

Appendix B

Past, Present, and Reasonably Foreseeable Future Projects

Past, Present, and Reasonably Foreseeable Future Activities listed below are activities and natural events known to have already happened, are currently happening, or likely to happen within the analysis area boundaries for this project. This appendix lists projects and activities that are within one or more of the Cumulative Effects Analysis Areas for the resources listed below. The Analysis Area boundaries are depicted in Figure B-1

1. Vegetation
2. Wildlife
3. Botanical Resources
4. Watershed
5. Heritage Resources

This analysis relies on current environmental conditions as a proxy for the impacts of past actions—the reason is to understand the contribution of past actions to the cumulative effects of the Moonlight and Wheeler Fires Recovery and Restoration proposed action and alternatives. The current conditions reflect the aggregate impact of prior human actions that have affected the environment and might contribute to cumulative effects.

This appendix is organized by Past Projects, Present and Ongoing Projects, and Future Projects. The projects and activities associated with specific resources are listed under each category. The sections below present past vegetation management projects on public and private lands; wild fires; watershed improvement projects; wildlife projects; herbicide treatments; and present, on-going, and reasonably foreseeable future projects. For each resource area, the scale and boundaries for the cumulative effects analysis vary—these are described in Chapter 3 of the Moonlight and Wheeler Fires Recovery and Restoration Project Draft Environmental Impact Statement (2008).

PAST PROJECTS

Past Forest Service Vegetation Management Projects

A total of 71 aspen stands, on approximately 194 acres, were treated between 1988 and 2007. Table B-1 lists the acres of past vegetation management actions on public lands, by activity.

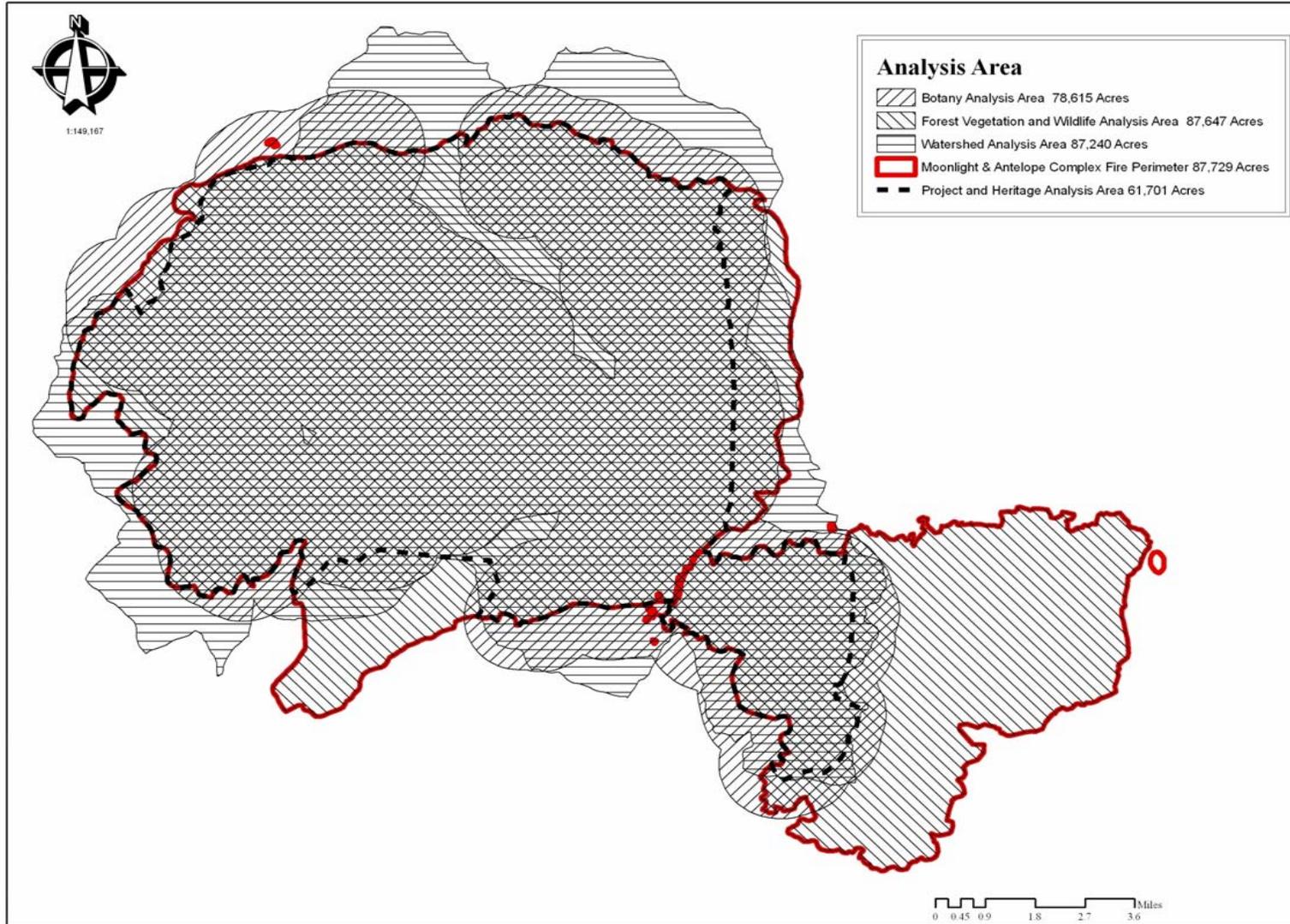


Table B-1. Forest Service vegetation management activities between 1974 and 2005 that occurred in the four resource analysis areas (combined) for the Moonlight and Wheeler Project.

Description of Forest Service Activity	1974	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Activity Fuels Underburn									53	57			345	
Area release and weeding										13				
Burn of Activity Fuels Piles					40			79						5
Burning site preparation for planting														
Commercial Thinning							159	190	5	77			20	171
Mechanical site preparation for planting														
Other site preparation for planting														
Overstory removal cut (from advanced regeneration)		624					83	48				98	25	1,230
Piling of Activity Fuels														
Precommercial thinning - individual or selected trees			570	8								75	114	377
Precommercial thinning or cleaning need addition														
Rearrangement of Activity Fuels														
Salvage cut (intermediate treatment, not regeneration)														
Sanitation Cut													91	257
Seed-tree seed cut													14	
Shelterwood final removal cut	464						50							
Single-tree selection cut														441
Site preparation for natural regeneration													63	3
Site preparation for planting					18	345	66	49	9				10	
Special Cut														
Stand clearcutting - Salvage Mortality					25		9							
Stand clearcutting (w/reserves)								61		20	6	89	67	
Stand Clearcutting					34			18						
Grand Total	464	624	570	8	117	345	367	445	67	167	6	262	749	2,484

Table B-1. Forest Service vegetation management activities between 1974 and 2005 that occurred in the four resource analysis areas (combined) for the Moonlight and Wheeler Project (continued).

Description of Forest Service Activity	1992	1993	1994	1995	1996	1997	2000	2001	2002	2003	2004	2005	Grand Total
Activity Fuels Underburn											60		60
Area release and weeding													455
Burn of Activity Fuels Piles								4				136	153
Burning site preparation for planting	8												132
Commercial Thinning			20	173	113	744							1,050
Mechanical site preparation for planting				71									693
Other site preparation for planting									12				12
Overstory removal cut (from advanced regeneration)	209												2,317
Piling of Activity Fuels							4				1,922		1,926
Precommercial thinning - individual or selected trees	270	80	344		263	215							2,316
Precommercial thinning or cleaning need addition							278						278
Rearrangement of Activity Fuels						50							50
Salvage cut (intermediate treatment, not regeneration)										733	4,573	2,653	7,959
Sanitation Cut			29										377
Seed-tree seed cut													14
Shelterwood final removal cut													514
Single-tree selection cut	66												507
Site preparation for natural regeneration													66
Site preparation for planting													497
Special Cut							1,096						1,096
Stand clearcutting - Salvage Mortality				71									105
Stand clearcutting (w/reserves)													243
Stand Clearcutting													52
Grand Total	553	80	393	315	376	1,009	1,378	4	12	733	6,555	2,789	20,873

Past Vegetation Management Projects on Private Lands

Table B-2 lists the acres of past vegetation management actions on private lands, by activity.

Table B-2. Private harvest activities in watershed analysis area.

Activity	Acres of Activity by Treatment Year												
	1982	1993	1994	1996	1999	2000	2001	2002	2004	2005	2006	2007	2008
Clearcut	14						16	5			162		
Commercial thin							56						
Modified selection		130								80			
Salvage				60								3,488	2,288
Selection			1,146	1,510	1,115			1,555	6	3,570	1,775	154	
Shelterwood removal		60			20	25		36	4				
Transition		16											

Past Wildfires

There have been approximately 103,000 acres of wildfires within the Moonlight and Wheeler Recovery and Restoration analysis areas since 1917. 87,700 of those acres were the result of the Moonlight and Wheeler fires of 2007. There were 22 fires for 101,005 acres in the wildlife analysis area, 17 fires for 98,530 acres in the botany analysis area, 23 fires for 102,470 acres in the hydrology analysis area, and 11 fires for 88,866 acres in the heritage analysis area. These fires ranged in size from .04 to 64,991 acres with an average size of nearly 2,000 acres.

Past Watershed Improvement Projects

- 2007 Post Moonlight Fire Burned Area Emergency Response (BAER) treatments—helicopter straw mulching and mastication of burned submerchantable trees to reduce sedimentation from burned hill slopes.
- 2001 Post Stream Fire Burned Area Emergency Response (BAER) treatments — to reduce sedimentation from burned hill slopes. Treatments included contour falling, hydroseed application, and straw wattle placement.
- Early 1990s Bank stabilization on Indian Creek, several miles below the Dam. Root wads keyed into bank. Willow Creek plug/pond activities.

Past Wildlife Projects

Table B-3. Wildlife projects within the Wildlife Analysis Area between 1983 and 1997.

Project Type	Year	Description
Eight moat type islands	1988	Within Little Antelope Creek Meadow
Check dam installation	1991	Little Antelope Creek
Check dam repair	1997	Little Antelope Creek
Exclosures	1985	Upper Indian Creek
Exclosures	1987	Pachyderm aspen exclosure
Exclosures	1988	Two structures at Antelope Lake for WIFL
Exclosures	1990	Red Light aspen
Vegetation management (excluding aspen)	1983	Cottonwood planting and protection (lower Indian Creek)
Vegetation management (excluding aspen)	1983	Browse way creation, Cairn Butte
Vegetation management (excluding aspen)	1985	Willow plugs, Pierce Creek
Vegetation management	1987	Aspen/willow plant, cottonwood protection, lower Indian Creek
Fish habitat improvement	1986	Log/Bank deflectors - Upper Indian Creek
Fish habitat improvement	1986	Rock rip rap Lower Indian Creek
Fish habitat improvement	1987	Rock rip rap Lower Indian Creek
Fish habitat improvement	1990	Rock rip rap Lower Indian Creek
Fish habitat improvement	1991	Two fish ladders on upper Indian Creek
Fish habitat improvement	1991	Ten instream log plunge structures in side tributary to upper Indian Cr
Fish habitat improvement	1991	Log/riprap structure on Lower Indian Creek

PRESENT AND ONGOING PROJECTS

Present and Ongoing Recreation, Lands, and Minerals Projects

Recreation activities	Dispersed recreation use is moderate in the project area. Season of use is generally May through November, with activities including camping, hiking, hunting, horseback riding, mountain biking, off-highway vehicle riding, fishing, firewood cutting, wildflower viewing, and rock hounding, by individuals and small groups. January and February may see light use of snowmobile and cross-country skiing activities in the area.
Recreation site maintenance	Developed recreation site maintenance requires hazard tree removal, pile burning, replacing signs, fire rings, tables, and older buildings.
Trail maintenance	There is approximately 17 miles of non-motorized trails within the project area. Annual trail maintenance work consists of clearing hazard trees, maintaining water bars or other erosion control devices, and maintaining and replacing signs. Work is typically accomplished by force account crews and volunteers.

Personal use woodcutting permits	<p>Woodcutting for personal use is permitted throughout the Plumas National Forest. The following is a list of the number of personal use permits sold on the Mt. Hough Ranger District for the past five years. It is estimated that 3 percent of the District's permit sales are within the Moonlight and Wheeler Project Area.</p> <p>2001 – 998 permits for 2,572 cords 2002 – 938 permits for 2,401 cords 2003 – 819 permits for 2,154 cords 2004 – 758 permits for 2,400 cords 2005 – 942 permits for 2478 cords 2006 – 978 permits for 2651 cords 2007 – 960 permits for 2493 cords</p>
Commercial use woodcutting permits	<p>The following is a list of the number of commercial permits sold on the Mt. Hough Ranger District for the past five years. It is estimated that 3 percent of the District's commercial permit sales are within the Moonlight and Wheeler Project Area.</p> <p>2001 – 17 permits for 160 cords 2002 – 15 permits for 135 cords 2003 – 15 permits for 90 cords 2004 – 19 permits for 95 cords 2005 – 66 permits for 322 cords 2006 – 83 permits for 329 cords 2007 – 107 permits for 372 cords</p>
Christmas tree permits	<p>It is estimated that 5 percent of the Mt. Hough Ranger District's permit sales are within the Moonlight and Wheeler Project Area.</p> <p>2001 – 2,062 permits 2002 – 2,348 permits 2003 – 2,124 permits 2004 – 2,124 permits 2005 – 2,235 permits 2006 – 2,806 permits 2007 – 2,651 permits</p>
Abandoned mines	<p>Approximately 12 abandoned mineshafts exist within the project area. Open shafts may pose a direct hazard to forest users, Forest Service personnel, and Forest Service contractors.</p>
Active mining claims	<p>There are approximately 302 active mining claims in the project area. The Mt. Hough Ranger district currently administers five active plans of operation and eight notices of intent for those active claims.</p>
Special uses	<p>There are three special uses that occur in the Project Area. These include power lines, recreation events, and campground concession operations. These forest uses require annual maintenance for access, fire protection, and hazard tree removal.</p>

Present and Ongoing Grazing Activities

Table B-4. Present and ongoing grazing activities in the Moonlight and Wheeler Project Area.

Allotment	Number of Acres	Acres within Analysis Area	Status		
			Status/Kind	Number	Season
Antelope	24,872	6,474	Active/Cattle	207	6/14–10/8
Lone Rock	26,815	26,815	Active/Cattle	116	7/16–9/15
Antelope Lake	5,043	2,551	Active/Cattle	150	9/3–10/4
Taylor Lake	26,718	19,968	Vacant/Sheep	—	—
Hungry Creek	17,774	17,589	Vacant/Sheep	—	—
Jenkins	27,366	3,251	Active/Cattle	600	8/1–9/1
Clarks Creek	16,635	12,446	Active/Cattle	207	6/1-10/1
Lights Creek	29,721	25,477	Active/Cattle	24	6/1–9/1
Bass	2,122	260	Active/Cattle	64	6/1-9/30
Doyle	5,067	230	Active/Cattle	100	6/1-9/15
Fitch Canyon	17,871	53	Active/Cattle	317	6/3-9/2

FUTURE PROJECTS

Future Fuels and Vegetation Management Projects within the Moonlight and Wheeler Project Area

- Greenflat Underburn Project** 1,000 acres of underburning to be initiated in 2008 and completed over 3–5 years as weather, burn conditions, and resource levels allow.
- Campgrounds** Fuels and fire personnel may work with recreation staff to develop a hazard tree and ladder fuel removal program in campgrounds. This will likely involve using fire crews to fall and remove (chip or pile burn) suppressed trees and snags from all developed campgrounds and possibly other high use sites on an “as needed” basis.
- Moonlight Roadside Hazard Project** About 120 miles of roadside hazard tree removal. It is anticipated to be implemented in the Fall of 2008.
- North Moonlight Fire Salvage** About 200 acres of fire salvage on the Lassen National Forest. It is anticipated that this would be implemented in the Summer of 2008.
- Antelope Fire Reforestation** About 1,000 acres of reforestation on portions of the Antelope Complex fire. It is anticipated that this would be implemented in 2008.
- Antelope Complex and Moonlight Fire Reforestation** About 7,000 acres of reforestation on portions of the antelope Complex and Moonlight fires. These are areas not included in the Moonlight and Wheeler Fires Recovery and Restoration Project. It is anticipated that this would be implemented in 2009 and 2010.

Future HFQLG Projects

Table B-5. Future HFQLG Projects that are within one or more of the Resource Analysis Areas of the Moonlight and Wheeler Recovery Project.

Project	Year Planned
Wildcat DFPZ and ITS on MHRD (About 75 acres are within an analysis area)	2009
Keddie Project on the Mt. Hough Ranger District, Plumas National Forest. (About 80 acres are within an analysis area)	2009

Future Watershed Treatments

A half mile portion of FS road 28N03 will be re-routed due to a landslide. The road beneath the landslide will be decommissioned and return to a natural condition.

Anticipated BAER Activities

- Headcut stabilization – Modification of a channel obstruction.
- Helimulch – About 1200 acres of straw mulching utilizing a helicopter in Bear Valley/Morton Cree, Middle Lights, and Willow Creek watersheds.
- Mastication – About 700 acres of mastication in East Branch Lights Creek, Hungry, Lone Rock, and Smith/Fant watersheds.

Future Grazing Activities

A forestwide Range NEPA (*National Environmental Policy Act*) Strategy and Implementation Plan was signed by the Forest Supervisor on December 16, 2005. This plan will analyze and document range NEPA projects on all 65 allotments on the Plumas National Forest and is currently posted on the Plumas National Forest Schedule of Proposed Actions (the “SOPA”).

Future Recreation, Lands, and Minerals Projects

Table B-6. Future recreation, lands, and minerals projects.

Year	Future Activities	Activity Description
2008	OHV Route Designation	The USDA Forest Service is currently undergoing an off-highway vehicle (OHV) route designation process. By 2008, the Plumas National Forest will have established a designated OHV route system based on existing non-system and system trails on the Forest. It is likely that a number of non-system routes in the Moonlight and Wheeler Project Area will be decommissioned or closed.
2008–2010	Land conveyance	In order to sustain funding under the <i>Secure Rural Schools and Community Self-Determination Act</i> , the Forest Service may authorize the conveyance of parcels of forest land that are isolated or inefficient to manage.
2008–2009	Wind energy testing sites and meteorological towers	Four wind energy sites and meteorological towers have been installed in the Moonlight and Wheeler project area for wind energy testing.