

<[www.livablecommunities.gov/toolsandresources/wr\\_restoration.htm](http://www.livablecommunities.gov/toolsandresources/wr_restoration.htm)>. Applications may be obtained by contacting Gerry Clark at (202) 857-0166; or Bureau of Reclamation, call Shannon Cunniff at (202) 208-5007.

g. Bring Back the Natives (Bureau of Land Management (BLM))

The goal of this program is to conserve native water animals by restoring river and stream watershed basins. Restoration work has included various projects including total stream restoration to fencing vegetation, to protect the willow flycatcher and bull trout habitat. More information may be obtained by visiting the website at: [www.nfwf.org/bbn/bbn.htm](http://www.nfwf.org/bbn/bbn.htm).

h. Clean Water Act Nonpoint Source Grants (EPA)

These grant funds are allocated by the applicable state, territory, or tribe and are used for technical assistance, education and training, demonstration projects, and monitoring of water quality in rivers, lakes and coastal areas. Stream bank repair for the purpose of reducing erosion and the subsequent non-point pollution, implementation of non-point source best management practices, public awareness programs, septic tank replacement, and wetlands restoration, are typical of the projects which have been previously funded. For additional information, visit the website at: [www.epa.gov/OWOW/NPS/sec319.html](http://www.epa.gov/OWOW/NPS/sec319.html).

i. Emergency Watershed Protection Program (EWP) (US Department of Agriculture/Natural Resources Conservation Service(USDA/NRCS))

This program was designed to respond to emergencies created by natural disasters. In the event of a flood, EWP may provide funding to project sponsors for such work as clearing debris from clogged waterways, restoring vegetation and stabilizing river banks. The projects must be environmentally and economically sound and generally provide benefits to more than one property owner. EWP can not be used to fund operation and maintenance work, repair private or public transportation facilities or utilities, or solve problems that existed before the disaster. More information can be provided by contacting the USDA Service Center located in Las Vegas at (702) 262-9047, ext. 3.

j. Reasonable and Prudent Alternative for the Biological Opinion for the Lower Colorado River Operations and Maintenance (Bureau of Reclamation - BOR).

The BOR is purchasing currently unprotected lands in riparian areas that support either occupied or unoccupied potential habitat for SWF. This is a potential source of funding to protect SWF habitat along Meadow Valley Wash.

k. Watershed Operations - Small Watershed Program and Flood Prevention Program (WF 08 or FP 03) (USDA/NRCS)

The Small Watershed Program works through local government sponsors and helps participants solve natural resource and related economic problems on a watershed basis. Projects include watershed protection, flood prevention, erosion and sediment control, water supply, water quality, fish and wildlife habitat enhancement, wetlands creation and restoration and public recreation in watersheds of 250,000 or fewer acres. More information can be provided by contacting the USDA Service Center located in Las Vegas at (702) 262-9047, ext. 3.

l. High Desert Resource Conservation & Development Council, Inc.

This USDA/NRCS sponsored program is a 501(c)3 entity which is dedicated to the conservation, development and utilization of natural resources, to improving the general level of economic activity, and to enhancing the environment and standard of living within its boundaries. Lincoln County and the City of Caliente are members of the council. While no direct funding is available from the council, project applications made be made for assistance in developing grants and facilitating the development of a community coalition to implement the recommendations of the Technical Review Team (TRT).

m. Water Resources Development Act of 1999 (WRDA)

Section 595 of this act sets aside \$25,000,000 for rural Nevada, including Lincoln County. WRDA is administered by the Army Corps of Engineers. WRDA establishes a program for providing environmental assistance to publically owned projects by non-Federal interests. This includes design and construction of projects to accomplish environmental restoration and surface water resource protection and development. The Federal share of projects is 75%. The matching 25% non-Federal portion may include in-kind and voluntary services. Authorization of funds under WRDA will begin in FY 2001 (starts October 1, 2000).

n. Small Watershed Program (PL 566 - NRCS)

The Small Watershed Program provides both technical and financial (project implementation) assistance to improve, protect, and develop water and land resources in watersheds of up to 250,000 acres (approximately 390 square miles). Projects are undertaken at the request of local sponsors who seek assistance in addressing resource issues including, but not limited to: flood prevention, agricultural water development, watershed protection and water quality management. For more information, contact Chuck Houston at 775-784-5317.

**B. State Funding**

1. Nevada State funding or grants, including Nevada Division of Forestry (N.F.) Stewardship Program.

Although this program was not funded in either 1999 or 2000, it is currently in the budget proposals for 2001. This program has several different components including (SIP 5) soil and water protection and (SIP 6) riparian and wetland area protection. This program is available to individuals, groups associations, American Indians, corporations and other private entities who own a minimum of 5 acres. Total forest land ownership must be less than 1000 acres. Cost share is 75% of the out-of-pocket expenses and can not exceed \$10,000 per landowner. More information is available by contacting Gail Durham at 775-684-2514 or through the internet site at: [www.state.nv.us/cnf/forestry/ndf/](http://www.state.nv.us/cnf/forestry/ndf/).

2. Nevada Division of Environmental Planning (NDEP)

*Non-point Source Implementation Grants, Section 319*

The 319 Program provides formula grants to the states to implement nonpoint source projects and programs in accordance with Section 319 of the Clean Water Act. Projects eligible for funding include activities which reduce, eliminate and/or prevent nonpoint source pollution through the implementation of best management practices such as, but not limited to, agricultural drainage and/or runoff, channel erosion, sedimentation due to construction and land development, dredging, and hydro logic modification. Comprehensive watershed management projects are also eligible for funding. A request for proposals is made each year in the late spring with project proposals due in August. For more information, visit their website at

<[www.state.nv.us/ndep/bwqp/npsgrnt.htm](http://www.state.nv.us/ndep/bwqp/npsgrnt.htm)> or contact Jean Stone at 775-687-4670, extension 3090.

### **C. Private, Non-Profit Funding**

This section includes non-profit funding sources as well as directories containing financial and technical assistance for projects relating to water quality.

#### 1. National Fish and Wildlife Foundation (NFWF)

NFWF awards challenge grants for natural resource conservation projects. NFWF uses its Federally-appropriated funds to match private sector funds. Priority areas include, but are not limited to, wetland conservation, conservation education, conservation policy, and wildlife and habitat. More information may be obtained at the NFWF internet website [www.nfwf.org](http://www.nfwf.org) or by calling (202) 857-0166.

#### 2. Directory of Funding Sources for Grassroots River and Watershed Conservation Groups

This directory provides profiles of private, corporate and Federal funding sources for river and watershed groups. There is also a section on how to write grant proposals and a bibliography of state and local foundation directories. There is a charge for the directory. It may be obtained by calling (800) 423-6747 or through their internet website at: [www.teleport.com/~rivernet/rivernet/pubs.htm](http://www.teleport.com/~rivernet/rivernet/pubs.htm).

#### 3. Foundation Center

The Foundation Center publishes directories of funding opportunities which profile over 2,300 corporate philanthropic programs. The books are available by calling (212) 620-4320. Additional Foundation Center information is available on the internet at [fdncenter.org/](http://fdncenter.org/).

#### 4. Council on Foundations

Information on foundation grant monies can be located on the internet at [www.cof.org](http://www.cof.org).

## **D. Public Sector Funding Opportunities**

1. U.S. Department of Agriculture (USDA)/Natural Resources Conservation Service (NRCS)

NRCS provides technical assistance to land-users, communities, units of state and local government, and other Federal agencies in planning and implementing conservation systems. The purpose of the conservation systems are to reduce erosion, improve soil and water quality, improve and conserve wetlands, enhance fish and wildlife habitat, improve air quality, improve pasture and range condition, reduce upstream flooding, and improve woodlands. For more information on program qualifications and funding opportunities, contact Rick Orr at 775-726-3101 or visit their web site at [www.nrcs.usda.gov/NRCSProg.html](http://www.nrcs.usda.gov/NRCSProg.html). Programs which may be beneficial to this project are listed below:

### *a. Conservation Reserve Program (CRP)*

This program is designed to reduce soil erosion on agricultural land. The CRP offers opportunities to provide buffer strips along the riparian zone. Producers receive an annual rental payment for the term of the multi-year contract. Cost sharing is provided to establish the vegetative cover practices.

### *b. Environmental Quality Incentives Program (EQIP)*

The EQIP program provides technical, educational, and financial assistance to eligible farmers and ranchers to address natural resource issues. The purposes of the program are achieved through the implementation of a conservation plan. Contracts of 5 to 10 years are required and cost-share payments are available for some practices such as filter strips, tree planting, wildlife habitat and vegetation establishment.

### *c. Wetlands Reserve Program (WRP)*

This program was established to restore wetlands. Participating landowners can establish conservation easements of either 30 year or permanent easement on degraded agricultural wetlands. Ten-year restoration cost-share agreements are available where no easement is involved. In exchange for a permanent easement, the landowner receives payment up to the agricultural value of the land and 100 percent of the restoration costs for restoring the wetlands. Cost-share amounts decrease based on the contract term. In all

instances, the land owner retains control access to their land.

*d. Wildlife Habitat Incentives Program (WHIP)*

While this program has not been funded for 2000, it may be funded in the future. In this program, financial incentives are provided to develop habitat for fish and wildlife on Private lands. Agricultural production is not a requirement of this program. Cost-share agreements generally last a minimum of 10 years from the date of the contract.

**E. Initial Funding Needs**

1. In order to accomplish Objective A.1.a, involving channel restorations design, a contract for a watershed specialist (or similar discipline) would need to be let. Our preliminary estimate to fund this specialist is \$100,000. This will fund the preparation of the needed report as well as the reimbursement of a grant writer and administrator to oversee the effort.
2. The second step (Objective A.1.b) will be to use the Channel Restoration Report to make estimates of needed funding to implement the channel restoration as well as emergency and long term channel maintenance needs. Grants or other funding will then be sought to complete the restoration and maintenance work.
3. The BLM inventory (Objective B.1.a.) in the Clover Creek watershed is expected to cost \$110,000. A preliminary funding request for Fiscal Year 2001 (starting October 2000) has been submitted. Funding for the vegetative conversion would follow the completion of the inventory.

**XIII. IMPLEMENTATION SCHEDULE (PHASE I ONLY)**

Year(s) (after plan approved)	Planned Actions (see Section X)	Responsible Party/Funding
1	A.1.a.- Contract with watershed specialist to design solutions	City of Caliente/NRCS grant or direct appropriation
1 and ongoing	A.2.c./B.2.a. - Tamarisk removal on private and public land	Lincoln County Weed District - in cooperation with BLM, Nevada Division of Forestry, City of Caliente and private land owners
1-2	B.1.a. - Do PSISYP Inventory of 162,700/yr in watershed-Ash Canyon	BLM - hire or contract for 4 resource specialists- request extra funding
1 (and periodically after project completion)	B.2.b. - Intensive inventory of current riparian conditions and identify areas for habitat restoration and enhancement-Meadow V. Wash	BLM - get base line data and monitor success of riparian restoration
2 or as soon as permits issued	A.1.b. - Channel Restoration on private/city lands through Caliente	City of Caliente/Lincoln County, with approval of COE and USFWS - obtain grant(s) or special federal funding
2 and ongoing	B.3.a. - UPRR designs fixes that are compatible with other objectives	UPRR - contract with watershed specialist
2-3	B.1.b. Vegetation conversions in Clover Watershed to reduce sedimentation movement	BLM - Use results of B.1.a. inventory - pending additional funding
3 and beyond	A.1.c. - Maintenance of channel restoration as needed (include emergency measures)	City of Caliente - with approval/permits from COE and USFWS. Use local and/or grant funds

#### **XIV. IMPLEMENTATION AND ONGOING EVALUATION OF THE PLAN**

The watershed management practices in the Meadow Valley/Clover Creek Watershed Plan (Phase I) were reached by consensus among the diverse members of the TRT. Upon approval by the Lincoln County CRM Steering Committee, the plan will be complete. If, how, and when the plan will be implemented will be up to the City of Caliente and the federal, state and county agencies and private companies and individuals involved. The CRM process makes recommendations to the agencies and private land holders. Implementation may require further public input, environmental analysis of actions, and/or incorporation into future management plans by the agencies involved.

In this Phase I Plan, the TRT decided to deal only with the most pressing problems involved with the impacts to Caliente. Further additions or separate plans may be needed to deal with other problems in the watershed. This may involve other portions of the watershed including flooding impacts to the UPRR mainline above and below (Cottonwood Canyon) Caliente.

It is intended for the Meadow Valley/Clover Creek Watershed Plan (Phase I), to be a dynamic working document. This plan can be amended as new information becomes available, conditions change, or additional opportunities occur. It will be the responsibility of the Lincoln County CRM Steering Committee, to name a TRT as needed, to draft any amendments and then approve the plan as revised.

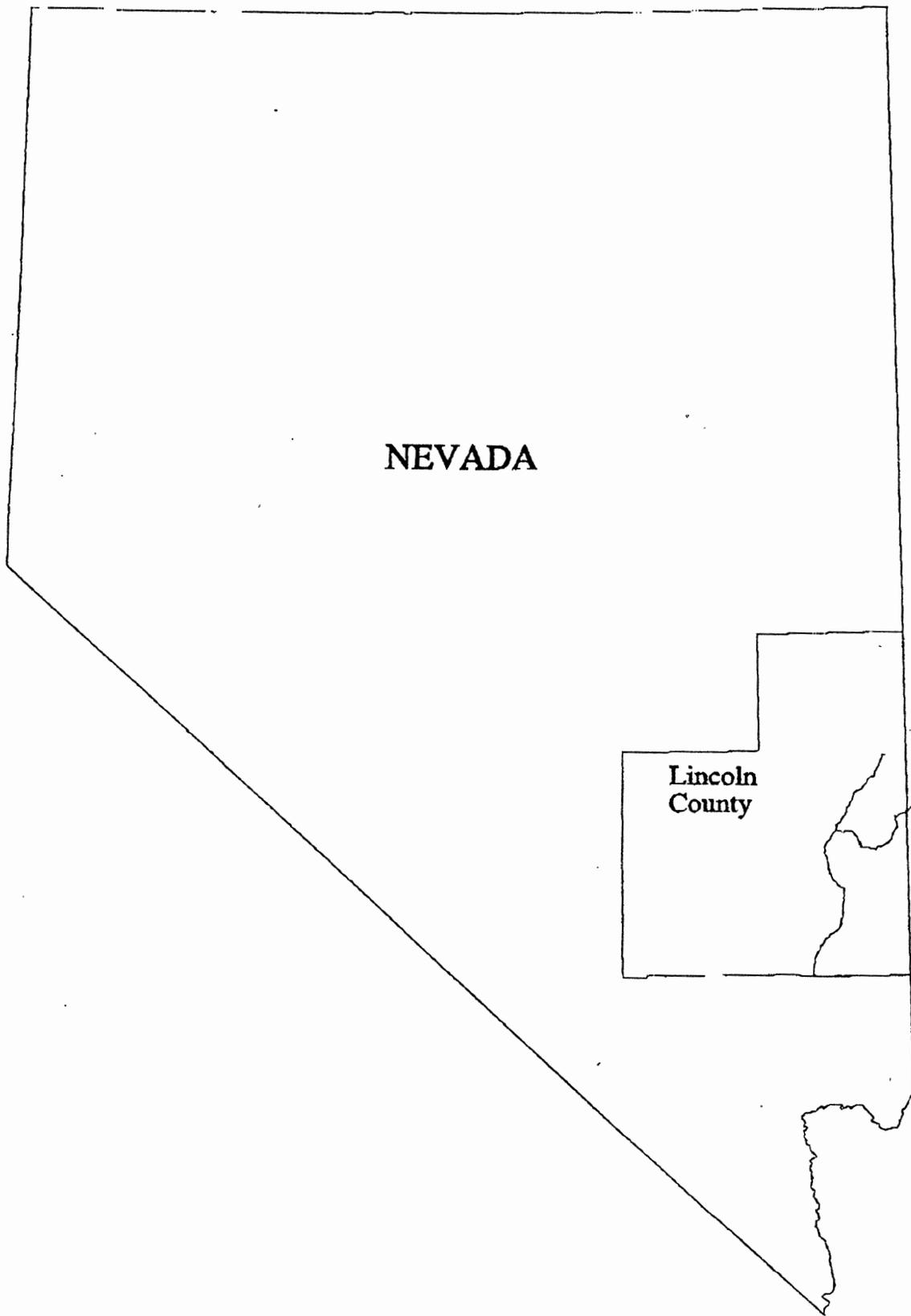
No amendment of the plan would be needed to adopt new or improved methods or other minor changes within the scope of the plan guidelines.

As a minimum, the Lincoln County CRM Steering Committee should call a TRT together every five years, after the plan is approved, to monitor the progress made in implementing the recommendations of the plan. This would include land use plan revisions, environmental analyses conducted, and specific projects completed. In addition, look into any obstacles that have prevented implementation of any provisions of the plan. The team should make recommendations on appropriate solutions.

## **XV. APPENDICES**

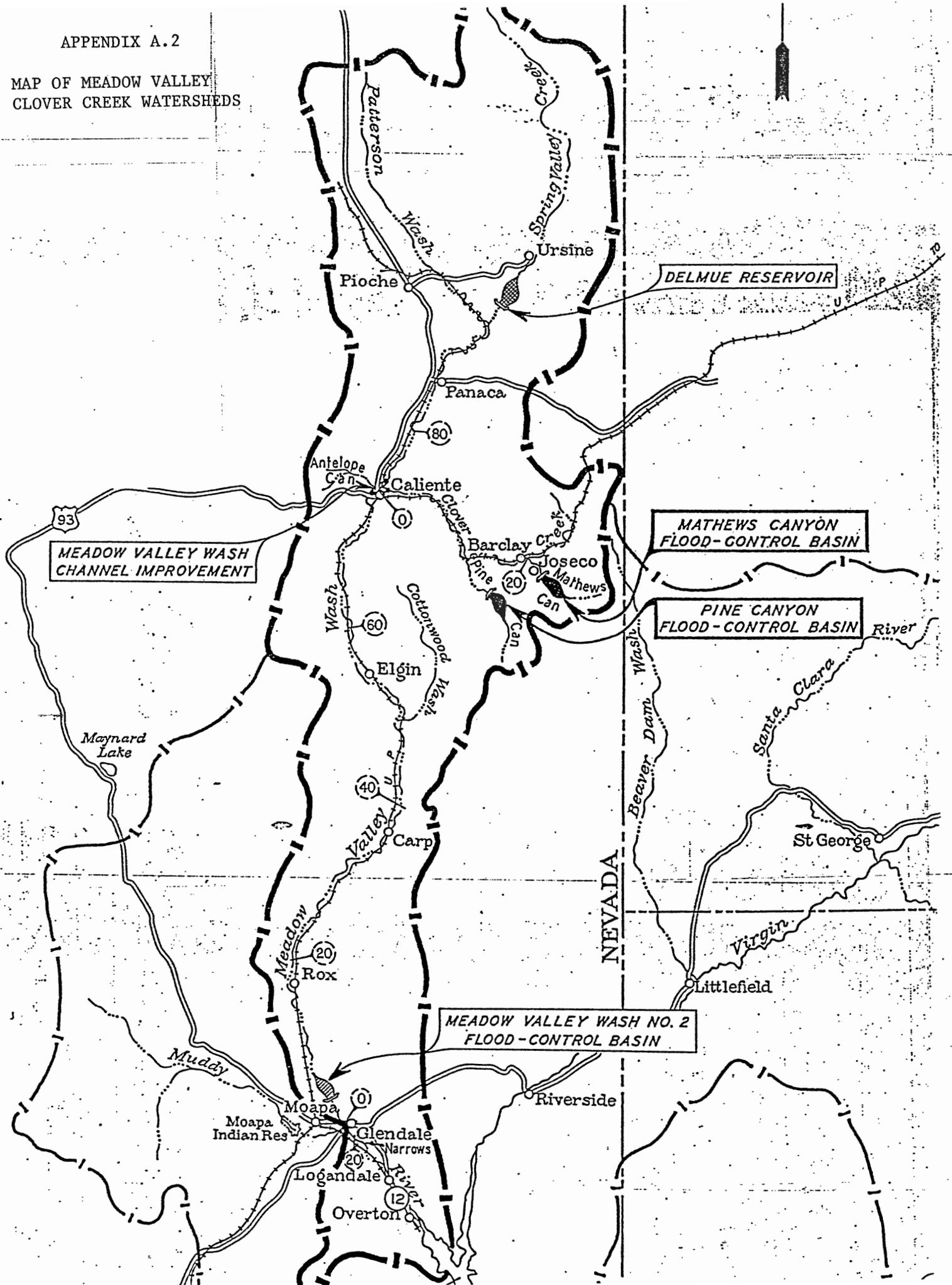
- A. Maps of the Meadow Valley/Clover Creek Watersheds
  - 1. Map of Lincoln County/Meadow Valley drainage in Nevada
  - 2. Map of Meadow Valley/Clover Creek Watersheds
- B. Map of BLM Grazing Allotments in Lincoln County
- C. Map of BLM Wild Horse Herd Areas in Lincoln County
- D. Map of Flood Prone Areas Near Caliente
- E. Table 1 Miles of Tamarisk in the Meadow Valley/Clover Creek Watershed
- F. Table 2 Acres of Tamarisk at Reservoirs in the Meadow Valley/Clover Creek Watershed
- G. References

**Addendix A.1. Map of Lincoln County/Meadow Valley drainage in Nevada**



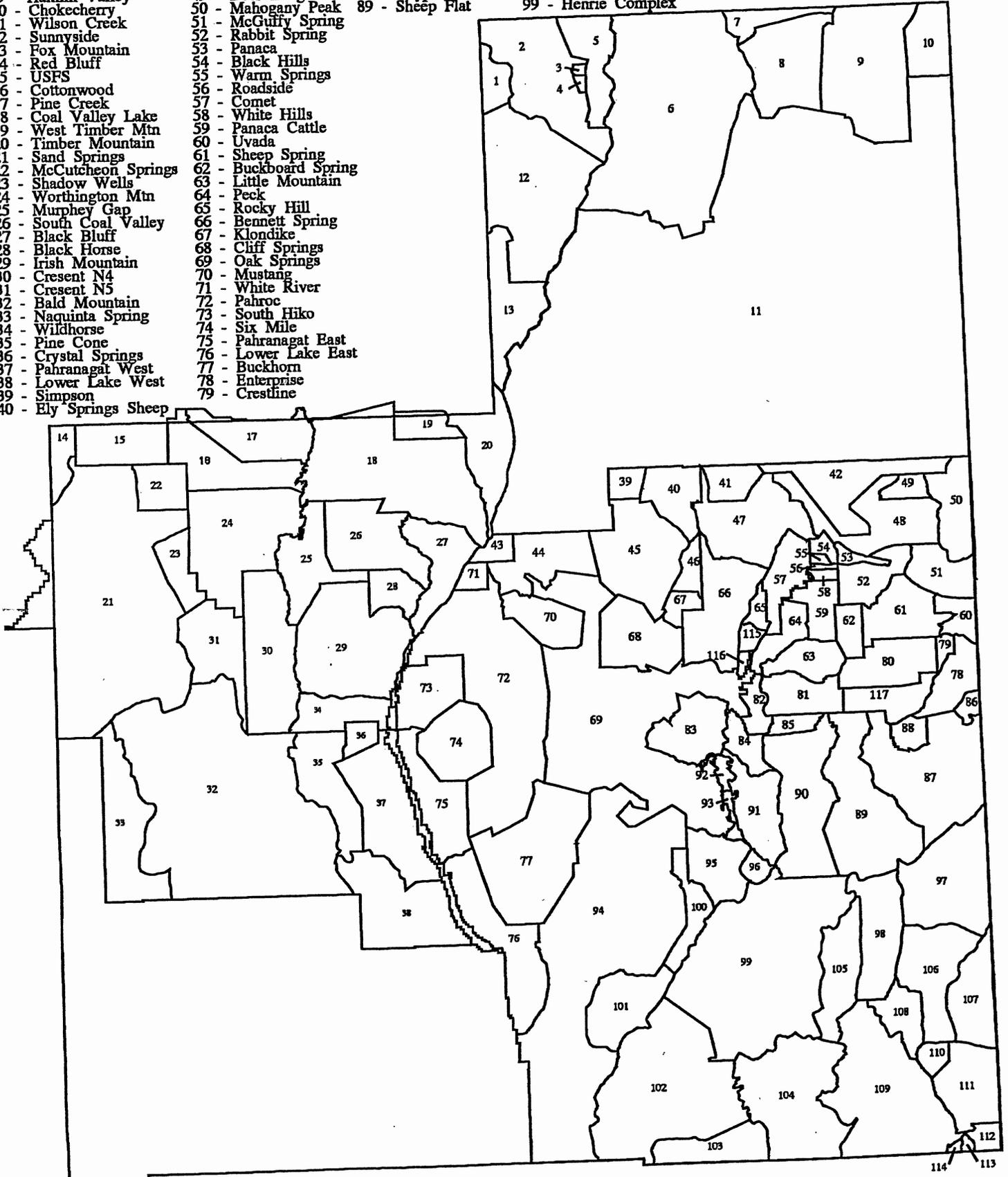
APPENDIX A.2

MAP OF MEADOW VALLEY  
CLOVER CREEK WATERSHEDS



Appendix B Grazing Allotments within Lincoln County.

- |                         |                       |                     |                     |                      |                      |
|-------------------------|-----------------------|---------------------|---------------------|----------------------|----------------------|
| 1 - Hardy Springs       | 41 - Pioche           | 80 - Oak Wells      | 90 - Cottonwood     | 100 - Boulder Spring | 109 - Gourd Spring   |
| 2 - Shingle Pass        | 42 - N4               | 81 - Clover Creek   | 91 - Pennsylvania   | 101 - Grapevine      | 110 - Beacon         |
| 3 - Haggerty Wash       | 43 - Narrows          | 82 - Sawmill Canyon | 92 - Meadow Valley  | 102 - Breedlove      | 111 - Sand Hollow    |
| 4 - Cave Valley Seeding | 44 - Rattlesnake      | 83 - Cottonwood     | 93 - Ash Flat       | 103 - Rox-Tule       | 112 - Jackrabbit     |
| 5 - Cave Valley Ranch   | 45 - Ely Springs      | 84 - Sand Hills     | 94 - Delamar        | 104 - Mormon Peak    | 113 - Pulsipher Wash |
| 6 - Geyser Ranch        | 46 - Black Canyon     | 85 - Mustang Flat   | 95 - Elgin          | 105 - White Rock     | 114 - Flat Top Mesa  |
| 7 - South Spring Valley | 47 - Highalnd Peak    | 86 - Closed         | 96 - Schlarman      | 106 - Snow Springs   | 115 - Highway        |
| 8 - Cottonwood          | 48 - Condor Canyon    | 87 - Barclay        | 97 - Lime Mountain  | 107 - Terry          | 116 - Caliente       |
| 9 - Hamlin Valley       | 49 - Deer Lodge       | 88 - Haypress       | 98 - Garden Springs | 108 - Summit Spring  | 117 - Crossroads     |
| 10 - Chochecherry       | 50 - Mahogany Peak    | 89 - Sheep Flat     | 99 - Henrie Complex |                      |                      |
| 11 - Wilson Creek       | 51 - McGuffy Spring   |                     |                     |                      |                      |
| 12 - Sunnyside          | 52 - Rabbit Spring    |                     |                     |                      |                      |
| 13 - Fox Mountain       | 53 - Panaca           |                     |                     |                      |                      |
| 14 - Red Bluff          | 54 - Black Hills      |                     |                     |                      |                      |
| 15 - USFS               | 55 - Warm Springs     |                     |                     |                      |                      |
| 16 - Cottonwood         | 56 - Roadside         |                     |                     |                      |                      |
| 17 - Pine Creek         | 57 - Comet            |                     |                     |                      |                      |
| 18 - Coal Valley Lake   | 58 - White Hills      |                     |                     |                      |                      |
| 19 - West Timber Mtn    | 59 - Panaca Cattle    |                     |                     |                      |                      |
| 20 - Timber Mountain    | 60 - Uvada            |                     |                     |                      |                      |
| 21 - Sand Springs       | 61 - Sheep Spring     |                     |                     |                      |                      |
| 22 - McCutcheon Springs | 62 - Buckboard Spring |                     |                     |                      |                      |
| 23 - Shadow Wells       | 63 - Little Mountain  |                     |                     |                      |                      |
| 24 - Worthington Mtn    | 64 - Peck             |                     |                     |                      |                      |
| 25 - Murphey Gap        | 65 - Rocky Hill       |                     |                     |                      |                      |
| 26 - South Coal Valley  | 66 - Bennett Spring   |                     |                     |                      |                      |
| 27 - Black Bluff        | 67 - Klondike         |                     |                     |                      |                      |
| 28 - Black Horse        | 68 - Cliff Springs    |                     |                     |                      |                      |
| 29 - Irish Mountain     | 69 - Oak Springs      |                     |                     |                      |                      |
| 30 - Crescent N4        | 70 - Mustang          |                     |                     |                      |                      |
| 31 - Crescent N5        | 71 - White River      |                     |                     |                      |                      |
| 32 - Bald Mountain      | 72 - Pahroc           |                     |                     |                      |                      |
| 33 - Naquinta Spring    | 73 - South Hiko       |                     |                     |                      |                      |
| 34 - Wildhorse          | 74 - Six Mile         |                     |                     |                      |                      |
| 35 - Pine Cone          | 75 - Pahrnagat East   |                     |                     |                      |                      |
| 36 - Crystal Springs    | 76 - Lower Lake East  |                     |                     |                      |                      |
| 37 - Pahrnagat West     | 77 - Buckhorn         |                     |                     |                      |                      |
| 38 - Lower Lake West    | 78 - Enterprise       |                     |                     |                      |                      |
| 39 - Simpson            | 79 - Crestline        |                     |                     |                      |                      |
| 40 - Ely Springs Sheep  |                       |                     |                     |                      |                      |

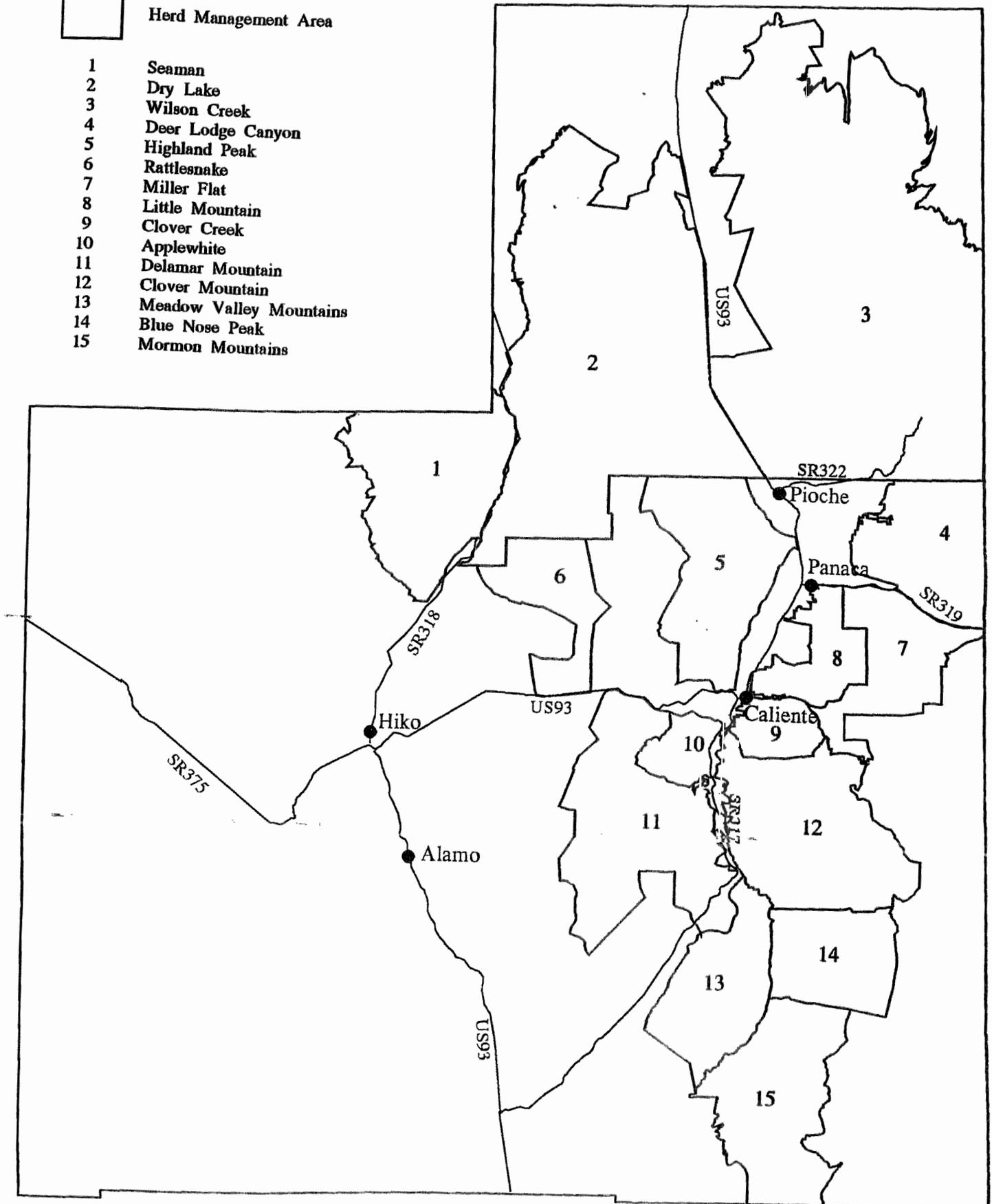


Appendix C. Wild Horse Herd Management Areas within Lincoln County.



Herd Management Area

- 1 Seaman
- 2 Dry Lake
- 3 Wilson Creek
- 4 Deer Lodge Canyon
- 5 Highland Peak
- 6 Rattlesnake
- 7 Miller Flat
- 8 Little Mountain
- 9 Clover Creek
- 10 Applewhite
- 11 Delamar Mountain
- 12 Clover Mountain
- 13 Meadow Valley Mountains
- 14 Blue Nose Peak
- 15 Mormon Mountains

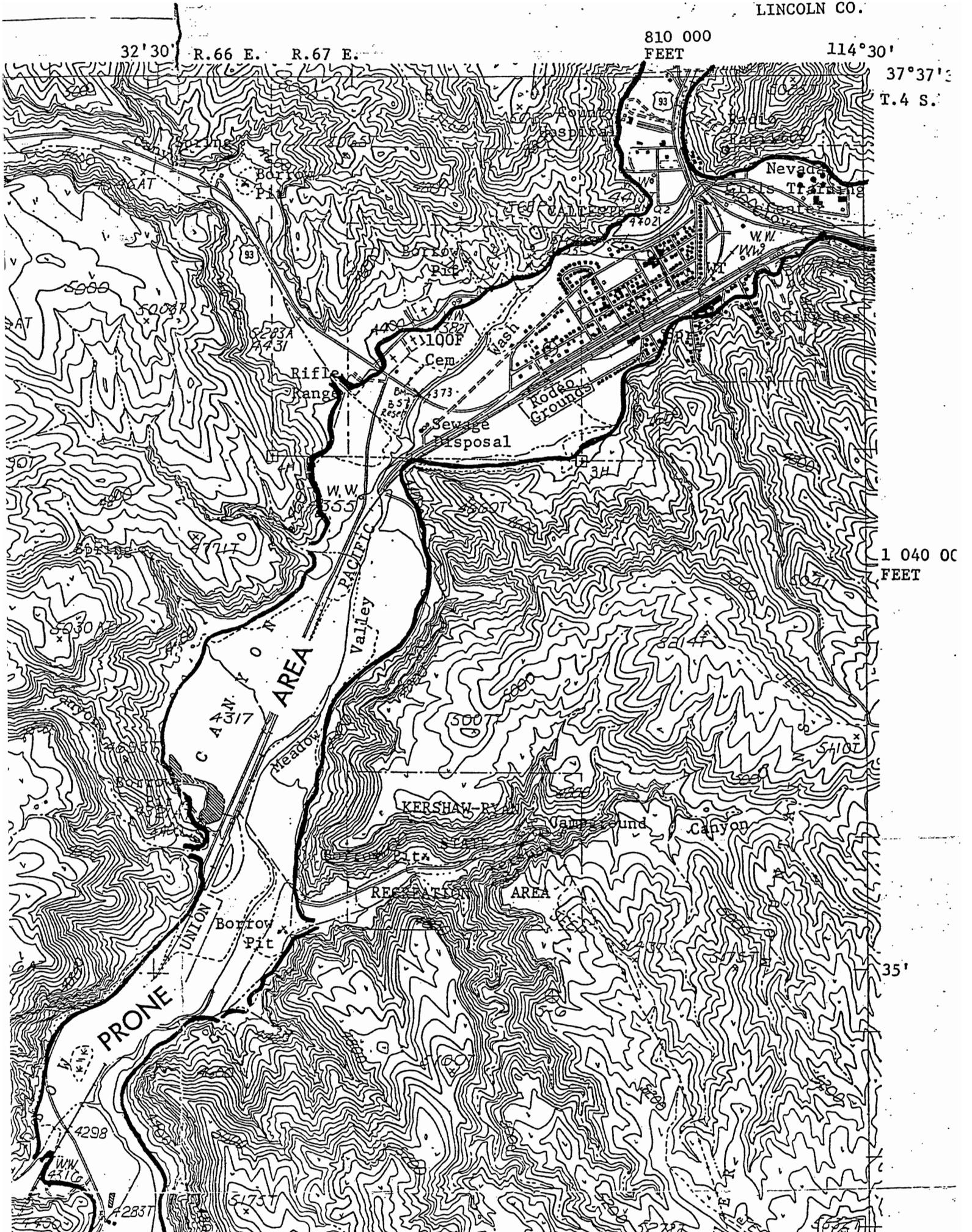


32'30" R.66 E. R.67 E.

810 000  
FEET

114°30'

37°37'  
T.4 S.



1 040 00  
FEET

35'

## Appendix E

### Table 1

Miles of Tamarisk in the Meadow Valley/Clover Creek Watershed

Tributary	Linear Miles of Drainage (estimated from 1:100,000 scale maps)								Overall	
	Mt. Wilson Pub/Pvt		Caliente Pub/ Pvt		Clover Mtns Pub/Pvt		Overton Pub/Pvt		Public	Pvt.
Meadow Valley Wash	136	38	29	37	7	10	2		54	44'
Camp Valley Wash	134								13	4
Burnt Canyon Creek	7	2							7	2
Pine Creek	3	2							3	2
Clover Creek		33	8						33	8
Mathews Canyon		2	2						2	2
Antelope Canyon		2	0						2	0
DUA Canyon		1	0						1	0
Sawmill Canyon		4	0						4	0
Pine Wash		2	0						2	0
Cottonwood Canyon (and tributaries.)				78	0				78	0
Pennsylvania Canyon (and tributaries)				21	0				21	0
Macklin Canyon				6	0				6	0
Grand Total (approx. linear miles )	3613	82	39	142	7	10	2		226	61

## Appendix F

### Table 2

Acres of Tamarisk at Reservoirs  
in Meadow Valley/Clover Creek Watersheds

Reservoir/Lake	Approximate acreage	Reference 100K map
Eagle Valley Reservoir**	225 (includes areas upstream)	Mount Wilson
Echo Canyon Reservoir**	45	Caliente
Pine Canyon Reservoir	220	Clover Mountains
Mathews Canyon Reservoir	320	Clover Mountains
Beaver Dam Reservoir (Schroeder Lake)**	20	Clover Mountains
<i>Totals</i>	<i>830 acres</i>	

\*\*Nevada State Park or Recreation Area

## Appendix G.

### References:

Bureau of Land Management (1992) Clover Creek/Cottonwood Habitat Management Plan N4-WHA-T24, Kyle Teel.

Bureau of Land Management (1993, Revised 1995) Process for Assessing Proper Functioning Condition, Technical Reference TR 1737-9.

State of Nevada, Department of Conservation and Natural Resources (July 1964) Ground-Water Resources-Reconnaissance Series Report 27. Ground-Water Appraisal of the Meadow Valley Area, Lincoln and Clark Counties, Nevada. Eugene Rush, Geologist.

State of Nevada, State Environmental Commission, (December 1994) Handbook of Best Management Practices, Non-Designated Water Quality Management Plan.

U.S. Department of Agriculture, Soil Conservation Service (1976) Meadow Valley Area, Nevada-Utah, Parts of Lincoln County, Nevada, and Iron County, Utah.