

RED CANYON RANCH
MANAGEMENT PLAN

Portions of Sections 8 and 9
Township 7 South, Range 4 West N.M.P.M.
Socorro County, New Mexico

QUIVIRA COALITION, INC.
1413 Second St.
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MANAGEMENT GOALS AND OBJECTIVES

1. The Quivira Coalition received the Red Canyon Ranch from the Estate of Michael Belshaw. Mr. Belshaw's will contained several conditions for the gift, and specified both encouraged and prohibited uses. Quivira was designated as the beneficiary because Mr. Belshaw believed that it was willing and able to manage the ranch under those conditions. The Red Canyon Ranch should be managed in compliance with the terms of the testamentary gift.

2. The Red Canyon Ranch should be managed so that it is economically, ecologically, and socially sustainable, and in compliance with the larger mission of the Quivira Coalition. Sustainable management includes, but is not limited to the following:
 - a) Reliance upon income generated from ranch activities, with independence or minimal reliance upon outside grants and donations.
 - b) A balancing of the various goals, rather than emphasis upon one or very few objectives.
 - c) Use of natural resources (water, flora, fauna, and minerals) in a manner that improves or does not deplete availability or quality for future ranch users.
 - d) Installation of an infrastructure that minimizes expense and adverse impacts upon other ranch objectives.

3. The Red Canyon Ranch should serve as a model of collaborative resource management. This objective should be accomplished by:
 - a) Providing a positive examples of the management of finances, natural resources, infrastructure, and human resources,
 - b) Establishing an outreach program that identifies potential collaborative projects and partners that further management objectives,
 - c) Conducting educational workshops and collaborative projects, and
 - d) Maintaining positive relationships with neighbors and other users of ranch resources.

4. The Red Canyon Ranch should encourage and facilitate scientific inquiry and education. This objective should be accomplished by:
 - a) Encouraging work with people who wish to study and implement resource management theories,
 - b) Developing techniques that test and demonstrate various theories of resource management, and
 - c) Maintaining relationships with colleges and other institutions that have the ability to disseminate the results of the experiments.

OVERSIGHT AND FINANCIAL MANAGEMENT

OVERSIGHT

The ranch is owned by Quivira Coalition, Inc., a New Mexico non-profit corporation. The corporation currently holds tax exempt status under Section 501(c)(3) of the Internal Revenue Code. The Board of Directors of the Quivira Coalition has delegated responsibility for management of the ranch to the Red Canyon Ranch management committee. The Board appointed seven people to the initial committee in November 2005. The Committee had regular meetings for about two years, but has not met since 2007. Oversight since 2007 has been informal, and consisted of approximately 3-6 people who visit the ranch and provide reports to the Board.

The Board retains supervisory authority over the Committee. Appointments to the Committee are without any fixed term, and may be terminated at the pleasure of the Board. The Board or the Committee may assign the chairman or any Committee member such duties and authorities as may be necessary to manage the ranch. While the Committee shall generally have all authority needed to manage the ranch, it shall take no action which is inconsistent with the mission or the tax-exempt status of Quivira Coalition.

FINANCIAL MANAGEMENT

Goal

To the extent possible, the Ranch should be financially independent and self-sustaining. The Ranch may accept grants and gifts, but generally will attempt to minimize its reliance on charitable donations. The Committee shall comply with laws and regulations which apply to non-profit institutions, and books shall be managed in accordance with generally accepted accounting principles.

Tactics

- Develop appropriate financial controls
- Develop budget for annual operations
- Create sinking fund for future anticipated expenses
- Identify sources for funding and revenue generation
 - Grants and stewardship programs
 - Donor program
 - User fees (grazing, hunting, birding, astronomers, hikers)

NATURAL RESOURCE MANAGEMENT

PLANT MANAGEMENT

Goal

The ranch shall be managed so that the habitat of native plant species is preserved and improved.

Tactics

Maintain/update botanical survey

Develop plan for preservation and improvement of threatened/fragile habitat

Identify and address conflicts resulting from grazing use

Construct and maintain structures for capturing and spreading precipitation and sediment to enhance vegetation.

WILDLIFE MANAGEMENT

Goal

The ranch shall be managed so that the habitat of native wildlife species is preserved and improved.

Tactics

Complete wildlife survey

Develop plan for preservation and improvement of wildlife habitat

Installation of wildlife friendly fencing

Identify and address conflicts between wildlife and livestock/human uses

Construct and maintain water system as needed for wildlife

GRAZING MANAGEMENT

Goal

No use of the ranch is “dominant.” Consequently, grazing need not be done in every year. Nevertheless, it is one of several management tools that may be used to enhance the ranch’s financial stability, the health of its natural resources, and its mission of collaborative problem solving. The committee may use this tool to the extent that it furthers the other objectives of the ranch

Tactics

Schedule regular reviews of grass/seed production, soil condition, capacity and other indicators of rangeland health
Maintain monitoring systems that further management goals
Maintain protocol for determining extent, manner, and timing of any grazing

WATER MANAGEMENT

Goal

The ranch shall adopt and implement systems that promote efficient and sustainable use of water for each of its activities.

Tactics

Increase water storage in streambanks
Increase efficiency of water delivery system

CANYON MANAGEMENT

Goal

The section of East Red Canyon that passes through the ranch contains an unusual ecosystem with a number of special management issues. The canyon should be managed in a way that recognizes and protects its unique features, while meeting the same objectives of the larger ranch.

Tactics

Develop specific plan for objectives and tactics
Develop plan for creek restoration

INFRASTRUCTURE MANAGEMENT

ROAD MANAGEMENT

Goal

Roads shall be designed and managed so that their footprint on the ranch is minimized, and so their impact on other management objectives is not adverse.

Tactics

Limit off-road use by motor vehicles, except as needed for ranch management
Continue to monitor and maintain existing roads for adverse watershed impact

TRAIL MANAGEMENT

Goal

Trails should be designed and managed so that they facilitate non-motorized access for management or recreational purposes.

Tactics

Construct and maintain existing trails for erosion issues.

FENCE MANAGEMENT

Goal

RCR should install and maintain fencing that securely contains livestock and defines boundaries without endangering or impeding the movement of wildlife.

Tactics

Check entire perimeter fencing and inventory on regular schedule
Check and rebuild all corners
Schedule workshops for fence maintenance
Install wildlife friendly wire on all fences as part of repairs

WATER SYSTEM MANAGEMENT

Goal

The ranch shall adopt and implement systems that promote efficient and sustainable use of water for its activities.

Tactics

Increase efficiency and extent of water storage and delivery system
Install wildlife drinkers

HEADQUARTERS MANAGEMENT

Goal

The ranch should maintain such facilities at the headquarters which permit users to accomplish plan objectives as efficiently as possible.

Tactics

Plan and construct improvements to shelter at HQ

Plan and construct camping facilities for visitors to HQ

Install vegetative windbreak

Design and construct facilities that may attract income producing visitors

 Pads for telescopes/bird watching

 Blinds for hunting? Bird watching?

HUMAN RESOURCE MANAGEMENT

USER MANAGEMENT

Goal

The ranch shall be available for public use, but managed so that such access does not compromise the other objectives in the management plan. The ranch will generally encourage uses which preserve or improve its natural resources, its infrastructure, or its human resources without conflicts with other objectives.

Tactics

- Identify contacts for interested users
- Develop regular schedule for visits by managers
- Develop protocol for use
 - List of approved/disapproved uses
 - Check in / Check out procedures
 - Chore list
 - Reports

CULTURAL RESOURCE MANAGEMENT

Goal

The ranch shall be managed in a way that preserves its archeological resources without compromising other objectives in the management plan.

Tactics

- Complete archeological survey
- Identify and address conflicts caused by other uses of the ranch.
- Determine steps needed to protect or interpret pictographs in canyon cave

OUTREACH MANAGEMENT

Goal

The ranch should promote programs which reach out to such people and institutions as may be able to assist with the management objectives

Tactics

- Website creation
- Initiate contacts with
 - Neighbors
 - Governmental agencies
 - Geology/Biology departments
 - Astronomy birding clubs

PROJECTS

PAST PROJECTS

- Installation and maintenance of water shedding structures along entrance road –
2004 to present
- Closure, ripping, and reseeded of unnecessary roads - 2004
 - West of well into west bench
 - South of well into prospect site
 - Tracks on either side of Windmill Draw
 - Road to Bickle gate on NE boundary
 - Road up ridge above headquarters
 - Road to industrial zone
- Redesign / relocate existing roads to minimize maintenance and erosion problems
– 2004 to present
 - Move, regrade, install watershedding structures at North Canyon
 - Relocate well access road and install watershedding structures
 - Two track road to Bickle gate
- Induced meandering
 - Windmill Draw, projects completed in 2004, 2009, 2010
- Headcut repairs 2004 to present
 - Arroyos crossing road on Bickle property
 - Windmill Draw – 2004, 2006, 2009, 2010
- Fence repairs 2004 to present
 - East fence work in conjunction with Smoky Nunn
 - Cattle proof main gate
 - Rebuild fence and corner west of main gate, and on angled fence
 - Rebuild exclusion structure at drinker on north boundary
 - Rebuild and maintain water gaps in East Red Canyon
 - Annual inspection and maintenance
- Water system repairs – 2006 to present
 - Replace windmill with solar pump
 - Install wood water heater for shower
 - Maintain water lines
- Improvements at headquarters
 - Installation of walls and windows at headquarter shelter
 - Work on roof and drainage at headquarters
 - Installation of plumbing, stove, and cooking area at headquarters
 - Conversion of wolf pens to camping shelters
 - Construction and installation of outhouse
- Wildlife habitat improvements
 - AWF partnership to build self cleaning rainfall catchments
 - Installation of lizard ladders in cattle drinkers
 - USFWS partnership for wildlife drinkers
- Plant survey
 - Kenmore survey – 2004-06
 - Annual monitoring program – 2004 - ?

FUTURE PROJECTS

	<u>Priority code</u>
<u>Financial management</u>	
Develop budget and sinking fund	C
<u>Natural resource management</u>	
Complete boundary survey	D
Confirm accuracy of preliminary NRCS soil survey	D
Obtain wildlife surveys (mammal, bird, reptile, and invertebrate)	C
GIS overlays	E
Repairs to Windmill Draw headcut	C
Assess canyon for induced meandering possibilities	D
<u>Infrastructure Management</u>	
Design and construct trails	
Trail along stream in canyon	D
Outhouse management	D
Fence maintenance/repair	D
Design and build rooftop water collection system	E
Shelves in sheds and at headquarters	D
Wood preservative everywhere	C
<u>Human Resource Management</u>	
Obtain archeological survey	D
Consult with NMT, UNM or NMSU for outreach/joint projects	D
Identify and contact collaboration partners	D
Identify and contact potential users	D
Design and implement page on QC website	D
Design and schedule workshops	C-D

Key to priority code

- C - Critical maintenance - without which the condition will deteriorate
- D - Discretionary maintenance - without which things will remain stable for awhile at least
- E - Enhancement - improving on the condition and quality of resources.

DONATION WISH LIST

VOLUNTEERS !!!!

Professional Services

Wildlife surveys

Boundary survey

Archeology survey

Website design/maintenance

Heavy equipment operator

Black tubing (1-2" ID) for water lines

Two troughs for wildlife drinkers

Steel "T" fence posts

Smooth fence wire

Pressure treated wood posts for fence corners

Construction materials for HQ

Plywood for siding and roof decks

Windows

Shelving material

Use of heavy equipment

Backhoe

Bulldozer

GRAZING RECORDS

	<u>2003</u>	<u>2004</u>
USAGE	Grazed	Grazed
ACRES GRAZED	320 acres	320 acres
LESSEE	Tommy Bickle	Tommy Bickle
TYPE OF ANIMALS	Longhorn cattle	Longhorn cattle
NUMBER OF ANIMALS	10 head (cow calf)	10 head (cow calf)
DATE IN		
DATE OUT		
DAYS GRAZED	Ten mos. (300 days)	Ten mos (300 days)
ANIMAL UNITS		
AUMS USED	300 AUM	300 AUM
USE CLASS	Not assessed	Not assessed
BODY CONDITION IN	Not assessed	Not assessed
BODY CONDITION OUT	Not assessed	Not assessed
GAIN/ACRE	Not assessed	Not assessed
FEE	\$5/head/mo	\$5/head/mo.
	<u>2005</u>	<u>2006</u>
USAGE	Grazed	
ACRES GRAZED	320 acres	
LESSEE	Tommy Bickle	
TYPE OF ANIMALS	Longhorn cattle	
NUMBER OF ANIMALS	25 head (cow calf pairs)	
DATE IN	2/1/05	
DATE OUT	3/1/05	
DAYS GRAZED	Thirty days	
ANIMAL UNITS		
AUMS USED	25 AUM	
USE CLASS	Not assessed	
BODY CONDITION IN	Not assessed	
BODY CONDITION OUT	Not assessed	
GAIN/ACRE	Not assessed	
FEE	\$5/head/mo.	