

**State and Private Forestry
FY 2010 Western Competitive
Resource Allocation
Multi-State Project Proposal**

Filename	
Virgin River Multi state	
Administration Information	
Dollar Amount Requested:	\$300,000
Matching Share:	\$305,000

Lead Applicant Information	
State Forestry Agency:	Nevada Division of Forestry
Contact Person:	Chris Faehling
Address:	PO Box 600
City/State/Zip Code:	Pioche, NV 89043
Phone (Work/Cell):	775-962-5543/775-962-1844
Email:	cfaehling@forestry.nv.gov
Fax:	775-962-5550

Lead Applicant - Project Information			
Descriptive Title of Project:	Virgin and Muddy River Watershed Initiative		
Names of Partnering Agencies / Organizations:	Nevada Division of Forestry (NDF); Nevada Department of Wildlife (NDOW); Arizona State Forestry Division (AZ); Utah Division of Forestry, Fire and State Lands (UT); Virgin River Conservation Partnership (VRCP); Partners in Conservation (PIC); Fire Safe Council - Moapa and Logandale Chapters; Muddy River Regional Environmental Impact Alleviation Committee (MRREIAC); Southern Nevada Water Authority (SNWA); City of Mesquite; Clark County; Bureau of Land Management (BLM); United States Fish and Wildlife Service (USFWS)		
State(s):	Nevada	Congressional Districts:	2
Counties:	Clark	Forest Service Regions:	4

Lead Applicant – Total Leverage							
Please specify each 3 rd party contributor (partnering organizations and agencies, including other Federal) and the dollar value of each contribution. Please DO NOT show grant requested funds in this table.							
3	Contributors: (Please specify by name)	Nevada Division of Forestry	MRREIAC	SNWA	City of Mesquite		TOTAL
	Value of Contributions:	\$90,000	\$100,000	\$50,000	\$15,000		\$255,000

Lead Applicant – Project Budget					
	Grant Share (\$ requested)	Applicant	Non-Federal Contributors	TOTAL	
		Cash¹	In-Kind²		
4	Personnel / Labor:	\$65,000	\$65,000	\$15,000	\$145,000
	Fringe Benefits:	\$0	\$0	\$0	\$ 0
	Travel:	\$0	\$0	\$0	\$ 0
	Equipment:	\$15,000	\$15,000	\$0	\$30,000
	Supplies:	\$10,000	\$10,000	\$0	\$20,000
	Contractual:	\$160,000	\$0	\$150,000	\$310,000
	Construction:	\$0	\$0	\$0	\$ 0
	Other:	\$0	\$0	\$0	\$ 0
	Indirect Costs:	\$0	\$0	\$0	\$ 0
	TOTAL:	\$250,000	\$90,000	\$165,000	\$505,000

5		Project Duration		
		What is the duration of this project? <input type="checkbox"/> One Year <input type="checkbox"/> Two Years <input checked="" type="checkbox"/> Three Years		

6		National Relevance	
		Conserve Working Forest Landscapes <input checked="" type="checkbox"/>	Protect Forests From Harm <input checked="" type="checkbox"/>
		Enhance Public Benefits From Trees and Forests <input checked="" type="checkbox"/>	

¹ 'Cash' is the value of *any qualifying match* the applicant pays for such as cash, staff time, supplies, or equipment.

² 'In-Kind' is the value of *any qualifying match* contributed by a nonfederal 3rd party contributor such as donated time, supplies, or equipment.

Co - Applicant Information	
1.1	State Forestry Agency: Arizona Division of Forestry
	Contact Person: Al Hendricks
	Address: 3650 Lake Mary Road
	City/Zip Code: Flagstaff, AZ 86001
	Phone (Work/Cell): 928.774.1425
	Email: alhendricks@azstatefire.org
	Fax: 928.779.2413

Co - Applicant Project Information				
2.1	Title of Project:	Virgin and Muddy River Watershed Initiative		
	Partnering Agencies / Organizations:	Arizona Division of Forestry		
	State(s):	Arizona	Congressional Districts:	2
	Counties:	Mohave	Forest Service Regions:	4

Co-Applicant – Total Leverage							
3.1	3rd Party Contributors: (Specify by name)	State of Arizona					TOTAL
	Value of Contributions:	\$25,000	\$0	\$0	\$0	\$0	\$25,000

Co-Applicant – Project Budget					
	Grant Share (\$ requested)	Applicant	3 rd Party Contributors	TOTAL	
		Cash	In-Kind		
4.1	Personnel / Labor:	\$10,000	\$10,000	\$0	\$20,000
	Fringe Benefits:	\$0	\$0	\$0	\$ 0
	Travel:	\$0	\$0	\$0	\$ 0
	Equipment:	\$0	\$0	\$0	\$ 0
	Supplies:	\$0	\$0	\$0	\$ 0
	Contractual:	\$15,000	\$15,000	\$0	\$30,000
	Construction:	\$0	\$0	\$0	\$ 0
	Other:	\$0	\$0	\$0	\$ 0
	Indirect Costs:	\$0	\$0	\$0	\$ 0
	TOTAL:	\$25,000	\$25,000	\$ 0	\$50,000

Co - Applicant Information	
1.2	State Forestry Agency: Utah Division of Forestry, Fire and State Lands
	Contact Person: Patrick Moore
	Address: 585 North Main
	City/Zip Code: Cedar City, UT 84720
	Phone (Work/Cell): 435.586.4408
	Email: patrickmoore@utah.gov
	Fax: 435.586.2789

Co - Applicant Project Information				
2.2	Title of Project:	Virgin and Muddy River Watershed Initiative		
	Partnering Agencies / Organizations:	Utah Division of Forestry, Fire and State Lands		
	State(s):	Utah	Congressional Districts:	2
	Counties:	Iron, Kane, Washington	Forest Service Regions:	4

Co-Applicant – Total Leverage								
3.2	3rd Party Contributors: (Specify by name)	State of Utah						TOTAL
	Value of Contributions:	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000

Co-Applicant – Project Budget					
	Grant Share (\$ requested)	Applicant	3rd Party Contributors	TOTAL	
		Cash	In-Kind		
4.2	Personnel / Labor:	\$10,000	\$10,000	\$0	\$20,000
	Fringe Benefits:	\$0	\$0	\$0	\$ 0
	Travel:	\$0	\$0	\$0	\$ 0
	Equipment:	\$0	\$0	\$0	\$ 0
	Supplies:	\$0	\$0	\$0	\$ 0
	Contractual:	\$15,000	\$15,000	\$0	\$30,000
	Construction:	\$0	\$0	\$0	\$ 0
	Other:	\$0	\$0	\$0	\$ 0
	Indirect Costs:	\$0	\$0	\$0	\$ 0
	TOTAL:	\$25,000	\$25,000	\$ 0	\$50,000

1.3		Co - Applicant Information	
	State Forestry Agency:		
	Contact Person:		
	Address:		
	City/Zip Code:		
	Phone (Work/Cell):		
	Email:		
	Fax:		

2.3		Co - Applicant Project Information			
	Title of Project:				
	Partnering Agencies / Organizations:				
	State(s):		Congressional Districts:		
	Counties:		Forest Service Regions:		

3.3		Co-Applicant – Total Leverage						
	3 rd Party Contributors: (Specify by name)							TOTAL
	Value of Contributions:	\$0	\$0	\$0	\$0	\$0	\$0	\$ 0

4.3		Co-Applicant – Project Budget			
		Grant Share (\$ requested)	Applicant	3 rd Party Contributors	TOTAL
		Cash		In-Kind	
	Personnel / Labor:	\$0	\$0	\$0	\$ 0
	Fringe Benefits:	\$0	\$0	\$0	\$ 0
	Travel:	\$0	\$0	\$0	\$ 0
	Equipment:	\$0	\$0	\$0	\$ 0
	Supplies:	\$0	\$0	\$0	\$ 0
	Contractual:	\$0	\$0	\$0	\$ 0
	Construction:	\$0	\$0	\$0	\$ 0
	Other:	\$0	\$0	\$0	\$ 0
	Indirect Costs:	\$0	\$0	\$0	\$ 0
	TOTAL:	\$ 0	\$ 0	\$ 0	\$ 0

Co - Applicant Information	
1.4	State Forestry Agency:
	Contact Person:
	Address:
	City/Zip Code:
	Phone (Work/Cell):
	Email:
	Fax:

Co - Applicant Project Information				
2.4	Title of Project:			
	Partnering Agencies / Organizations:			
	State(s):		Congressional Districts:	
	Counties:		Forest Service Regions:	

Co-Applicant – Total Leverage								
3.4	3rd Party Contributors: (Specify by name)							TOTAL
	Value of Contributions:	\$0	\$0	\$0	\$0	\$0	\$0	\$ 0

Co-Applicant – Project Budget					
	Grant Share (\$ requested)	Applicant	3rd Party Contributors	TOTAL	
		Cash	In-Kind		
4.4	Personnel / Labor:	\$0	\$0	\$0	\$ 0
	Fringe Benefits:	\$0	\$0	\$0	\$ 0
	Travel:	\$0	\$0	\$0	\$ 0
	Equipment:	\$0	\$0	\$0	\$ 0
	Supplies:	\$0	\$0	\$0	\$ 0
	Contractual:	\$0	\$0	\$0	\$ 0
	Construction:	\$0	\$0	\$0	\$ 0
	Other:	\$0	\$0	\$0	\$ 0
	Indirect Costs:	\$0	\$0	\$0	\$ 0
	TOTAL:	\$ 0	\$ 0	\$ 0	\$ 0

1.5		Co - Applicant Information	
	State Forestry Agency:		
	Contact Person:		
	Address:		
	City/Zip Code:		
	Phone (Work/Cell):		
	Email:		
	Fax:		

2.5		Co - Applicant Project Information			
	Title of Project:				
	Partnering Agencies / Organizations:				
	State(s):		Congressional Districts:		
	Counties:		Forest Service Regions:		

3.5		Co-Applicant – Total Leverage							
	3 rd Party Contributors: (Specify by name)								TOTAL
	Value of Contributions:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$ 0

4.5		Co-Applicant – Project Budget			
		Grant Share (\$ requested)	Applicant	3 rd Party Contributors	TOTAL
		Cash		In-Kind	
	Personnel / Labor:	\$0	\$0	\$0	\$ 0
	Fringe Benefits:	\$0	\$0	\$0	\$ 0
	Travel:	\$0	\$0	\$0	\$ 0
	Equipment:	\$0	\$0	\$0	\$ 0
	Supplies:	\$0	\$0	\$0	\$ 0
	Contractual:	\$0	\$0	\$0	\$ 0
	Construction:	\$0	\$0	\$0	\$ 0
	Other:	\$0	\$0	\$0	\$ 0
	Indirect Costs:	\$0	\$0	\$0	\$ 0
	TOTAL:	\$ 0	\$ 0	\$ 0	\$ 0

Project Description

Maximum 10,000 Characters Including Spaces – Clearly summarize the proposed project, including goals, objectives, measurable outputs, outcomes, and how grant funds will be used towards successful completion of the project. – Please specify the components of the project that will occur in each state.

This purpose of this project is to restore and enhance the Virgin River and Muddy River Watersheds, and to protect the communities located within these watersheds from the destructive forces of wildfire. Both watersheds are extremely important to southern Nevada for a variety of reasons. For example, approximately seven miles northwest of Moapa are nearly two dozen springs which form the headwaters of the Muddy River. This 1,218-acre property is formally known as the Warm Springs Ranch and provides an ideal habitat for a number of listed and sensitive species. Prior to being acquired by the Southern Nevada Water Authority (SNWA), the United States Fish & Wildlife Service (USFWS) considered this property a top priority in southern Nevada for acquisition and protection. In addition, the Virgin River Watershed is one of only five watersheds assessed nationally as a result of the 2006 Energy and Water Development Appropriations Act. A draft report of the analyses directed by this Act lists among the highest priorities for the VR Watershed: control of invasive species, improved river function and an increase in water quality and quantity. The main goal of this project is to address these priorities for both watersheds.

Our objective is to reforest and stabilize the watersheds with native vegetation in order to restore them to pre-saltcedar condition and to reduce their susceptibility to other invasive plants. Doing so will reduce fire danger, increase water quality and quantity, remove an invasive species, and provide sustainable habitat for several protected species.

7 Studies on California Wildfires from 2001 to 2007 have shown that California's forests are dwindling due to permanent deforestation from devastating wildfires. In addition, they estimate that 134 million tons of carbon dioxide released by the fires and the decay of dead trees and the conversion to brush vegetation type will continue to worsen climate change, more so than automobiles and factory emissions. Although Nevada was not studied in this survey, climate types are similar and fire effects are the same. This project would help to decrease the devastation of wildfire, take it to a more natural regime and forest type, and increase overall forest and wildlife habitat health.

Stands of saltcedar will be removed using a combination of hand crews, mechanized mastication, herbicides and biological control. The tamarisk beetle was released in St. George Utah several years ago and is nearing the Nevada border. It is already present in the Virgin River Watershed in Utah and Arizona and it is only a matter of time before it reaches the Virgin River and Muddy River Watersheds in Nevada. This project will monitor the movement of the beetle into new watersheds. Removal of the saltcedar will reduce the fire danger and assist in restoring native species. Restoration efforts will be based in part on the findings of Restoring Riparian Habitats: Repairing and Stabilizing the Virgin River, which is a publication developed in Utah. Work within the Muddy River Watershed will reference a comprehensive upper Muddy River watershed assessment that the Nature Conservancy was contracted by Clark County to develop. This report was completed in 2005 and is considered the Final Report to the Clark County Multiple Species Habitat Conservation Plan.

Reforestation of the project areas will be completed using native cottonwoods, willows and other species. Nevada Division of Forestry's Las Vegas Nursery will assist with providing appropriate plant materials. Poles will also be harvested from nearby properties to assist in revegetation.

This project is a continuation of Utah Division of Forestry's successfully funded multi-state Virgin River Initiative from the last grant cycle, of which, Nevada Division of Forestry and Arizona State Forestry Division are the co-applicants. Components of this project that will occur in each state is as follows:

Nevada - Outreach and education efforts will be directed to private landowners and elected officials to increase participation levels in the project. As opportunities become available, assistance will be provided to landowners to

assist them in meeting their goals and objectives for their property by developing Forest Stewardship Plans. Along the Virgin River Watershed and Muddy River Watershed, approximately 300 acres will be restored to pre-saltcedar conditions, including disposal of woody slash and replanting with native species. The tamarisk beetle movement will be monitored as will various removal techniques (i.e. hand crew versus mastication) to determine what methods of saltcedar removal are most effective. The Muddy River area is eligible for participation in the Forest Legacy Program and outreach efforts will be incorporated into this project to determine if a future Forest Legacy project can be identified.

Utah - Efforts in Utah will focus on the restoration of the Virgin River Watershed in and around the greater St. George area. Acreage will be restored to pre-saltcedar conditions, woody slash disposed of and the area replanted with native species. The tamarisk beetle will be monitored.

Arizona - Efforts in Arizona will focus on the restoration of the Virgin River Watershed in and around Beaver Dam and Littlefield. Acreage will be restored to pre-saltcedar conditions, woody slash disposed of and the area replanted with native species. The tamarisk beetle will be monitored.

Program Integration	
8	<p>Maximum 1250 Characters Including Spaces</p> <p>This project incorporates several S&P Programs including Forest Stewardship, Forest Legacy, Fire Protection, Urban & Community Forestry, and Forest Health. The Forest Stewardship program will focus on promoting sustainable landscapes by working with landowners in developing stewardship plans. These plans have been shown to be successful because the landowner is directly involved in the management of their property. We will attempt to ID potential Forest Legacy projects along the Muddy River. The Fire Protection program will address fuel reduction in the WUI area of the project - the five communities in the project area have been rated high hazard in Nevada's Community Wildfire Protection Plan. The Urban & Community Forestry program will provide assistance to residents and municipalities in the form of workshops tailored to their needs and interests. The Forest Health program will be used in reforestation efforts in areas such as native species selection, erosion control, and tamarisk beetle monitoring. Working together, these five key programs will be able to meet the project goals by focusing each program's disciplines and combining them to achieve a holistic implementation of the plan and achieving the desired results.</p>

Collaboration	
9	<p>Maximum 1250 Characters Including Spaces</p> <p>The partners involved in this initiative have been selected based on their ability to contribute, their commitment to achieving defined goals, and their successful outcomes of past projects. MRREIAC and SNWA have been regional leaders in the restoration of the Muddy and Virgin Rivers, and VRCP and PIC are heavily involved with conservation issues in the watersheds. Collaboration with these groups gives this proposal the technical expertise necessary to provide tangible results. The states of Utah, Arizona and Nevada are in collaboration together because invasive species do not respect state boundaries. These states will be responsible for implementing desired practices and using their technical expertise. The Forestry Division's of these partners are very capable of handling projects of this scale. The NVFSC is involved because of the high fire danger and their willingness and ability to motivate and educate private landowners. NDOW and USFWS will provide consultation in respect to endangered species. The City of Mesquite will provide \$15,000 in match in labor and equipment on community property. Clark County and the BLM are partners because their existing projects will compliment this one.</p>

Leverage	
10	<p>Maximum 1250 Characters Including Spaces</p> <p>The work of other agencies and organizations will be leveraged to maximize the effectiveness of this project. For example, the Bureau of Land Management is also removing saltcedar along portions of the Virgin River. We will coordinate our efforts with them to ensure that our projects complement each other. The United States Fish and Wildlife Service and Nevada Department of Wildlife will be consulted to ensure that the project will enhance T&E habitat and to coordinate appropriate timing for treatment activities. The efforts of the Virgin River Conservation Partnership and Partners in Conservation are much larger than this project alone and will continue to benefit these Watersheds for years to come. Similarly, Southern Nevada Water Authority will be continually improving and enhancing the Muddy River Headwaters. Lastly, this project will be leveraged against similar on-going projects in the States of Utah and Arizona providing a regional benefit.</p>

Meaningful Scale	
11	<p>Maximum 1250 Characters Including Spaces</p> <p>Due to the multi-state aspect of this project, the overall benefit of a successful project will be felt at a regional scale, particularly the Virgin River portion. At a more localized level, efforts will be at the landscape level, focusing on the greater watershed. We feel this is the best way to meet the recommendations of the Virgin River draft report referenced in the project description. The watershed level is also the best approach based on the recommendations found within The Nature Conservancy's final report to the MSHCP. Working at the watershed level will provide the greatest impact, allowing us to meet our objectives which range from reducing the threat of fire, to habitat improvement, to promoting stewardship of the land.</p>

Sphere of Influence	
12	<p>Maximum 1250 Characters Including Spaces</p> <p>The issues that we hope to correct with this project extend beyond state boundaries into much of the Western United States. Control of saltcedar is of national concern and monitoring of the tamarisk beetle may provide important information to other land managers in the West. In addition, by utilizing various treatment methods we may be able to determine the best approach to saltcedar removal and its replacement with native species - specifically in the Mojave Desert, which is a unique area with special concerns. The project area is highly visible and is sure to receive attention in the communities along the Virgin and Muddy Rivers, and from tourists that visit Zion National Park and Lake Mead National Recreation Area. This visibility can help us educate residents and non-residents about the importance of saltcedar control.</p>

Sustainability of Outcomes	
13	<p>Maximum 1250 Characters Including Spaces</p> <p>Sustainability is a high priority of this project and is easily attainable given the nature of this proposal. Due to the expected presence of the tamarisk beetle it is very important to reintroduce riparian areas with native forest vegetation as tamarisk is removed. This will ensure that the once forested areas are on the most rapid trajectory towards full recovery. The reforestation of the riparian areas as well as the continued presence of the saltcedar leaf beetle will ensure that the value and contribution of the project will extend far past the project itself. In coming years, riparian areas along the Virgin and Muddy River will be covered with native forests once again, providing cooler stream temperatures, habitat for several protected species, bank stability, and shade for the citizens that inhabit adjacent towns. The urban & community forestry workshops proposed here will assist and educate municipalities about the importance of managing their urban trees. Forest Stewardship activities will be successful by promoting landowner involvement in the future of their lands.</p>