$300.00

**Deliverable description:** Signed copies enclosed.

**Deliverable due date:** Aug. 1, 1996

### **Task # 2a Description:**

Order all project materials and authorize contract labor.

### **Task # 2b Description:**

Expansion of pipeline-- See common task for water development.

**AWPF task cost:** \$53,803.00

**Deliverable description:** 1) Contractor and dealer invoices 2) Description of construction progress in quarterly reports.

**Deliverable due date:** 1) November. 1, 1997 2) 1st Quarterly Reports, May, August, November, 1997.

### **Task # 3 Description:**

Delivery and installation of 8000 gallon fiberglass storage tank by USFS.

**AWPF task cost:** \$ 0.00

**Deliverable description:** Photos and report.

**Deliverable due date:** November 1, 1997.

### **Task #4 Description:**

Construction of 13 watering points for the pipeline: Excavation and compaction of 2 ponds will be done by Elbrok Water Systems along with pipeline burial. Additional compaction on wet soil will be done with cost effective livestock and wildlife feet. Experience has shown that hoof compaction is periodically required to reduce percolation. Ten coyote willows will be planted at 6 foot intervals on the south side of ponds. The diameter of the ponds will be 30 feet and constructed to Forest Service standards. In addition, ten 500 gallon watering troughs with float valves to be installed on pipeline.

**AWPF task cost:** \$6,127.00

**Deliverable description:** 1) Contractors and dealers invoices 2) Photographs 3) Quarterly Report

**Deliverable due date:** 1) November 15, 1997 2) Sept. 1, 1997 3) May, August, November, 1997.

**Task # 5 Description:**

Permanent fencing of ponds.

A 4 wire fence will be constructed around 9 old tanks and 2 new ponds. 3 barbed on top & 1 smooth wire on the bottom. Forest Service standards of construction apply allowing wildlife access.

**AWPF task cost:** \$9,057.00

**Deliverable description:** 1) Dealer invoices 2) Photographs 3) Applicable labor log and quarterly reports

**Deliverable due date:** 1) April. 1, 1998 2) May, 1998

**Task #6 Description:**

Solar voltaic water system----See common task form.

**AWPF task cost:** \$33,247.00

**Deliverable description:** 1) Copies of invoices from contractor 2) Photographs 3) Quarterly Report

**Deliverable due date:** 1) Aug. 1, 1997 2) Sept. 1, 1997 3) May, August , 1997

**Task # 7 Description:**

Install ram pump to lift water to 8000 gallon storage tank at 6,150' for gravity feed to higher grazing area.

**AWPF task cost:** \$1,827.87

**Deliverable description:** 1) Dealer invoice and photos

**Deliverable due date:** 1) July 31, 1998

**Task # 8 Description:**

Portable electric drift fencing one mile in length will also be done to Forest Service standards, located at various locations, to be determined by manager.

**AWPF task cost:** \$2,515.00

**Deliverable description:** Dealer invoice

**Deliverable due date:** Aug. 1, 1997

**Task # 9 Description:**

7a. Baseline monitoring has been established in uplands. Two Riparian sites will be established and read Feb., 1997.

7b. See common task form

**AWPF task cost:** \$4,000.00

**Deliverable description:** 1) Data report of results every 6 months for 3 years from each group. 2) Applicant progress report

**Deliverable due date:** 1) Every 6 months starting with baseline in April 1997 2) Aug. 1, 1997

**Task #10 Description:**

Post project monitoring

HMT will start doing Riparian and upland monitoring again after the 3 year project monitoring by outside firms. Monitoring after the year 2000 will be done one time per year at the second team meeting in September. Monitoring system are Parker 3-Step and plant frequency and repair.

**AWFP task cost:** \$0

**Deliverable description:** Meeting report

**Deliverable due date:** Jan. 1, 2001.

**Task #11 Description:**

Grazing Management Plan

With the support of USFS personnel and HMT, a grazing management plan that incorporates all 32 grazing areas will be developed during May and June 1997. The plan will consist of a 32-pasture, rest-rotation system that includes a high-intensity, short duration grazing strategy for all areas. Grazing will initially be excluded from the riparian pasture for 1-2 years.

**AWFP task cost:** \$240.00

**Deliverable description:** Discussion in final report, copies of plan each year.

**Deliverable due date:** July 15, 1997, July 15, 1998, July 15, 1999

**Task #12 Description:**

Maintenance Agreement

A maintenance agreement that describes who will be responsible for maintaining each of the range improvements constructed during the project period will be developed by March 1997. In addition, the new improvements will be added to a maintenance schedule, specifying who will be responsible for doing what and when.

Until the maintenance program is established, the applicant will be responsible for maintaining all funded project improvements.

**AWFP task cost:** \$0

**Deliverable description:** Copy of the signed maintenance agreement and maintenance inspection schedule in the final report.

**Deliverable due date:** Feb. 15, 1997

**Task #13 Description:**

Progress and Final Reports

Quarterly progress reports will be provided to the Commission each February, May, August, and November during the funded project period. The reports will provide updates on project construction, livestock management, and monitoring activities which have occurred during that period. The progress reports will begin in May 1997 and end August 2000. A final report will be provided to the Commission in December 1999. This report will include an analysis and presentation of vegetation data, a qualitative evaluation of photographic monitoring information, the allotment management plan, and the project maintenance agreement.

Final reports will be provided to the Gila Valley NRC, Greenlee County, Cattlegrower's Association, Arizona Game and Fish, Forest Service and University of Arizona. Articles regarding the project will also be published in these organizations' respective newsletters. In addition, upon request, the applicant will give oral presentations to interested organizations.

Start Date: 2/15/97 Yrs of Benefit: > 20 years  
 End Date: 12/15/00  
 Duration: \_\_\_\_\_

Project Name: **EAGLE CREEK WATERSHED AND RIPARIAN STABILIZATION**

**Project Categories and Tasks**

**Months Since Project Initiated (Year 1)**

Task No.	Task Cost	Task Description	1	2	3	4	5	6	7	8	9	10	11	12
1	\$300.00	Clearance, permits	X											
2a	\$0	Order materials		X					X					
2b	\$53,803.00	Pipeline expansion				X			X			X		
3	\$0	delivery 8000 gal storage tank				X			X	X		X		
4	\$3,580.00	Troughs & pond construction				X			X	X		X		
5	\$9,057.00	Permanent fencing				X			X					
6	\$33,247.00	Solar voltaic water system				X			X	X				
7	\$1,827.00	Ram Pump						X						
8	\$1,786.00	Electric Fence							X					
9	\$4,000.00	Monitoring	X		X					X			X	
10	\$0	Post project monitoring												
11	\$240.00	Grazing management plan						X				X		
12	\$0	Maintainence Agreement												
13	\$3,520.00	Progress and Final Reports				X			X					



Project Categories and Tasks			Project Name: EAGLE CREEK WATERSHED & RIPARIAN STABILIZATION											
			Months Since Project Initiated (Year 3)											
Task No.	Task Cost	Task Description	25	26	27	28	29	30	31	32	33	34	35	36
9		Monitoring			X						X			
11		Grazing Management Plan											X	
12		Maintainence Agreement											X	
13		Progress & Final Reports	X			X			X				X	

## Project Budget Sheets

On the project budget sheet, break down your budget into Administrative costs, Direct Labor costs, Other Direct costs, Outside Services costs, and Capital Outlay costs. **Administrative costs** are management and overhead costs, and by statute the total administrative costs charged to the AWPFC cannot exceed 5% of the total amount requested from the AWPFC. **Direct Labor costs** include the labor costs directly involved with the project. Break down these costs by: Job classification (e.g., laborer, project scientist, hydrologist, etc.); average cost/hour for that job classification; number of hours for that job classification; and total cost (Total cost = (Job classification cost/hour) x (number of hours)). **Other Direct costs** include supplies and materials, paper, pencils, computer time, per diem, printing, public relations, etc. **Capital Outlay costs** include any equipment costs greater than \$1000.00. [The costs on this budget sheet do not have to be broken down into the exact same task costs that you previously presented in the scope of work section and on the task-timetable.]

### PROJECT BUDGET

	FUNDING SOURCES			
	AWPF	Other	Donated Mat./Serv.	TOTAL
<b>ADMINISTRATION COSTS (1)</b>				
Project administration overhead	\$5,732.00			\$ 5,732.00
<b>DIRECT LABOR COSTS (2)</b>				
Trough installer				
at \$10.00 X 48 hours	\$ 480.00			\$ 480.00
Fence Builders at	\$ 7,200.00			\$ 7,200.00
\$10.00 X 720 hours				
1 Driver at \$10.00 X 15	\$ 150.00			\$ 150.00
USFS Range Conservationist				
\$187.00 per day X 35 Days			\$ 6,888.00	\$ 6,888.00
<b>OTHER DIRECT COSTS</b>				
Pipe	\$33,739.00			\$33,739.00
Solar System		\$12,147.00	\$20,000.00	\$32,147.00
4 Wire Fence	\$ 1,853.00		\$ 480.00	\$ 2,333.00
Electric Fence	\$ 2,515.00			\$ 2,515.00
Troughs	\$ 3,365.00		\$ 1,192.00	\$ 4,557.00
8000 gal storage tank			\$ 2,250.00	\$ 2,250.00

## 8 Budget Information

Your budget information (numeric) is presented on the project budget sheets preceding this page and within the task-timetable. These should be your best estimates of all costs. You will not be contractually bound to spend that exact amount for each task if your proposal is selected. However, the total cost requested from the AWPf will be part of the contract. If an explanation of any costs or expenditures is necessary, include it in this section. Also provide written evidence of all secured funds (in-hand or committed in writing) that you are listing on the cover page. For unsecured funds, list their amount and describe their status. If you were to obtain them, when would this occur. An explanation of any in-kind contributions listed in your application is recommended.

### **Budget Information:**

In kind documentation attached

United States Forest Service, Az Game and Fish, Rocky Mountain Elk Foundation

Solar System -

Will not improve water shed directly by using solar but it is a critical part of the whole . System applicant will pay \$12,147.00 towards the system. Arizona Game and Fish and Rocky Mountain Elk Foundation are considering the balance of \$20,000.00. Their grant process is taking time but expect word by September interview. We are continuing to work on additional grants.

## 9Existing Plans

Discuss any existing plans, reports or information that are relevant to the project and that the Commission should be aware of when evaluating your proposal. This might include other projects that are being performed or being planned in the area that may affect your project, or local planning/zoning changes that could impact the project area.

### **Existing Plans:**

1. Annual grazing plan enclosed.
2. Ervin's Beef  
Marketing natural beef; predator friendly, drug free, range raised, no feed lot.

CLIFTON RANGER DISTRICT  
APACHE SITGREAVES NATIONAL FOREST  
ANNUAL OPERATING PLAN  
1995-1996

PERMITTEE: JAMES AND CLARICE HOLDER  
ALLOTMENTS: BASELINE AND HORSESPRINGS

I. The following numbers and classes of livestock will be permitted to graze the Allotment this year:

<u>KIND</u>	<u>CLASS</u>	<u>PROPOSED SEASON OF USE</u>
<u>Cattle</u>	Cows 175	03/01/95-2/28/96
	Bulls 6	3/01/95-02/28/96
	calves 48	12/01/94-05/15/95
	yrllings 55	12/01/94-05/15/95
<u>Horses</u>		

II. GRAZING MANAGEMENT

<u>NUMBER LIVESTOCK</u>	<u>UNIT/PASTURE</u>	<u>SEASON OF USE</u>
284	(17) BLACK MOUNTAIN	1/1/95-1/14/95
(284)	(15) DEER TANK	1/14-1/28
(284)	(16) BLACK TANK	1/28-2/12
(284)	(18) LION TANK EAST	2/12-2/26
(284)	(21) GRASS TANK	2/26-3/9
(284) DAY HERD	(22) HOLD UP	3/9-3/20
(284)	FS NORTH	3/20-3/31
(284)	FS WEST	4/1-4/6
(284)	(32) ANCHOR	4/6-4/13
(284)	(2) CEMETARY	4/13-4/18
(284)	(27) FIRST MESA	4/18-4/24
(284)	(26) THREE SISTERS	4/24-5/1
(284)	(31) S/E	5/1-5/6
(284)	(30) TIM COX	5/6-5/18
(181)	(29) HOLDER	5/18-5/29
(181)	(28) MUD SPRINGS	5/29-6/9
(181)	(25) PIPELINE	6/9-6/19
(181)	(19) STEEL RIM	6/19-6/30
(181) DAY HERD	(24) BEAR CANYON	6/30-7/11
(181)	(20) LION TANK WEST	7/11-7/22
(181)	(23) HOLD UP FLAT	7/22-8/2
(181)	(5) SANDY FLAT	8/2-8/8
(181)	(3) POCO	8/8-8/12
(181)	(1) CLAY CANYON	8/12-8/16
(181)	(4) CANYONS	8/16-8/22
(181)	(6) GIBSON	8/22-8/30
(181)	(9) TWO RIDGES	8/30-9/11
(181)	(12) HICKS	9/11-9/22
(181)	(13) CC TANK	9/22-10/5

<u>(181) DAY HERD</u>	<u>(14) PINE FLAT</u>	<u>10/5-10/20</u>
<u>(181) DAY HERD</u>	<u>(11) HORSE SPRINGS</u>	<u>10/20-10/31</u>
<u>(181)</u>	<u>(8) SUNFLOWER</u>	<u>10/31-11/11</u>
<u>(181)</u>	<u>(7) PINE CREEK</u>	<u>11/11-11/17</u>
<u>(181)</u>	<u>FS SOUTH</u>	<u>11/17-11/28</u>
<u>(181)</u>	<u>(32) ANCHOR</u>	<u>11/28-11/30</u>
<u>(181)</u>	<u>(30) TIM COX</u>	<u>11/30-12/13</u>
<u>(181)</u>	<u>(29) HOLDER</u>	<u>12/13-12/31</u>

### III. SALTING AND SUPPLEMENTAL FEEDING

Salt and supplemental feed will be used as a range management tool to draw cattle into light use areas, or areas for special treatment by animal impact.

### IV. RANGE IMPROVEMENT CONSTRUCTION MAINTENANCE

All work involving the use of heavy equipment will be accomplished only with prior approval of the District Ranger.

The following will be completed this year:

1. Routine maintenance as assigned on your permit map.
2. Look at various water development systems to aid in livestock distribution.
3. Complete Bear Canyon Water Distribution system reconstruction.
4. Install solar pump or ram pump, 8,800 gallon storage tank, and three troughs and pipeline to be used in areas 12, 10, and 9. (Pump and storage tank may need to be flown in by helicopter).
5. Continue road maintenance of washouts and ruts.
6. Reconstruct waterlot fence around Lion Tank.
7. Install culvert in Gibson Tank.
8. Clean and repair stock tanks as necessary and the opportunity arises.

Completed in 1994:

1. Corrals maintenance	\$45.00
2. Fence repair	\$142.93
3. Water system repair	\$9,330.35
4. Litter and added mulch	\$8,844.61
5. Monitoring	\$44.50

### V. PROTECTION

## 10Community Support

Describe the community support for your project. Include signed copies of letters from community organizations or groups that support your project. If pertinent, describe your commitment to work jointly with affected cities, towns, counties, NRCDs, special districts, and/or Indian tribes. Please be aware that for public support to affect your proposal's criteria rating score, it must be included with your application. Indications of public support for your proposal that are received after your application is submitted will be summarized for the Commission and may affect their decisions on which proposals to fund, but will not affect the criteria rating score.

### **Community Support:**

Support for our project has been excellent. Documentation enclosed in the form of several letters.

## 11 Personnel

Identify the key personnel associated with this project. Include brief biographical sketches that indicate relevant qualifications.

### Personnel:

#### **James F. Holder, O.D.**

Graduate degree in optometry

Owner/Manager Baseline ranch for 30 years, Horsesprings 4 years.

Annual continuing education seminars in range management, U of A, Holistic Resource Management

7 years experience in holistic Resource Management

#### **Clarice Holder, B.S. in education**

Project assistant manager

Owner in above ranch, Born and raised on Eagle Creek on the Horsesprings Ranch

Numerous continuing education seminars and workshops with Holistic Resource Management

7 years experience in HRM

#### **Will & Jan Holder, both have B.S. in advertising**

Ranch address: [REDACTED]

Managers, Operated the family ranch for past 3 years. Both attended seminars and workshop each year in HRM and agriculture related fields. 6 year experience in HRM

#### **Fred Sindel, B.S. Degree in Engineering**

[REDACTED]

Member of HRM team, advisor for project

Registered profession engineer and land surveyor in Az, Co and NM. Area Engineer ADOT (retired), private consultant, experienced in hydrology, hydraulics and runoff.

#### **Eric Schwennesen, M.Sc. P.A.S. Resource Management International**

[REDACTED]

Resource Management advisor for World Bank, Banco de Mexico and United Nations. Natural Resource and livestock management U of A, assistant manager Moorman Ranch (250,000 sq acres) Ely, Nevada

#### **Christopher Filardi, Round River Conservation Studies**

Ph.D. Student, Zoology Washington University, Seattle, Wa

[REDACTED]

"To preserve biodiversity and restore bioregions to their former biotic potentials we must develop ecologically based means for human communities to survive and thrive within their respective social, economic and political context."

#### **Ed Elbrock, Elbrock Water Systems**

[REDACTED]

Owner of Elbrock Water Systems for 29 years, Ranch owner 31 years.

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**STATE OF ARIZONA  
ARIZONA WATER PROTECTION FUND  
500 North Third Street  
Phoenix, Arizona 85004**

**AMENDMENT NO. 96-0012A WPF-03**

This Amendment, created by, **THE HORSESPRINGS MANAGEMENT TEAM, A NON-PROFIT ORGANIZATION** and the **ARIZONA WATER PROTECTION FUND COMMISSION (AWPF)**, is executed for the purpose of amending and revising Arizona Water Protection Fund Grant No. 96-0012 WPF with the terms and conditions contained in Attachment 1.

---

Grant Project Description: To improve the Eagle Creek Watershed and riparian communities on the Horsespings and Baseline Allotments.

---

The parties mutually concede that unforeseen events have occurred which prevent the complete and timely satisfaction of all terms of the original grant contract. Therefore, the undersigned mutually agree that the Arizona Water Protection Fund Grant No. 96-0012 WPF is hereby amended to include the terms and conditions contained in Attachment 1, attached hereto and incorporated by reference. This Amendment becomes effective upon the date it is executed by both parties.

---

**ALL OTHER TERMS AND CONDITIONS  
SHALL REMAIN IN FULL FORCE AND IN EFFECT.**

---

**THE HORSESPRINGS MANAGEMENT  
TEAM, A NON-PROFIT ORGANIZATION**

  
\_\_\_\_\_  
Signature of Authorized Individual      Date

James F. Holder  
\_\_\_\_\_  
Typed Name

Ranch Owner  
\_\_\_\_\_  
Typed Title

**ARIZONA WATER PROTECTION FUND  
COMMISSION**

  
\_\_\_\_\_  
Signature of Authorized Individual      5/5/2000  
Date

Roger S. Manning  
\_\_\_\_\_  
Typed Name

Chairman  
\_\_\_\_\_  
Typed Title

Attachment 1

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1. Page 1, Termination Date: December 31, 2000

**Change to: June 30, 2001**

2. Page 8, TERM: This Grant shall terminate not later than December 31, 2000

**Change to: This Grant shall terminate no later than June 30, 2001**

3. Page 8, PAYMENT:

1. Payments by the Commission shall be made on a quarterly basis after receipt and approval of applicable payment requests. The Commission shall retain 10 % of each quarterly payment request until all work is delivered, accepted and approved as complete by the Commission. When all work is approved, the retention will be released for payment.

**Change to:**

- 1. Payments by the Commission shall be made on a quarterly basis after receipt and approval of applicable payment requests.**

4. Page 9, Task 2, Cost: \$38,957

**Change to: Cost \$48,134**

5. Page 10, Task 3, Construction of Pipeline

Deliverable: Report describing construction activity, with map showing completed pipeline construction to date with applicable quarterly reports.

Due Dates: June 30, 1999, August 31, 1999, November 30, 1999, February 28, 2000

Cost: \$20,064

**Change to:**

**Deliverable: Report describing construction activity**

**Due Date: August 31, 2000**

**Cost \$21,430**

6. Page 10, Task 4: Storage Tank Installation

The grantee shall oversee the installation of two, 11,000-gallon fiberglass storage tanks, in the location noted on Attachment A.

Attachment 1

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**Change to: The Grantee in conjunction with the Forest Service, and at no cost to the Commission, shall purchase water storage tanks. The Grantee shall install the tanks in the locations noted on Attachment D.**

7. Page 10, Task 5: Installation of Watering Troughs; Construction of Stock Ponds

The grantee shall construct one, 30-foot diameter stock pond. The grantee shall plant ten coyote willows at six-foot intervals along the south side of the stock pond. The grantee shall install nine, 250 gallon watering troughs with float valves in the locations noted on Attachment A.

**Change to: The Grantee in conjunction with the Forest Service, and at no cost to the Commission, shall purchase ten new watering troughs. The Grantee shall install the new watering troughs and shall connect other existing watering troughs in the general locations noted on Attachment D.**

8. Page 10, Task 5, Deliverable: Photographs of completed stock pond, installed troughs and contractors invoices included with quarterly reports.

**Change to: Photographs of installed troughs with location information noted on back, contractor invoices for labor or materials other than troughs.**

9. Page 10, Task 6: Permanent Fencing of Stock Ponds

The grantee shall install wildlife fencing, constructed according to Forest Service wildlife fence standards around the following existing stock ponds; Deer, Line, and Lion.

**Change to: The Grantee, at no cost to the Commission, shall construct wildlife fencing around the Lion stock pond.**

10. Page 10, Task 6, Deliverable:

(1) Forest Service fence design criteria (2) Photographs of fenced stock ponds, and labor invoices included with quarterly reports

**Change to: (1) Forest Service fence design criteria (2) photographs of the fenced stock pond**

11. Page 10, Task 6, Cost: \$8,028.00

**Change to: \$0**

12. Page 11, Task 8, Electric Drift Fencing

Attachment 1

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The grantee shall purchase and use a one-mile length of portable electric drift fence, installed according to Forest Service specifications, at various locations to manage animal distribution. The grantee shall include in quarterly reports where this fencing is being utilized, why it is being used, and the effectiveness of the fencing.

Deliverable: (1) Fence invoice (2) summary of fence use and effectiveness included in quarterly reports.

Due Date: (1) November 30, 1999 (2) February 28, 2000, May 31, 2000, August 31, 2000, November 30, 2000

Cost: \$2,515.00

**Change to: Delete Task 8**

13. Page 11, Task 9: Develop Grazing Management Plan

The grantee, in conjunction with the U.S. Forest Service, shall develop a grazing plan for the 32 pastures in the two grazing allotments. This plan will incorporate a rest-rotation system, utilizing a high intensity short duration management strategy. The grantee shall monitor utilization on each pasture following use, as noted in task 10, and use this information to adjust the management plan as needed. The grantee shall submit a copy of the management plan, including a discussion of the evaluation of impacts and adjustments made on an annual basis.

**Change to: The Grantee, in conjunction with the U.S. Forest Service shall develop a grazing management plan for the 32 pastures in the two grazing allotments. This plan will incorporate a rest-rotation system, utilizing a high-intensity short duration management strategy. The grantee shall visually evaluate utilization on each pasture following use, and shall use this information to adjust the management plan as needed. The Grantee shall submit a copy of the Allotment Management Plan (AOP), and shall report in the final project report how the AMP was implemented during the project period, including any deviations from the plan and the reasons for those changes.**

14. Page 11, Task 9, Deliverable: (1) Management Plan (2) Management plan effectiveness report

**Change to: (1) AOP (2) AOP implementation discussion part of final project report**

15. Page 11, Task 9, Due Dates: (1) November 30, 1999 (2) November 30, 2000

**Change to: (1) May 31, 2000 (2) May 31, 2001**

16. Page 11, Task 10, Monitoring

Attachment 1

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**Vegetation Monitoring**

The grantee shall collect vegetation frequency data, and record photo points at nine established upland transects, and at two riparian transects in the locations noted on Attachment B, attached hereto and incorporated herein by reference. The grantee shall photograph each of the upland and riparian sites each April during the funded project period. The grantee shall collect vegetation frequency data each April and October during the funded project period. The grantee shall monitor utilization of individual pastures immediately following livestock use.

**Precipitation Monitoring**

The grantee shall collect rainfall data at the NRCD rain gauge immediately following precipitation events.

**Channel Morphology**

The grantee shall establish four permanent points, at approximately one-half mile intervals along Eagle Creek. The grantee shall record channel width at these four locations.

**Deliverable:** (1) Map identifying the location of all channel morphology transects (2) monitoring results and photographs

**Due Dates:** (1) June 30, 1999 (2) November 30, 1999, May 31, 2000, November 30, 2000

**Cost:** \$4,000

**Change to:** The Grantee shall determine what type of vegetation monitoring data has been collected by the U.S. Forest Service for the Horseshoe Allotment. The Grantee shall repeat the monitoring conducted by the U.S. Forest Service and shall evaluate the data comparatively. The Grantee shall prepare a project monitoring report, part of the final project report, which shall include the monitoring methods used, a map and/or GPS coordinates of the monitoring transect locations, season of monitoring and interpretation including evaluation of trend. The Grantee may also include in the final report precipitation data and surface water flow data if available.

**Deliverable:** Monitoring report part of final project report

**Due Date:** May 31, 2001

**Cost:** \$4,000

17. Page 12, Task 11, Maintenance Agreement, Due Date: August 31, 2000

**Change to:** May 31, 2001

18. Page 12, Task 12, Quarterly and Final Reports

## Attachment 1

**Deliverables:** (1) Quarterly reports (2) Final Project Report

**Due Dates:** (1) June 30, 1999, August 31, 1999, November 30, 1999, February 28, 2000, May 31, 2000, August 31, 2000 (2) November 30, 2000

**Cost:** \$0

**Change to:**

**Deliverables:** (1) Quarterly reports (2) Final Project Report

**Due Dates:** (1) June 30, 1999, August 31, 1999, November 30, 1999, February 28, 2000, May 31, 2000, August 31, 2000, November 30, 2000, February 28, 2001 (2) May 31, 2001

**Cost:** \$0

19. Page 13, SCHEDULE OF PAYMENTS AND DELIVERABLES

**STRIKE SCHEDULE OF PAYMENTS AND DELIVERABLES AND REPLACE WITH THE FOLLOWING:**

<b>TASKS</b>	<b>DELIVERABLES</b>	<b>DUE DATES</b>	<b>PAYMENTS</b>
Task 1: Obtain necessary clearances, permits and authorizations	Copies of all clearances, permits and authorizations	July 31, 1997	\$300
Task 2: Order Materials	Copies of packing slips or receipts for materials and a summary, with total dollar amount expended, of all items purchase each quarter included in quarterly reports	June 30, 1999 August 31, 1999 November 30, 1999	\$48,134
Task 3: Construction of Pipeline	Report describing construction activity	August 31, 2000	\$21,430
Task 4: Storage Tank Installation	Photos of installed storage tank included in quarterly report	November 30, 1999	\$0

## Attachment 1

Task 5: Installation of watering troughs; construction of stock ponds	<b>Photographs of installed troughs with location information noted on back, contractor invoices for labor or materials other than troughs.</b>	November 30, 2000	\$4,695
Task 6: Permanent fencing of stock ponds	(1) Forest Service fence design criteria (2) Photographs of the fenced stock pond	August 31, 2000	\$0
Task 7: Install solar voltaic and ram water pumps	(1) Copies of contractor invoices (2) Photographs of installed pumps submitted with quarterly reports	(1) November 30, 1999 (2) May 31, 200	\$1,827
<b>Delete Task 8</b>			
Task 9: Develop Grazing Management Plan	<b>(1) AOP (2) AOP implementation discussion part of final project report</b>	<b>(1) May 31, 2000 (2) May 31, 2001</b>	\$240
Task 10: Monitoring	<b>Monitoring report part of final project report</b>	<b>May 31, 2001</b>	\$4,000
Task 11: Maintenance Agreement	Copy of Maintenance Agreement	<b>May 31, 2001</b>	\$0
Task 12: Quarterly and Final Reports	(1) Quarterly reports (2) Final Project Report	(1) June 30, 1999, August 31, 1999, November 30, 1999, February 28, 2000, May 31, 2000, August 31, 2000, November 30, 2000, February 28, 2001 (2) May 31, 2001	\$0
<b>Total</b>			<b>\$80,626</b>

**LEGAL DETERMINATION**

The attached Grant Amendment has been submitted to the Legal Division of the Arizona Department of Water Resources. The undersigned Deputy Counsel has determined that said Agreement is in proper form and is within the powers and authority granted under the laws of the State of Arizona to the Arizona Department of Water Resources.

Dated this 25th day of April, 2000

Arizona Department of Water Resources  
Michael J. Pearce, Chief Counsel

By: Martha J. McConnell  
Martha J. McConnell  
Deputy Counsel

STATE OF ARIZONA  
ARIZONA WATER PROTECTION FUND  
500 North Third Street  
Phoenix, Arizona 85004

DUPLICATE

AMENDMENT NO. 96-0012A WPF 02

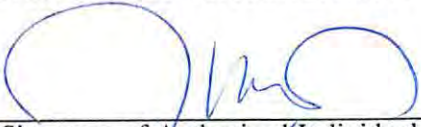
This Amendment, created by the HORSESPRINGS MANAGEMENT TEAM, A NON-PROFIT ORGANIZATION, and the ARIZONA WATER PROTECTION FUND COMMISSION (AWPF), is executed for the purpose of amending and revising Arizona Water Protection Fund Grant No. 96-0012 WPF with the terms and conditions contained in Attachment 1.

Grant Program Description: To improve the Eagle Creek Watershed and riparian communities on the Horsesprings and Baseline allotments

The parties mutually concede that unforeseen events have occurred which prevent the complete and timely satisfaction of all terms of the original grant contract. Therefore, the undersigned mutually agree that the Arizona Water Protection Fund Grant No. 96-0012 WPF is hereby amended to include the terms and conditions contained in Attachment 1, attached hereto and incorporated by reference. This Amendment becomes effective upon the date it is executed by both parties.

ALL OTHER TERMS AND CONDITIONS OF THE GRANT CONTRACT  
SHALL REMAIN IN FULL FORCE AND IN EFFECT.

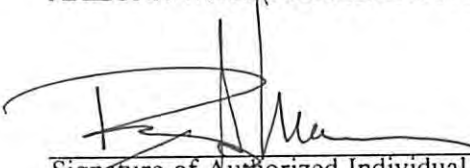
THE HORSESPRINGS MANAGEMENT TEAM, A  
NON-PROFIT ORGANIZATION

 6-7-99  
Signature of Authorized Individual Date

James F. Holder  
Typed Name

Ranch Owner  
Typed Title

ARIZONA WATER PROTECTION FUND COMMISSION

 6/10/99  
Signature of Authorized Individual Date

Roger S. Manning  
Typed Name

Chairman  
Typed Title

The parties agree to amend the above numbered Grant as follows:

1. Page 1, Termination Date: December 31, 1999

**Change to: December 31, 2000**

2. Page 8, B, TERM: This Grant shall terminate not later than December 31, 1999.

**Change to: This Grant shall terminate not later than December 31, 2000.**

3. Page 9, Task 2, Due Date: May 31, 1998, August 31, 1998, November 30, 1998

**Change to: June 30, 1999, August 31, 1999, November 30, 1999**

4. Page 9, Task 3, first sentence: The Grantee shall install approximately 47,00 linear feet of two inch, 260 psi, polyethylene pipeline, approximately fourteen inches below the ground surface, in the locations noted on Attachment C, attached hereto and incorporated herein by reference.

**Change to: The Grantee shall install approximately 1 mile of 320 psi 2½ inch, 2 miles of 267 psi 2½ inch, 1½ miles of 200 psi 2½ inch, and 5 miles of 200 psi 1¼ inch polyethylene pipeline, approximately fourteen inches below the ground surface, in the locations noted on Attachment D, attached hereto and incorporated by reference.**

5. Page 10, Task 3, Due Dates: May 31, 1998, August 31, 1998, November 30, 1998, February 28, 1999

**Change to: June 30, 1999, August 31, 1999, November 30, 1999, February 28, 2000**

6. Page 10, Task 4, sentence one: The Grantee shall oversee the installation of three 8,000 gallon fiberglass tanks, in the locations noted on Attachment C.

**Change to: The Grantee shall oversee the installation of two 11,000 gallon fiberglass storage tanks, in the locations noted on Attachment D.**

7. Page 10, Task 5, last sentence: The Grantee shall install nine, 250 gallon watering troughs with float valves in the locations noted on Attachment C.

**Change to: The Grantee shall install thirteen (13), 250 gallon watering troughs (troughs will be purchased by the Forest Service) with float valves in the locations noted on Attachment D.**

8. Page 10, Task 5, Due Date: November 30, 1999

**Change to: November 30, 2000**

9. Page 10, Task 6: The Grantee shall install wildlife fencing, constructed according to Forest Service wildlife fence standards around the following existing stock ponds: Coyote, Bear, Grass, Black, Deer, Forks, Hicks, Pine, and CC stock pond, and around the newly constructed stock pond.

**Change to: The Grantee shall install wildlife fencing, constructed according to Forest Service wildlife fence standards around the following existing stock ponds; Deer, Line, and Lion.**

10. Page 10, Task 6, Due Date: 2) February 28, 1999, May 31, 1999, August 31, 1999

**Change to: February 28, 2000, May 31, 2000, August 31, 2000**

AMENDMENT NO: 96-0012A WPF 02

**Attachment 1**

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11. Page 11, Task 7, Due Date: (2) November 30, 1998 (2) May 31, 1999

**Change to: (2) November 30, 1999. May 31, 2000**

12. Page 11, Task 8, Due Dates: (1) November 30, 1998 (2) February 28, 1999, May 31, 1999, August 31, 1999, and November 30, 1999.

**Change to: (1) November 30, 1999 (2) February 28, 2000, May, 31, 2000, August 31, 2000, November 30, 2000**

13. Page 11, Task 9, Due Date: (1) November 30, 1998 (2) November 30, 1999

**Change to: (1) November 30, 1999 (2) November 30, 2000**

14. Page 12, Task 10, Due Dates: (1) May 31, 1998 (2) November 30, 1998, May 31, 1999, November 30, 1999

**Change to: (1) June 30, 1999 (2) November 30, 1999, May 31, 2000, November 30, 2000**

15. Page 12, Task 11, Due Date: August 31, 1999

**Change to: August 31, 2000**

16. Page 12, Task 12, Due Date: (1) May 31, 1998, 1999, August 31, 1998, 1999, November 30, 1998, February 28, 1999 (2) November 30, 1999

**Change to: (1) June 30, 1999, August 31, 1999, November 30, 1999, February 28, 2000, May 31, 2000, August 31, 2000 (2) November 30, 2000**

AMENDMENT NO: 96-0012A WPF 02

## Attachment 1

TASKS	DELIVERABLES	DUE DATES	PAYMENTS
Task 1: Obtain necessary clearances, permits and authorizations	Copies of all clearances, permits and authorizations	Prior to the start of task 2	\$300
Task 2: Order Materials	Copies of packing slips or receipts for materials and a summary, with total dollar amount expended, of all items purchased each quarter included in quarterly reports	June 30, 1999 August 31, 1999 November 30, 1999	\$38,957
Task 3: Construction of Pipeline	Report describing construction activity, with map showing completed pipeline construction to date included with applicable quarterly reports	June 30, 1999 August 31, 1999 November 30, 1999 February 28, 2000	\$20,064
Task 4: Storage Tank Installation	Photos of installed storage tanks included in quarterly report	November 30, 1999	\$0
Task 5: Installation of Watering Troughs; Construction of Stock Ponds	Photographs of completed stock pond, installed troughs and contractors invoices included with quarterly report	November 30, 2000	\$4,695
Task 6: Permanent Fencing of Stock Ponds	(1) Forest Service fence design criteria (2) Photographs of fenced stock ponds, and labor invoices included with quarterly reports	(1) Prior to construction (2) February 28, 2000 May 31, 2000 August 31, 2000	\$8,028
Task 7: Install Solar Voltaic and Ram Water	(1) Copies of contractor invoices (2) photographs of installed pumps submitted with quarterly reports	(1) November 30, 1999 (2) May 31, 2000	\$1,827
Task 8: Electric Drift Fence	(1) Fence invoice (2) Summary of fence use and effectiveness included in quarterly reports	(1) November 30, 1999 (2) February 28, 2000 May 31, 2000 August 31, 2000 November 30, 2000	\$2,515
Task 9: Develop Grazing Management Plan	(1) Management plan (2) Management plan effectiveness report	(1) November 30, 1999 (2) November 30, 2000	\$240

AMENDMENT NO: 96-0012 WPF 02

## Attachment 1

Task 10: Monitoring	(1) Map identifying the location of all channel morphology transects (2) Monitoring results and photographs	(1) June 30, 1999 (2) November 30, 1999 May 31, 2000 November 30, 2000	\$4,000
Task 11: Maintenance Agreement	Copy of Maintenance Agreement	August 31, 2000	\$0
Task 12: Quarterly and Final Reports	(1) Quarterly reports (2) Final report	(1) June 30, 1999 August 31, 1999 November 30, 1999 February 28, 2000 May 31, 2000 August 31, 2000 (2) November 30, 2000	\$0
TOTAL			\$80,626

**LEGAL DETERMINATION**

The attached Grant Amendment has been submitted to the Legal Division of the Arizona Department of Water Resources. The undersigned Deputy Counsel has determined that said Agreement is in proper form and is within the powers and authority granted under the laws of the State of Arizona to the Arizona Department of Water Resources.

Dated this 4th day of June, 1999

Arizona Department of Water Resources  
Michael J. Pearce, Chief Counsel

By: Martha J. McConnell  
Martha McConnell  
Deputy Counsel

4050 1 NE  
(WILLOW MTN.)

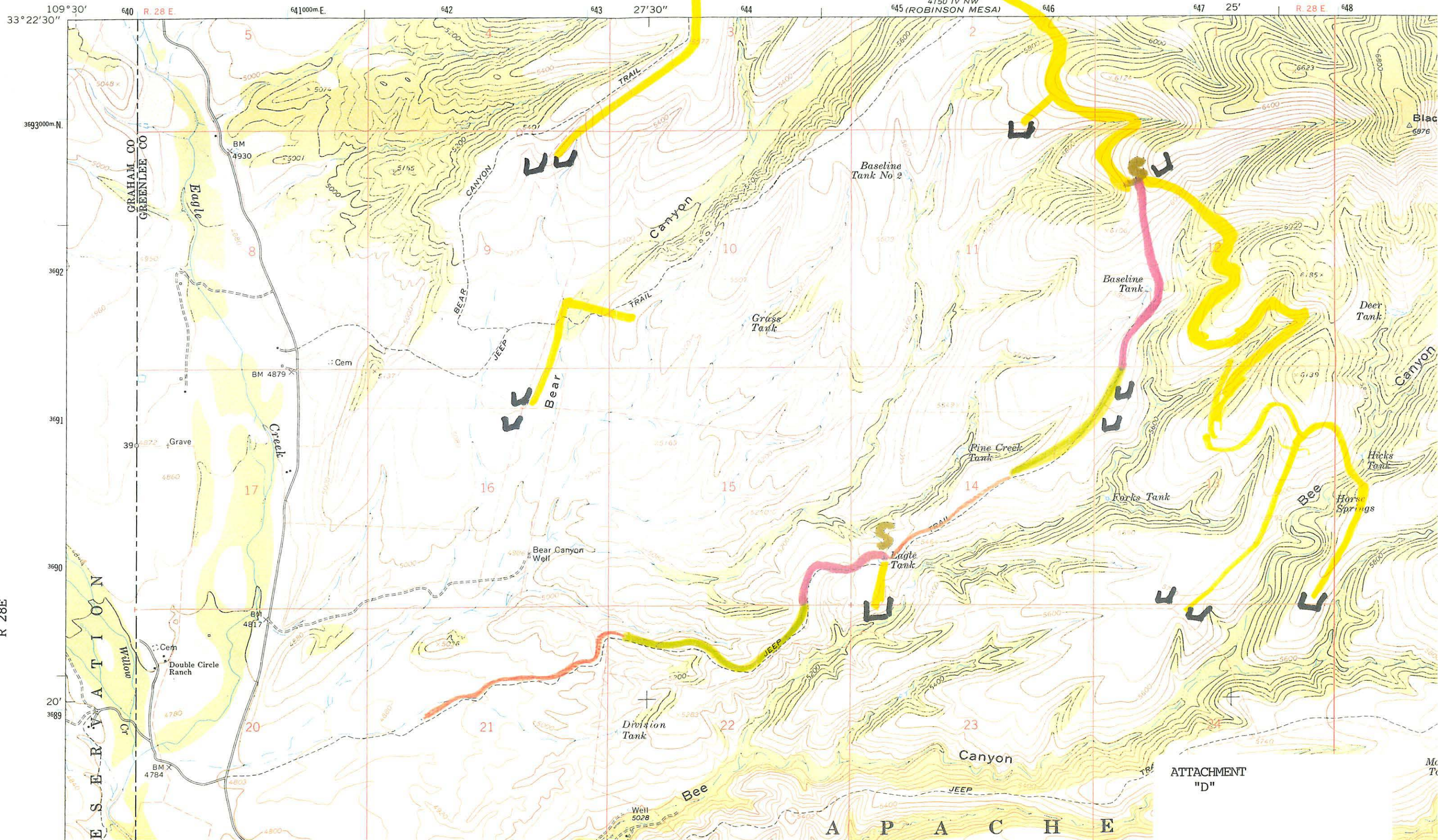
W - troughs (13-250g)

200 PST

200 F34

approx 1.5 miles

appear 3 times



**ORIGINAL**

STATE OF ARIZONA  
ARIZONA WATER PROTECTION FUND  
500 North Third Street  
Phoenix, Arizona 85004

AMENDMENT NO. 96-0012A WPF 01

This Amendment, created by **THE HORSESPRINGS MANAGEMENT TEAM, A NON-PROFIT ORGANIZATION**, and the **ARIZONA WATER PROTECTION FUND COMMISSION (AWPF)**, is executed for the purpose of amending and revising Arizona Water Protection Fund Grant No. 96-0012 WPF with the terms and conditions contained in Attachment 1.

---

Grant Program Description: To improve the Eagle Creek Watershed and riparian communities on the Horseprings and Baseline allotments.

---

The parties mutually concede that unforeseen events have occurred which prevent the complete and timely satisfaction of all terms of the original grant contract. Therefore, the undersigned mutually agree that the Arizona Water Protection Fund Grant No. 96-0012 WPF is hereby amended to include the terms and conditions contained in Attachment 1, attached hereto and incorporated by reference. This Amendment becomes effective upon the date it is executed by both parties.

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**ALL OTHER TERMS AND CONDITIONS OF THE GRANT CONTRACT  
SHALL REMAIN IN FULL FORCE AND IN EFFECT.**

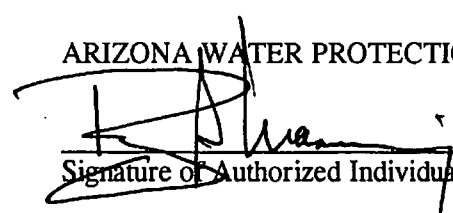
THE HORSESPRINGS MANAGEMENT TEAM, A  
NON-PROFIT ORGANIZATION

 2-19-98  
\_\_\_\_\_  
Signature of Authorized Individual Date

James F. Holder  
\_\_\_\_\_  
Typed Name

Ranch Owner  
\_\_\_\_\_  
Typed Title

ARIZONA WATER PROTECTION FUND

 3/3/98  
\_\_\_\_\_  
Signature of Authorized Individual Date

Roger S. Manning  
\_\_\_\_\_  
Typed Name

Chairman  
\_\_\_\_\_  
Typed Title

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**Attachment 1**

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The parties agree to amend the above numbered Grant as follows:

1. Page 8, C.1, Administrator:

James F. Holder  
Horsesprings Management Team  
825 20th Avenue  
Safford, Arizona 85546  
Phone: (520) 428-6930  
Fax: (520) 428-7272

**Change to:** Administrator

James F. Holder  
Horsesprings Management Team  
128 E. 19th Street  
Safford, Arizona 85546  
Phone: (520) 428-0033  
Fax: (520) 428-7272

2. Page 8, C.2: Notice and correspondence from the Grantee to the Commission shall be sent to:

Grant Contract Officer:

Jerry Rathke  
Arizona Department of Water Resources  
500 North Third Street  
Phoenix, Arizona 85004  
Phone: (602) 417-2450  
Fax: (602) 417-2401

**Change to:** Notices, correspondence, invoices, technical reports and inquiries regarding the technical aspects of this Grant should be made to:

Project Manager:

Perri Benemelis  
Arizona Department of Water Resources  
500 North Third Street  
Phoenix, Arizona 85004  
Phone: (602) 417-2400 ext. 7172  
Fax: (602) 417-2423

3. Page 8, C.3: Any invoices, technical reports and inquiries regarding the technical aspects of this Grantee should be made to:

Technical Administrator

Patricia McCraw  
Arizona Department of Water Resources  
500 North Third Street  
Phoenix, Arizona 85004  
Phone: (602) 417-2460  
Fax: (602) 417-2423

**Change to: Delete section C.3**

4. Page 8, D. DELIVERABLES, sentence one:

The Grantee shall submit two copies of all deliverables to the Arizona Department of Water Resources, one to the Grant Contract Officer and one to the Technical Administrator.

**Change to: The Grantee shall submit two copies of all deliverables to the Arizona Department of Water Resource Project Manager.**

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Attachment 1

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5. Page 9, Task 1: The Grantee shall obtain all clearances, permits and authorizations necessary to complete the project, including authorization from the District Ranger, the State Historic Preservation Office, an Environmental Assessment and a copy of the cooperative agreement with Phelps Dodge for use of water from their pipeline, prior to the start of task 2.

**Change to: The Grantee shall obtain all clearances, permits and authorizations necessary to complete the project, including authorization from the District Ranger, the State Historic Preservation Office, an Environmental Assessment and a copy of the cooperative agreement with Phelps Dodge for use of water from their well.**

6. Page 9, Task 1: Due Date: July 31, 1997, or if required by law at a later date, with the applicable quarterly report.

**Change to: Prior to the start of task 2.**

7. Page 9, Task 2: Due Date: July 31, 1997, August 31, 1997, November 30, 1997

**Change to: May 31, 1998, August 31, 1998, November 30, 1998**

8. Page 9, Task 3, first sentence: The grantee shall install approximately 12 miles of one and one-quarter inch poly pipeline, approximately fourteen inches below the ground surface, in the locations noted on Attachment A, attached hereto and incorporated herein by reference.

**Change to: The Grantee shall install approximately 47,000 linear feet of two inch, 260 psi, polyethylene pipeline, approximately fourteen inches below the ground surface, in the locations noted on Attachment C, attached hereto and incorporated herein by reference.**

9. Page 10, Task 3, Due Dates: August 31, 1997, November 30, 1997, February 28, 1998, and May 31, 1998

**Change to: May 31, 1998, August 31, 1998, November 30, 1998, February 28, 1998**

10. Page 10, Task 3, Cost: \$20,064.00 [\$5,016 each for four quarters]

**Delete: [\$5,016 each for four quarters]**

11. Page 10, Task 4, sentence one: The grantee shall oversee the installation of an 8,000 gallon fiberglass storage tank, in the location noted on Attachment A.

**Change to: The Grantee shall oversee the installation of three 8,000 gallon fiberglass storage tanks, in the locations noted on Attachment C.**

12. Page 10, Task 4, Due Date: November 30, 1997

**Change to: November 30, 1999**

13. Page 10, Task 5: The grantee shall construct two, 30 foot diameter stock ponds according to Forest Service standards. The grantee shall plant ten coyote willows at six foot intervals along the south side of each stock pond. The grantee shall install ten, 500 gallon watering troughs with float valves in the locations noted on Attachment A.

**Change to: The Grantee shall construct one, 30 foot diameter stock pond in the location noted on Attachment C. The Grantee shall plant ten coyote willows at six foot intervals along the south side of the stock pond. The Grantee shall install nine, 250 gallon watering troughs with float valves in the locations noted on Attachment C.**

14. Page 10, Task 5, Deliverable: Forest Service stock pond design criteria submitted prior to construction. Photographs, and contractor invoices included with quarterly reports.

**Change to: Photographs of completed stock pond, installed troughs and contractors invoices included with quarterly report.**

15. Page 10, Task 5, Due Date: Stock pond design criteria August 31, 1997. Photographs and invoices November 30, 1997; February 28, and May 31, 1998.

**Change to: November 30, 1999**

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Attachment 1

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16. Page 10, Task 5, Cost: \$4,695.00 [\$0, 8/31/97; \$1,565, each for three quarters]

**Delete: [\$0, 8/31/97; \$1,565, each for three quarters]**

17. Page 10, Task 6: The grantee shall install wildlife fencing, with three barbed top wires and one smooth bottom wire, constructed according to Forest Service standards for wildlife fence, around nine existing stock ponds and the two newly constructed stock ponds, in the locations noted on Attachment A.

**Change to: The Grantee shall install wildlife fencing, constructed according to Forest Service wildlife fence standards around the following, existing stock ponds: Coyote, Bear, Grass, Black, Deer, Forks, Hicks, Pine and CC stock pond, and around the newly constructed stock pond.**

18. Page 10, Task 6, Deliverable: Forest service fence design criteria prior to construction. Photographs of fenced stock ponds, and labor invoices included with quarterly reports.

**Change to: (1) Forest Service fence design criteria (2) Photographs of fenced stock ponds and labor invoices submitted quarterly as work is completed.**

19. Page 10, Task 6, Due Date: Forest Service fence design criteria included in July 31, 1997 report. Photographs of fenced stock ponds and invoices, November 30, 1997, February 28, 1998, May 31, 1998, and August 31, 1998.

**Change to: (1) Prior to construction (2) February 28, 1999, May 31, 1999, August 31, 1999**

20. Page 10, Task 6, Cost: \$8,028.00 [\$0, 5/31/97; \$2007 for four quarters]

**Delete: [\$0, 5/31/87; \$2007 for four quarters]**

21. Page 11, Task 7: The grantee shall install two solar voltaic and one ram water pump in locations noted on Attachment A.

**Change to: The Grantee shall install one solar submersible pump and two solar booster pumps in locations noted on Attachment C.**

22. Page 11, Task 7, Deliverable: Copies of contractor invoices, photographs of installed pumps submitted with quarterly reports

**Change to: (1) Copies of contractor invoices (2) Photographs of installed pumps submitted with quarterly reports**

23. Page 11, Task 7, Due Date: August 31, 1998 and November 30, 1998

**Change to: (2) November 30, 1998 (2) May 31, 1999**

24. Page 11, Task 8, Deliverable: Forest Service fence design guidelines, and invoice. Summary of fence use and effectiveness included in quarterly reports.

**Change to: (1) Fence invoice (2) Summary of fence use and effectiveness included in quarterly reports**

25. Page 11, Task 8, Due Dates: Forest Service design guidelines and fence invoice, November 30, 1997. Summary of fence use and effectiveness, February 28, May 31, August 31 and November 30, 1998; February 28, May 31, August 31, 1999.

**Change to: (1) November 30, 1998 (2) February 28, 1999, May 31, 1999, August 31, 1999 and November 30, 1999**

26. Page 11, Task 8, Cost: \$2,515.00, 11/30/97; \$0 for following quarters

**Change to: \$2,515.00**

27. Page 11, Task 9: The grantee, in conjunction with the U.S. Forest service, shall develop a grazing management plan for the 32 pastures in the two grazing allotments. This plan will incorporate a rest-rotation system, utilizing a high intensity short duration management strategy. The grantee shall monitor utilization on each pasture following use, as noted in task 10, and use this information to adjust the management plan as needed. The grantee shall submit a copy of the management plan, including a discussion of the evaluation of impacts and adjustments made on an annual basis.

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**Attachment 1**

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**Change to:** The Grantee, in conjunction with the Forest Service, shall develop a grazing management plan for this allotment that incorporates a deferred rotation operating plan, on an eight month seasonal use schedule. The Grantee shall monitor utilization on each pasture following use, as noted in Task 10, and use this information to adjust the management plan as needed. The Grantee shall submit a copy of the management plan and one year later a report on the effectiveness of the management plan including an evaluation of range condition.

28. Page 11, Task 9, Deliverable: Management Plan and management plan revisions in quarterly reports.

**Change to:** (1) Management plan (2) Management plan effectiveness report

29. Page 11, Task 9, Due Date: Management plan, November 30, 1997. Management plan revisions and evaluation, November 30, 1998 and November 30, 1999.

**Change to:** (1) November 30, 1998 (2) November 30, 1999

30. Page 11, Task 9, Cost: \$240, 11/30/97; \$0, 11/30/98 and 11/30/99

**Change to:** \$240

31. Page 11, Task 10, Vegetation Monitoring, first sentence: The grantee shall collect vegetation frequency data, and record photo points at nine established upland transects, and at two riparian transects in the locations noted on Attachment B, attached hereto and incorporated herein by reference.

**Change to:** The Grantee shall collect vegetation frequency data, and record photo points at eight established upland transects, and at two riparian transects in the locations noted on Attachment B, attached hereto and incorporated herein by reference.

32. Page 12, Task 10, Deliverable: Map identifying the location of all channel morphology transects included in May 31, 1997 quarterly report. All monitoring results and photographs included in applicable quarterly reports.

**Change to:** (1) Map identifying the location of all channel morphology transects (2) Monitoring results and photographs

33. Page 12, Task 10, Due Date: Map of transect locations, May 31, 1997. Summary of monitoring data May 31, November 30, 1997; May 31, November 30, 1998; May 31, November 30, 1999, quarterly reports.

**Change to:** (1) May 31, 1998 (2) November 30, 1998, May 31, 1999, November 30, 1999

34. Page 12, Task 10, Cost: \$4,000 [\$670 each for five quarters; \$650 for sixth quarter]

**Delete:** [\$670 each for five quarters; \$650 for sixth quarter]

35. Page 12, Task 11, Due Date: November 30, 1998

**Change to:** August 31, 1999

36. Page 12, Task 12, Deliverable: Quarterly and final reports

**Change to:** (1) Quarterly reports (2) Final report

37. Page 12, Task 12, Due Date: Quarterly reports due May 31, August 31, November 30, 1997; February 28, May 31, November 30, 1998; February 28, May 31, August 31, 1999. Final report due November 30, 1999.

**Change to:** (1) May 31, 1998, 1999, August 31, 1998, 1999, November 30, 1998, February 28, 1999 (2) November 30, 1999

38. Page 13, H. SCHEDULE OF PAYMENTS AND DELIVERABLES

**Replace SCHEDULE OF PAYMENTS AND DELIVERABLES with the following:**

## Attachment 1

TASKS	DELIVERABLES	DUE DATES	PAYMENTS
Task 1: Obtain necessary clearances, permits and authorizations	Copies of all clearances, permits and authorizations	Prior to the start of task 2	\$300
Task 2: Order Materials	Copies of packing slips or receipts for materials and a summary, with total dollar amount expended, of all items purchased each quarter included in quarterly reports	May 31, 1998 August 31, 1998 November 30, 1998	\$38,957
Task 3: Construction of Pipeline	Report describing construction activity, with map showing completed pipeline construction to date included with applicable quarterly reports	May 31, 1998 August 31, 1998 November 30, 1998 February 28, 1999	\$20,064
Task 4: Storage Tank Installation	Photos of installed storage tanks included in quarterly report	November 30, 1999	\$0
Task 5: Installation of Watering Troughs; Construction of Stock Ponds	Photographs of completed stock pond, installed troughs and contractors invoices included with quarterly report	November 30, 1999	\$4,695
Task 6: Permanent Fencing of Stock Ponds	(1) Forest Service fence design criteria (2) Photographs of fenced stock ponds, and labor invoices included with quarterly reports	(1) Prior to construction (2) February 28, 1999 May 31, 1999 August 31, 1999	\$8,028
Task 7: Install Solar Voltaic and Ram Water	(1) Copies of contractor invoices (2) photographs of installed pumps submitted with quarterly reports	(1) November 30, 1998 (2) May 31, 1999	\$1,827
Task 8: Electric Drift Fence	(1) Fence invoice (2) Summary of fence use and effectiveness included in quarterly reports	(1) November 30, 1998 (2) February 28, 1999 May 31, 1999 August 31, 1999 November 30, 1999	\$2,515
Task 9: Develop Grazing Management Plan	(1) Management plan (2) Management plan effectiveness report	(1) November 30, 1998 (2) November 30, 1999	\$240

## Attachment 1

Task 10: Monitoring	(1) Map identifying the location of all channel morphology transects (2) Monitoring results and photographs	(1) May 31, 1998 (2) November 30, 1998 May 31, 1999 November 30, 1999	\$4,000
Task 11: Maintenance Agreement	Copy of Maintenance Agreement	August 31, 1999	\$0
Task 12: Quarterly and Final Reports	(1) Quarterly reports (2) Final report	(1) May 31, 1998 August 31, 1998 November 30, 1998 February 28, 1999 May 31, 1999 August 31, 1999 (2) November 30, 1999	\$0
TOTAL			\$80,626








**LEGAL DETERMINATION**

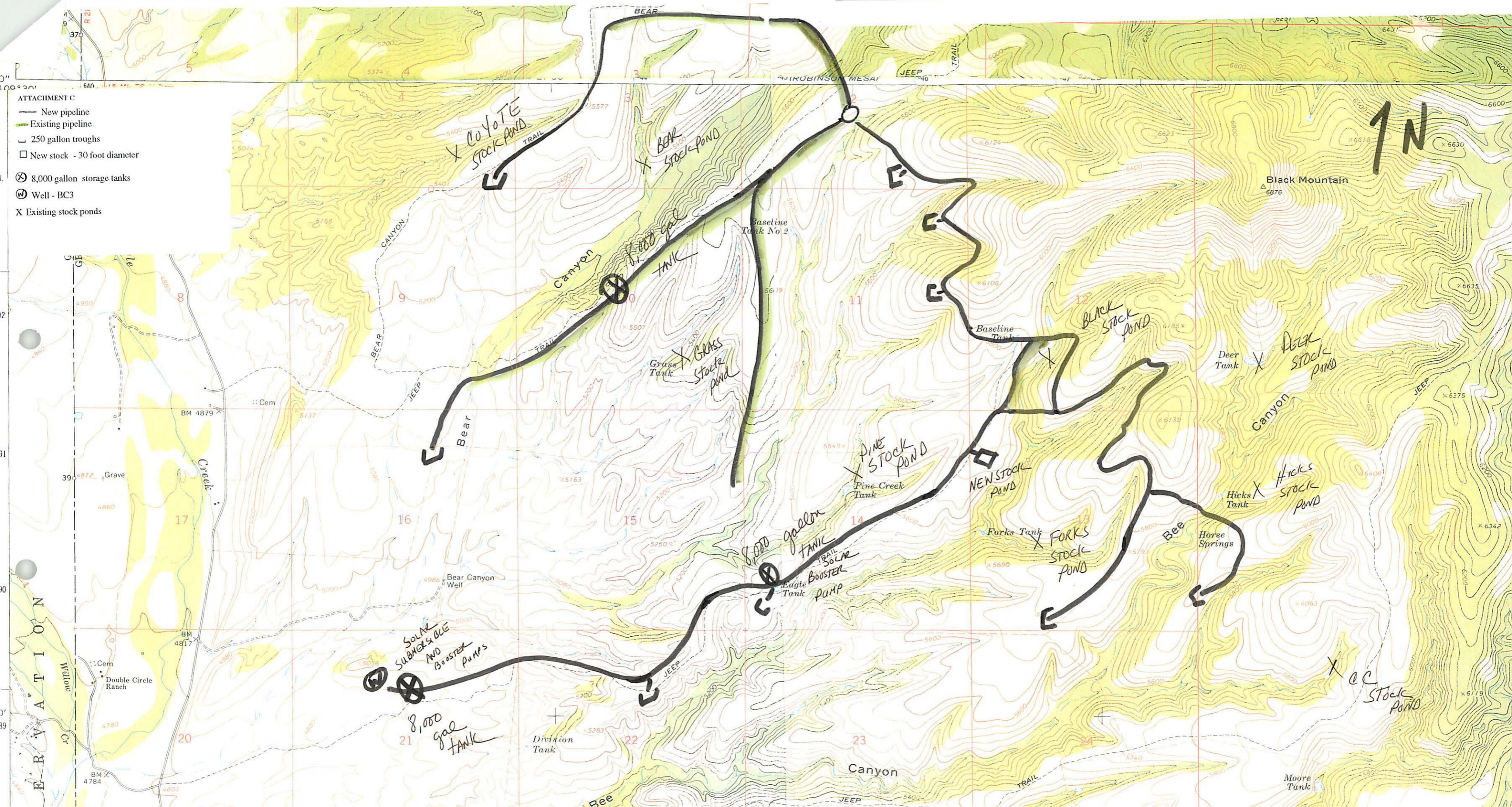
The attached Grant Amendment has been submitted to the Legal Division of the Arizona Department of Water Resources. The undersigned Deputy Counsel has determined that said Agreement is in proper form and is within the powers and authority granted under the laws of the State of Arizona to the Arizona Department of Water Resources.

Dated this 12th day of Feb., 1998

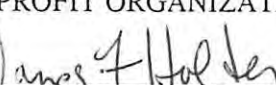

Arizona Department of Water Resources  
Michael J. Pearce, Chief Counsel

By: Martha J. McConnell  
Martha J. McConnell  
Deputy Counsel

 New pipeline  
 Existing pipeline  
 250 gallon troughs  
 New stock - 30 foot diameter  
 8,000 gallon storage tanks  
 Well - BC3  
 Existing stock ponds



**ARIZONA WATER PROTECTION FUND  
GRANT AWARD AGREEMENT**

Project: Eagle Creek Watershed and Riparian Stabilization.		Project Purpose: To improve the Eagle Creek Watershed and riparian communities on the Horsesprings and Baseline allotments.									
Grantee: (Name, Address, EIN No.)  James F. Holder Horsesprings Management Team 825 20th Ave. Safford, Arizona 85546		Type of Project:  <input type="checkbox"/> Water Acquisition <input checked="" type="checkbox"/> Capital Project or Other <input type="checkbox"/> Water Conservation <input type="checkbox"/> Research	AMA: <input type="checkbox"/> Phoenix <input type="checkbox"/> Tucson <input type="checkbox"/> Prescott <input type="checkbox"/> Pinal <input type="checkbox"/> Santa Cruz <input checked="" type="checkbox"/> Outside AMA								
This Agreement shall become effective:  <input type="checkbox"/> Upon the date it is filed with the Arizona Secretary of State  <input checked="" type="checkbox"/> Upon the date it is executed by both parties		Grant Amount:  <table> <tr> <td>AWPF</td> <td align="right">\$80,626.00</td> </tr> <tr> <td>Applicant</td> <td align="right">\$12,147.00</td> </tr> <tr> <td>Other</td> <td align="right">\$ <u>0</u></td> </tr> <tr> <td>Total</td> <td align="right">\$92,773.00</td> </tr> </table>		AWPF	\$80,626.00	Applicant	\$12,147.00	Other	\$ <u>0</u>	Total	\$92,773.00
AWPF	\$80,626.00										
Applicant	\$12,147.00										
Other	\$ <u>0</u>										
Total	\$92,773.00										
Termination Date: December 31, 1999											
<b>TERMS OF AGREEMENT</b>  This Grant Award Agreement is entered into by <b>THE HORSESPRINGS MANAGEMENT TEAM, A NON-PROFIT ORGANIZATION</b> hereinafter referred to as the <b>GRANTEE</b> , and the <b>ARIZONA WATER PROTECTION FUND COMMISSION (AWPF)</b> through its Chairman, hereinafter referred to as the <b>COMMISSION</b> . The undersigned agree to fulfill the terms and conditions of this Agreement, and to abide by all contractual and statutory regulations governing the expenditure of Arizona Water Protection Fund Commission funds.  This document, including the Scope of Services and all general and special provisions attached, shall constitute the entire agreement between the parties, superseding all other understandings oral or written.											
The parties hereto agree to carry out the Provisions of this Grant.											
THE HORSESPRINGS MANAGEMENT TEAM, A NON PROFIT ORGANIZATION   42197 Signature of Authorized Individual      Date		ARIZONA WATER PROTECTION FUND COMMISSION   5/2/97 Signature of Authorized Individual      Date									
James F. Holder Typed Name		John Keane Typed Name									
Ranch Owner Typed Title		Chairman Typed Title									

## THIS GRANT CONSISTS OF:

	<u>Page No.</u>
1. COVER PAGE	1
2. CONTENTS PAGE	2
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4. SPECIAL PROVISIONS	7
5. SCOPE OF SERVICES	
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F. Introduction	9
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H. Schedule of Deliverables and Payment	13
6. ATTACHMENT(S)	A B

ARIZONA WATER PROTECTION FUND  
GENERAL PROVISIONS

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1. DEFINITIONS:

As used throughout the General Provisions, Special Provisions, and the Scope of Services, the following terms shall have the meanings set forth below:

- a. "Chair" means the chairperson of the Arizona Water Protection Fund or a person duly authorized by the Chair to act on the Chair's behalf.
- b. "Commission" means the Arizona Water Protection Fund Commission.
- c. "Grant" means the agreement between the Arizona Water Protection Fund Commission and the Grantee to provide the services as set forth herein.
- d. "Grant Officer" means the person designated by the Chair to administer the Grant.
- e. "Grantee" means the person, firm, or organization performing the services or delivering the items described in this Grant.
- f. "Scope of Services" means the provisions of this Grant that delineate the nature and manner of the specific services to be performed and describe the items to be supplied in performing this Grant. If the provisions of the Scope of Services conflict with the Special Provisions or the General Provisions, the terms of the Scope of Services shall govern.
- g. "Shall" means what is mandatory.
- h. "Special Provisions" means provisions which alter the General Provisions. If the provisions of the Special Provisions conflict with the General Provisions, the Special Provisions shall govern.
- i. "State" means the State of Arizona.
- j. "Technical Administrator" means the person designated by the Chair to coordinate the technical aspects of this Grant between the Grantee and the Grant Officer.

2. GENERAL REQUIREMENTS:

- a. This Grant shall be interpreted in accordance with Arizona law.
- b. The Grantee shall obtain and maintain all licenses, permits and authority necessary to render services under this Grant and shall abide by all applicable State laws.
- c. The parties agree that the Grantee shall not be considered an officer, employee or agent of the Commission.

3. BOOKS AND RECORDS:

The Grantee shall keep adequate books and records related to work performed and expenditures incurred in accordance with this Grant's Scope of Services for a period of five (5) years after the termination of the Grant. Financial records shall: (1) identify the task completed; (2) include records of the time the Grantee spent in performing the services set forth in the Scope of Services; (3) include original copies of invoices, statements, sales tickets, billings for services and similar documents in this Grant as necessary to document all expenditures applicable to this Grant.

ARIZONA WATER PROTECTION FUND  
GENERAL PROVISIONS

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4. INDEMNIFICATION:

The Grantee agrees to indemnify and defend the State, its officers, agents and employees, and hold them harmless from and against all losses, damages, expenses and liability resulting from injury to or death of any person or loss of or damage to property, or claims of such injury, death, loss or damage to property, or damage due to any negligent act or omission of the Grantee, his employees or agents in connection with the work performed under this Grant.

5. TERMINATION OF GRANTS:

The Commission or the State may terminate this Grant as described below:

- a. The Commission, in addition to other rights set forth elsewhere in this Grant, reserves the right to terminate this Grant in whole or in part, without cause, effective thirty (30) days after mailing written notice of termination by certified mail, return receipt requested, to the Grantee, or if for default, upon receipt of written notice of termination.
  - 1) In the event of termination as provided in this Section, the Grantee shall stop work as specified in the notice of termination.
  - 2) If the payments prescribed by this Grant are made on a reimbursable basis, the Commission shall pay the Grantee the Grant price for all services completed in accordance with the Scope of Services as approved by the Grant Officer. In addition, the Commission shall pay to the Grantee its reasonable actual costs for work in progress as determined by generally accepted accounting principles and practices. If the payments have been made on an advance basis, the Grantee shall return all unexpended funds within fifteen (15) days of receipt of notice of termination. Upon termination under this Section, the Grantee, at the Commission's request, shall deliver to the Commission specified completed documents, programs, data, and other information described in the Grant.
- b. The State may cancel this Grant without penalty or further obligation to the State pursuant to A.R.S. § 38-511.
- c. In the event of cancellation under Section 5.b. of the General Provisions of this Grant or if the term of the Grant expires, the Grantee shall perform those acts and receive payment as established in Section 5.a. of the General Provisions of this Grant.
- d. In the event that the parties mutually agree to terminate a portion of the original Grant contract, the Grantee shall continue to perform this Grant to the extent not terminated under the provisions of this Section.

6. NON-DISCRIMINATION:

The Grantee shall comply with all applicable non-discrimination laws including, but not limited to, State Executive Order No. 75-5.

7. GRANT PAYMENTS:

- a. Payments made by the Commission to the Grantee pursuant to the Grant are conditioned upon the availability to the Commission of funds authorized for expenditure in the manner and for the purpose provided herein. The Commission shall not be liable for any purchases entered into by the Grantee prior to the effective date of the Grant.
- b. If the Grant payments are made on a reimbursable basis, payment made by the Commission to the Grantee are conditioned upon receipt of an applicable, accurate and complete invoice prepared by the Grantee. If payments are made on an advance basis, the Grantee shall provide the Commission with such invoices at a time prescribed by the Commission.

ARIZONA WATER PROTECTION FUND  
GENERAL PROVISIONS

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- c. If the Grantee is determined by the Commission to be in default in the performance of any obligation under this Grant, the Commission may, at its option and in addition to other available remedies, either adjust the amount of payment or withhold payment until satisfactory resolution of the default.

8. RECOUPMENT OF GRANT PAYMENTS:

The Grantee shall reimburse the Commission for all Grant funds which are determined by the Commission not to have been spent in accordance with the terms of this Grant.

9. INSPECTION:

Commission representatives and other appropriate agents of the State shall, with timely, written notice to the Grantee, be entitled to review and inspect the Grantee's records, its program operation, the site of the program, and data which pertain to the work specified in the Scope of Services during the term of this Grant.

10. NOTICES:

Whenever notice is required pursuant to this Grant, the notice shall be in writing and shall be directed to the persons and addresses specified for such purpose in the Scope of Services or to such other persons and addressees as either party may designate to the other party in writing. Notice shall be delivered in person or by certified mail, return receipt requested.

11. AMENDMENTS:

Amendments to this Grant shall be in writing and signed by all parties to the Grant.

12. SUBCONTRACTS:

- a. The Grantee may subcontract or consult with other parties to perform one or more of the Tasks which are described in the Scope of Services.
- b. Proposals to subcontract any task or segment described in this Grant must be approved by the Commission prior to the commencement of the subcontracted work.
- c. Any subcontractor or consultant participating in this Grant shall be bound by the duties set forth in this Grant.

13. WAIVERS/ASSIGNMENTS:

- a. Neither the Grantee nor the Commission shall waive or modify any condition or requirement contained in or made a part of this Grant without a written amendment to this Grant.
- b. The Grantee shall not assign the obligations under this Grant to another party.

ARIZONA WATER PROTECTION FUND  
GENERAL PROVISIONS

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14. INCORPORATION OF APPLICATION:

The Grantee's approved application for grant funds is incorporated by reference as part of this agreement; however, the terms of this agreement shall take precedence over the terms of the approved application in the event of conflict or ambiguity.

15. OPERATION AND MAINTENANCE:

The Grantee shall operate and maintain grant assisted capital improvements for the period of time specified in this Agreement. The Grantee shall provide reasonable protection of any project improvements provided pursuant to this Grant to discourage vandalism, for the term of this Grant.

16. EQUIPMENT:

Any equipment purchased by the Grantee with a unit value of \$5,000.00 or more and purchased exclusively with project funds provided by the Commission, shall be surrendered to the Commission upon completion of the project.

17. DATA:

- 1) All data, reports and other deliverables prepared or collected by the Grantee in carrying out the terms of this Grant shall become property of the Commission.
- 2) At the termination of this Grant, the Grantee shall provide the Commission with all data collected which is used to prepare any Grant deliverables

18. REQUESTS FOR COPIES:

If the Grantee receives a request to prepare a copy of any deliverable required by this Grant, the Grantee shall provide the copy at cost, or at a price required by law.

19. REQUIRED DELIVERABLE LANGUAGE:

The Grantee shall include the following language in any deliverable prepared for this Grant:

- a. All or a portion of the work for which this deliverable has been prepared has been funded by the Arizona Water Protection Fund Commission.
- b. The views or findings represented in this deliverable are the Grantees and do not necessarily represent those of the Commission nor the Arizona Department of Water Resources.



ARIZONA WATER PROTECTION FUND  
SPECIAL PROVISIONS

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None

ARIZONA WATER PROTECTION FUND  
SCOPE OF SERVICES

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## A. EFFECTIVE DATE:

The Grant shall become effective upon the date it is signed by both parties.

## B. TERM:

This Grant shall terminate not later than December 31, 1999.

## C. NOTICE, CORRESPONDENCE, REPORTS AND PAYMENTS:

1. Notices, correspondence and payments from the Commission to the Grantee shall be sent to:

Administrator:

James F. Holder

Horsesprings Management Team

~~825 20th Ave~~

128 E 19th St

Safford, Arizona 85546

Phone: (520) 428-6930

Fax: (520) 428-7272

2. Notice and correspondence from the Grantee to the Commission shall be sent to:

Grant Contract Officer:

Jerry Rathke

Arizona Department of Water Resources

500 North Third Street

Phoenix, Arizona 85004

Phone: (602) 417-2450

Fax: (602) 417-2401

3. Any invoices, technical reports and inquiries regarding the technical aspects of this Grant should be made to:

Technical Administrator:

Patricia McCraw

Arizona Department of Water Resources

500 North Third Street

Phoenix, Arizona 85004

Phone: (602) 417-2460

Fax: (602) 417-2423

## D. DELIVERABLES:

The Grantee shall submit two copies of all deliverables to the Arizona Department of Water Resources, one to the Grant Contract Officer and one to the Technical Administrator. All deliverables shall be identified with the Grant Contract Number.

## E. PAYMENT:

1. Payments by the Commission shall be made on a quarterly basis after receipt and approval of applicable payment

ARIZONA WATER PROTECTION FUND  
SCOPE OF SERVICES

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requests. The Commission shall retain 10% of each quarterly payment request until all work is delivered, accepted and approved as complete by the Commission. When all work is approved, the retention will be released for payment.

2. Payments will be made in accordance with the payment schedule on Page 13. All payments are conditioned on receipt and approval by the Commission of deliverables for each task.
3. Upon receipt of payment request, the Commission shall have 30 days to approve and pay the payment request. If the Commission does not approve the payment request during this period of time, the Commission shall provide the Grantee a reasonable period of time, as defined by the Commission, to correct problems associated with the payment request.
4. Upon approval of a payment request, the Commission shall reimburse the Grantee for all work which has been invoiced.

**F. INTRODUCTION:**

The purpose of this project is to improve the watershed, upland range, and the riparian communities of Eagle Creek on the Horsesprings and Baseline allotments by constructing a new fence and developing additional livestock watering facilities.

**G. SCOPE OF WORK:**

**Task 1: Obtain Necessary Clearances, Permits and Authorizations**

The grantee shall obtain all clearances, permits and authorizations necessary to complete the project, including authorization from the District Ranger, the State Historic Preservation Office, an Environmental Assessment and a copy of the cooperative agreement with Phelps Dodge for use of water from their pipeline, prior to the start of task 2.

**Deliverable:** Copies of all clearances, permits and authorizations.

**Due Date:** July 31, 1997, or if required by law at a later date, with the applicable quarterly report.

**Cost:** \$300.00

**Task 2: Order Materials**

The grantee shall obtain equipment and materials necessary to construct the pipeline, troughs, and permanent fencing described in Tasks 3, 5, and 6. The grantee shall obtain materials in a phased manner in accordance with the deliverable due dates. The grantee shall include copies of receipts or packing slips and a summary of purchases with applicable quarterly reports.

**Deliverable:** Copies of packing slips or receipts for materials and a summary, with total dollar amount expended, of all items purchased each quarter included in quarterly reports.

**Due Date:** July 31, 1997, August 31, 1997, November 30, 1997

**Cost:** \$38,957.00

**Task 3: Construction of Pipeline**

The grantee shall install approximately 12 miles of one and one-quarter inch poly pipeline, approximately fourteen inches below the ground surface, in the locations noted on Attachment A, attached hereto and incorporated herein by reference. A description

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of construction activity, and a map showing the portion of pipeline completed to date, will be included in the applicable quarterly reports.

**Deliverable:** Report describing construction activity, with map showing completed pipeline construction to date included with applicable quarterly reports.

**Due Dates:** August 31, 1997, November 30, 1997, February 28, 1998, and May 31, 1998

**Cost:** \$20,064.00 [\$5,016 each for four quarters]

**Task 4: Storage Tank Installation**

The grantee shall oversee the installation of an 8,000 gallon fiberglass storage tank, in the location noted on Attachment A.

**Deliverable:** Photos of installed storage tank included in quarterly report.

**Due Date:** November 30, 1997

**Cost:** \$0

**Task 5: Installation of Watering Troughs; Construction of Stock Ponds**

The grantee shall construct two, 30 foot diameter stock ponds according to Forest Service standards. The grantee shall plant ten coyote willows at six foot intervals along the south side of each stock pond. The grantee shall install ten, 500 gallon watering troughs with float valves in the locations noted on Attachment A.

**Deliverable:** Forest Service stock pond design criteria submitted prior to construction. Photographs, and contractor invoices included with quarterly reports.

**Due Date:** Stock pond design criteria August 31, 1997. Photographs and invoices November 30, 1997; February 28, and May 31, 1998.

**Cost:** \$4,695.00 [\$0, 8/31/97; \$1,565, each for three quarters]

**Task 6: Permanent Fencing of Stock Ponds**

The grantee shall install wildlife fencing, with three barbed top wires and one smooth bottom wire, constructed according to Forest Service standards for wildlife fence, around nine existing stock ponds and the two newly constructed stock ponds, in the locations noted on Attachment A.

**Deliverable:** Forest Service fence design criteria prior to construction. Photographs of fenced stock ponds, and labor invoices included with quarterly reports

**Due Date:** Forest Service fence design criteria included in July 31, 1997 report. Photographs of fenced stock ponds and invoices, November 30, 1997, February 28, 1998, May 31, 1998, and August 31, 1998.

**Cost:** \$8,028.00 [\$0, 5/31/97; \$2007 for four quarters]

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**Task 7: Install Solar Voltaic and Ram Water Pumps**

The grantee shall install two solar voltaic and one ram water pump in locations noted on Attachment A.

**Deliverable:** Copies of contractor invoices, photographs of installed pumps submitted with quarterly reports

**Due Date:** August 31, 1998 and November 30, 1998

**Cost:** \$1,827.00, 8/31/98; \$0, 11/30/98

**Task 8: Electric Drift Fencing**

The grantee shall purchase and use a one mile length of portable electric drift fence, installed according to Forest Service specifications, at various locations to manage animal distribution. The grantee shall include in quarterly reports where this fencing is being utilized, why it is being used, and the effectiveness of the fencing.

**Deliverable:** Forest Service fence design guidelines, and invoice. Summary of fence use and effectiveness included in quarterly reports.

**Due Date:** Forest Service design guidelines and fence invoice, November 30, 1997. Summary of fence use and effectiveness. February 28, May 31, August 31 and November 30, 1998; February 28, May 31, August 31, 1999.

**Cost:** \$2,515.00, 11/30/97; \$0 for following quarters

**Task 9: Develop Grazing Management Plan**

The grantee, in conjunction with the U.S. Forest Service, shall develop a grazing management plan for the 32 pastures in the two grazing allotments. This plan will incorporate a rest-rotation system, utilizing a high intensity short duration management strategy. The grantee shall monitor utilization on each pasture following use, as noted in task 10, and use this information to adjust the management plan as needed. The grantee shall submit a copy of the management plan, including a discussion of the evaluation of impacts and adjustments made on an annual basis.

**Deliverable:** Management Plan and management plan revisions in quarterly reports.

**Due Date:** Management plan, November 30, 1997. Management plan revisions and evaluation, November 30, 1998 and November 30, 1999.

**Cost:** \$240.00, 11/30/97; \$0, 11/30/98 and 11/30/99

**Task 10: Monitoring****Vegetation Monitoring**

The grantee shall collect vegetation frequency data, and record photo points at nine established upland transects, and at two riparian transects in the locations noted on Attachment B, attached hereto and incorporated herein by reference. The grantee shall photograph each of the upland and riparian sites each April during the funded project period. The grantee shall collect vegetation frequency data each April and October during the funded project period. The grantee shall monitor utilization of individual pastures immediately following livestock use.

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**Precipitation Monitoring**

The grantee shall collect rainfall data at the NRCD rain gauge immediately following precipitation events.

**Channel Morphology**

The grantee shall establish four permanent points, at approximately one-half mile intervals along Eagle Creek. The grantee shall record channel width at these four locations.

**Deliverable:** Map identifying the location of all channel morphology transects included in May 31, 1997 quarterly report. All monitoring results and photographs included in applicable quarterly reports.

**Due Date:** Map of transect locations, May 31, 1997. Summary of monitoring data May 31, November 30, 1997; May 31, November 30, 1998; May 31, November 30, 1999, quarterly reports.

**Cost:** \$4,000 [\$670 each for five quarters; \$650 for sixth quarter]

**Task 11: Maintenance Agreement**

The grantee shall submit a copy of the maintenance agreement that describes who will be responsible for maintaining each of the range improvements constructed during this project. The grantee shall be responsible for all maintenance until an agreement specifying otherwise is submitted.

**Deliverable:** Copy of Maintenance Agreement with applicable quarterly report

**Due Date:** November 30, 1998

**Cost:** \$0

**Task 12: Quarterly and Final Reports**

The grantee shall provide quarterly progress reports during the funded project period. The reports will provide updates on equipment purchases, project construction, livestock management and monitoring activities for that period. The Grantee shall submit a final project summary report in November 1999. This report will include an overview of project construction and an analysis of vegetation, precipitation, channel morphology and photographic point monitoring data. The final report will discuss the development and implementation of the management plan. Copies of the approved final report will be provided to the Gila Valley NRCD, Greenlee County, the Cattlegrower's Association, Arizona Game and Fish, the Forest Service and the University of Arizona. The Grantee shall give oral presentations or provide written articles to interested organizations upon request.

**Deliverable:** Quarterly and final reports.

**Due Date:** Quarterly reports due May 31, August 31, November 30, 1997; February 28, May 31, August 31, November 30, 1998; February 28, May 31, August 31, 1999. Final report due November 30, 1999.

**Cost:** \$0

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## H. SCHEDULE OF PAYMENTS AND DELIVERABLES

TASKS	DELIVERABLES	DUE DATES	PAYMENTS
Task 1: Obtain necessary clearances, permits and authorizations.	Copies of all clearances, permits and authorizations.	July 31, 1997	\$300
Task 2: Order Materials	Copies of packing slips or receipts for materials and a summary, with total dollar amount expended, of all items purchased each quarter included in quarterly reports.	July 31, 1997, August 31, 1997, November 30, 1997	\$38,957
Task 3: Construction of Pipeline.	Report describing construction activity, with map showing completed pipeline construction to date included with applicable quarterly reports.	August 31, 1997, November 30, 1997, February 28, 1998, May 31, 1998.	\$5,016 \$5,016 \$5,016 \$5,016
Task 4: Storage Tank Installation.	Photos of installed storage tank included in quarterly report.	November 30, 1997	\$0
Task 5: Installation of watering troughs; construction of stock ponds.	Forest Service stock pond design criteria submitted prior to construction. Photographs, and contractors invoices included with quarterly reports.	August 31, 1997 November 30, 1997 February 28, 1998 May 31, 1998	\$0 \$1,565 \$1,565 \$1,565
Task 6: Permanent fencing of stock ponds.	Forest Service fence design criteria prior to construction. Photographs of fenced stock ponds, and labor invoices included with quarterly reports	July 31, 1997  November 30, 1997 February 28, 1998 May 31, 1998 August 31, 1998	\$0  \$2,007 \$2,007 \$2,007 \$2,007
Task 7: Install solar voltaic and ram water pumps	Copies of contractor invoices, photographs of installed pumps submitted with quarterly reports.	August 31, 1998 November 30, 1998	\$1,827 \$0
Task 8: Electric drift fencing	Forest Service fence design guidelines, and invoice. Summary of fence use and effectiveness included in quarterly reports.	November 30, 1997 February 28, 1998 May 31, 1998 August 31, 1998 November 30, 1998 February 28, 1999 May 31, 1999 August 31, 1999.	\$2,515 \$0 \$0 \$0 \$0 \$0 \$0 \$0

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TASKS	DELIVERABLES	DUE DATES	PAYMENTS
Task 9: Develop grazing management plan.	Management Plan and management plan revisions in quarterly reports.	November 30, 1997 November 30, 1998 November 30, 1999	\$240 \$0 \$0
Task 10: Monitoring	Map identifying the location of all channel morphology transects included in May 31, 1997 quarterly report. Monitoring results and photographs included in applicable quarterly reports.	May 31, 1997 November 30, 1997 May 31, 1998 November 30, 1998 May 31, 1999 November 30, 1999	\$670 \$670 \$670 \$670 \$670 \$650
Task 11: Maintenance agreement	Copy of Maintenance Agreement with applicable quarterly reports.	November 30, 1998	\$0
Task 12: Quarterly and final report	Quarterly and final reports.          Final report	May 31, 1997 August 31, 1997 November 30, 1997 February 28, 1998 May 31, 1998 August 31, 1998 November 30, 1998 February 28, 1999 May 31, 1999 August 31, 1999  November 30, 1999	\$0
TOTAL AMOUNT:			\$80,626

LEGAL DETERMINATION

The foregoing Agreement has been submitted to the Legal Division of the Arizona Department of Water Resources. The undersigned Deputy Counsel has determined that said Agreement is in proper form and is within the powers and authority granted under the laws of the State of Arizona to the Arizona Department of Water Resources.

Dated this 14th day of April, 1997

Arizona Department of Water Resources  
Michael J. Pearce, Chief Counsel

By: Howard Kopp  
Howard Kopp  
Deputy Counsel

**ATTACHMENT**

**EXHIBIT**

**A**

**ATTACHMENT**

**EXHIBIT**

**B**

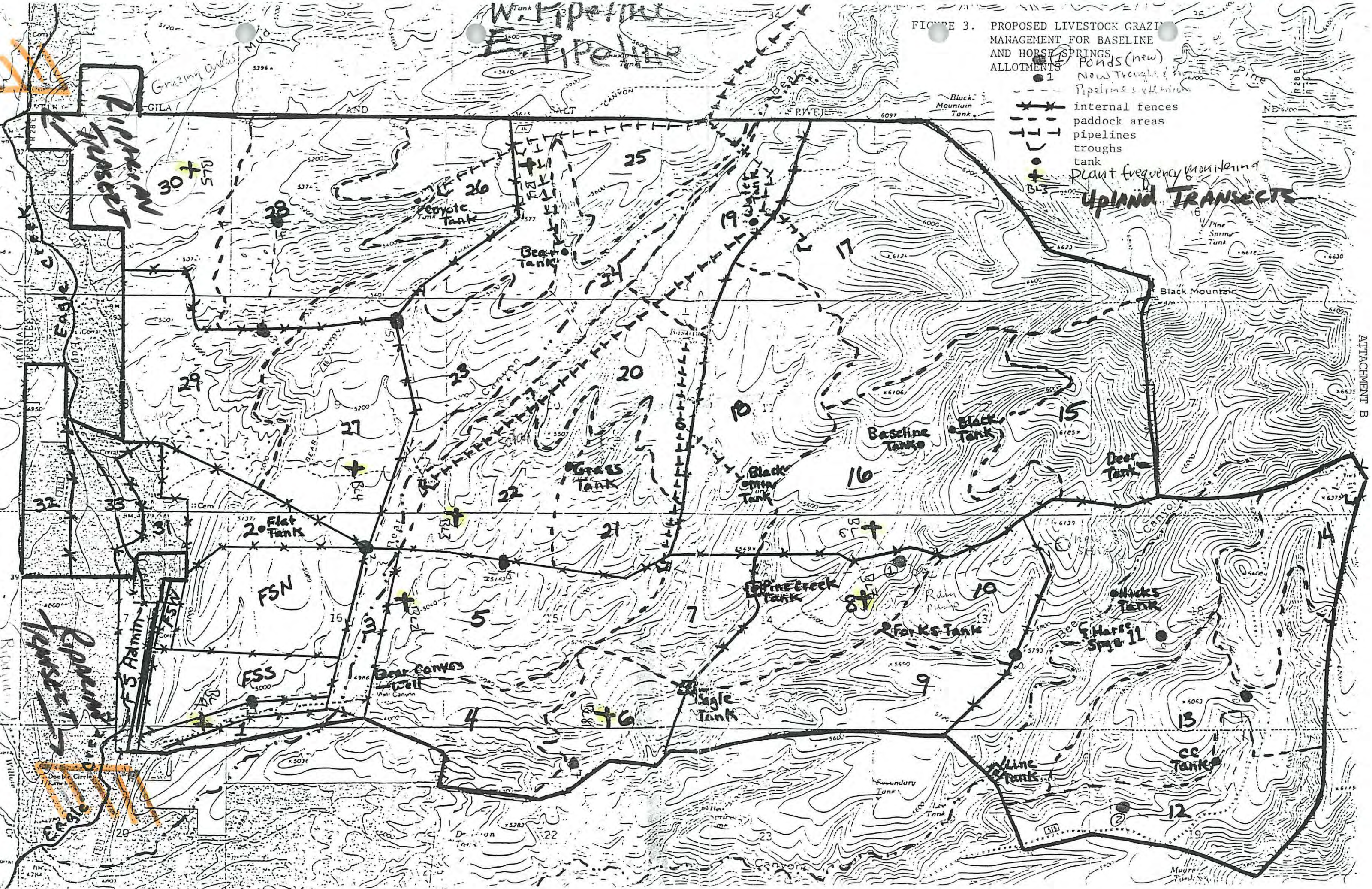
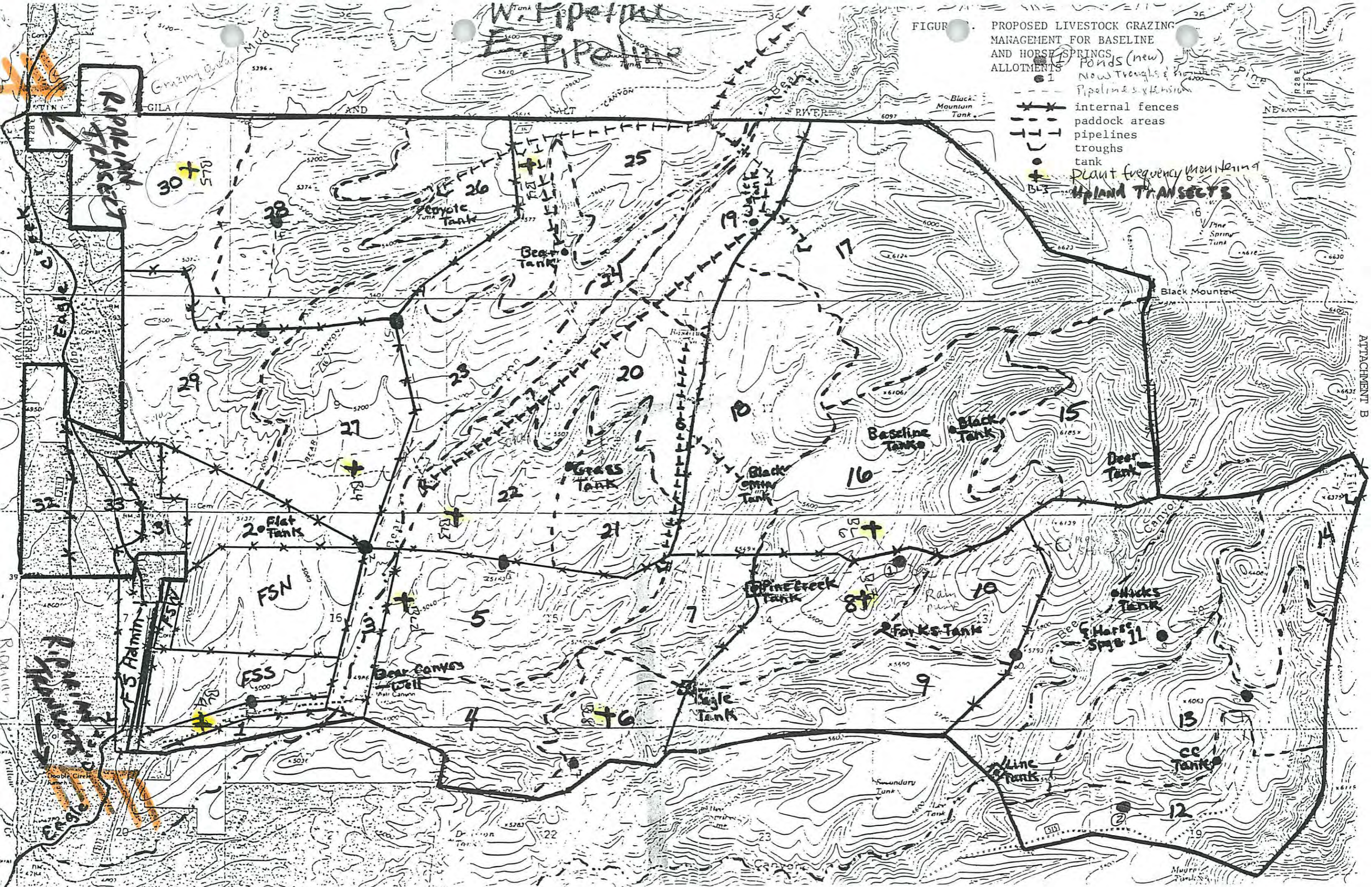


FIGURE 3. PROPOSED LIVESTOCK GRAZING MANAGEMENT FOR BASELINE AND HORSE SPRINGS ALLOTMENTS

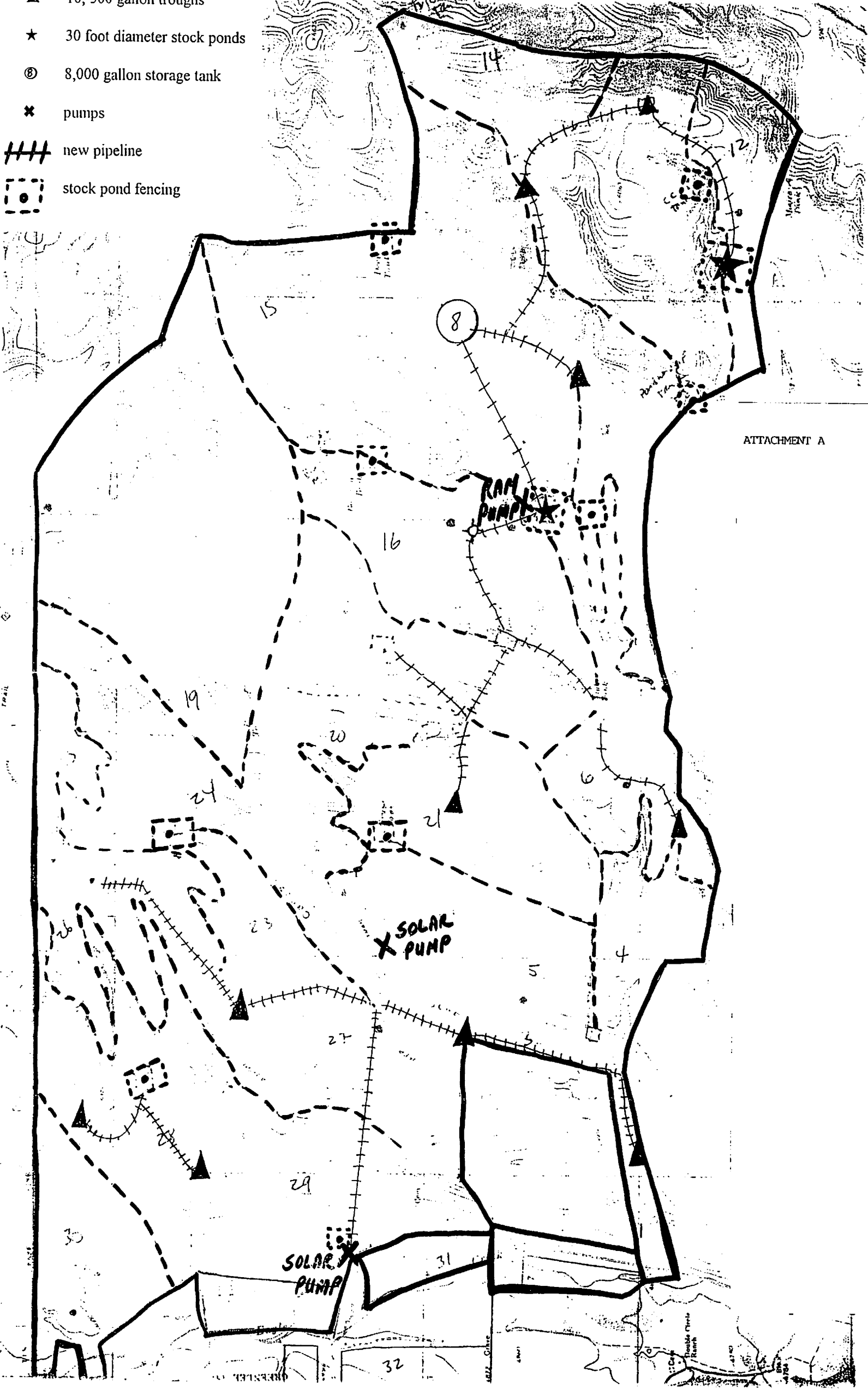
- 1 Ponds (new)
- Now Troughs
- Pipelines
- internal fences
- paddock areas
- pipelines
- troughs
- tank
- plant frequency monitoring

Upland Transects

ATTACHMENT B



- ▲ 10, 500 gallon troughs
- ★ 30 foot diameter stock ponds
- ⊙ 8,000 gallon storage tank
- ✕ pumps
- +++ new pipeline
- ⋯ stock pond fencing



ATTACHMENT A