



Management Area 12. Cottonwood Creek Location Map

## Management Area 12 Cottonwood Creek

### MANAGEMENT AREA DESCRIPTION

**Management Prescriptions** - Management Area 12 has the following management prescriptions (see map on preceding page for distribution of prescriptions).

Management Prescription Category (MPC)	Percent of Mgt. Area
3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial & Hydrologic Resources	45
6.1 – Restoration and Maintenance Emphasis within Shrubland & Grassland Landscapes	55

**General Location and Description** - Management Area 12 is comprised of National Forest System lands within the northeastern end of the Cassia Division on the Minidoka Ranger District. The entire area lies in Cassia County, and the nearest large communities are Oakley to the southeast, Burley to the northeast, and Twin Falls to the northwest. The management area is an estimated 49,900 acres, including a few small private land inholdings that make up less than one percent of the area. The area is bordered by Sawtooth National Forest to the south and west, and by primarily BLM land to the north and east. The primary uses in this area have been livestock grazing, developed and dispersed recreation, and timber management.

**Access** - The main access route into the area is graveled Forest Road 500 west from Oakley up Little Cottonwood Canyon to Hudson Ridge. Forest Road 528 accesses Big Cedar Canyon. Other roads in the area are native-surfaced and rough. There are few trails in the area, and most are in or near Big Cottonwood Canyon.

The Oakley-Rogerson Road (FDR 500) is to be a candidate for improvement from gravel to paved surface under the Public Forest Service Road system. This road provides access to Cottonwood Canyon, Hudson Ridge, and eventually to Rock Creek Forks from Oakley, Idaho. The density of classified roads in the management area is an estimated 1.8 miles per square mile. Total road density for area subwatersheds ranges between 1.2 and 2.7 miles per square mile.

**Special Features** - The dominant geographical features in the area are the rim-rock canyons and the ridges that separate them, particularly Cottonwood and Hudson Ridges. The Bostetter Guard Station is a historic site. The Idaho Department of Fish and Game operates the Big Cottonwood Canyon Wildlife Management Area adjacent to the Forest boundary. Big Cottonwood Creek has a Yellowstone cutthroat trout fishery. The Cottonwood Inventoried Roadless Area comprises an estimated 23 percent of the management area.

**Air Quality** - This management area lies within Montana/Idaho Airshed ID-25 and Cassia County. Particulate matter is the primary pollutant of concern related to Forest management. The closest ambient air monitor is located in Twin Falls. It is used to obtain current background

levels, trends, and seasonal patterns of particulate matter. The Jarbidge Wilderness in Nevada is the only Class I area within 100 kilometers. The IMPROVE monitoring site has been in operation since 1988 and provides trend and visibility data for this Class I area.

Between 1995 and 1999, emissions trends in Cassia County improved for PM 10, while PM 2.5 emissions remained constant. The most common source of particulate matter in the county was fugitive dust from unpaved roads and agricultural activities such as tilling. In addition to Forest management activities, crop residue and ditch burning may contribute to particulate matter emissions. The amount of agricultural-related burning in Cassia County was among the highest in the state (over 22,500 acres). There were no point sources located in Cassia County.

**Soil, Water, Riparian, and Aquatic Resources** - Elevations range from around 4,300 feet at the Forest boundary to 7,484 feet atop Fuller Peak. Management Area 12 lies primarily within two subsections: Humboldt River High Plateau and Southern Idaho Plateau. The dominant landforms are fluvial mountains, plateaus and escarpments, and depositional lands. Slope gradients range from 40 to 70 percent on the fluvial mountains, 0 to 30 percent on the plateaus and depositional lands, to near vertical on the escarpments. Volcanic basalts dominate the surface geology, with some inclusions of sedimentary materials. Soil surface erosion potential is low to moderate, and soil productivity is generally moderate. Subwatershed vulnerability ratings for this area are all low (see table below). Geomorphic Integrity ratings for the subwatersheds vary from moderate (functioning at risk) to low (not functioning appropriately) (see table below). Localized areas have impacts from roads, livestock grazing, and dispersed recreation. Impacts include accelerated erosion, upland compaction, and stream bank and channel modification.

The management area is comprised of portions of the Cottonwood Creek and Sawmill-Little Cottonwood Watersheds that drain north and east into the Goose Creek Subbasin, which flows north into the Snake River Basin. The main streams in the area are Big Cottonwood Creek, Little Cottonwood Creek, and the perennial stream in Big Cedar Canyon. No lakes or reservoirs occur in the area. Water Quality Integrity ratings for the subwatersheds vary from high (functioning appropriately) to low (not functioning appropriately) (see table below). Localized areas have accelerated sediment from roads, livestock grazing, and dispersed recreation. Upper Big Cottonwood Creek subwatershed was listed in 1998 as having an impaired water body under Section 303(d) of the Clean Water Act. The pollutant of concern was unknown. There are no TMDL-assigned subwatersheds associated with this management area.

Subwatershed Vulnerability			Geomorphic Integrity			Water Quality Integrity			No 303(d) Subs	No. Subs With TMDLs	No. Public Water System Subs
High	Mod.	Low	High	Mod.	Low	High	Mod.	Low			
0	0	6	0	3	3	1	2	3	1	0	0

No currently listed threatened or endangered fish species occur in the area. Big Cottonwood Creek subwatershed supports a strong local population of pure-strain Yellowstone cutthroat trout. It also has an isolated local population of native cutthroat that, if lost, could extirpate that metapopulation of cutthroat. Aquatic habitat is functioning at risk in localized areas due to sedimentation impacts from livestock grazing and dispersed recreation. The Upper Big

Cottonwood Creek subwatershed is important to maintaining or restoring strong populations of Yellowstone cutthroat trout and is considered a high-priority area for restoration.

**Vegetation** - An estimated 87 percent of the management area is non-forested, or covered by grasslands, shrublands, meadows, rock, or water. Much of this area is comprised of the Mountain Big Sagebrush, Basin Big Sage, and Low Sage cover types. The dominant forested vegetation groups are Persistent Lodgepole Pine (8 percent), Pinyon-Juniper (1 percent), and Aspen (5 percent).

The Low Sage group is properly functioning, although the herbaceous component could be increased to enhance diversity and maintain historic fire return intervals. The Mountain Big Sagebrush and the Basin Big Sage groups are functioning at risk due to fire exclusion and livestock grazing impacts, which have altered structure and species composition. Fire exclusion and livestock grazing have allowed canopy cover to increase, which has reduced the understory herbaceous cover. The bitterbrush component is being replaced by cheatgrass and other introduced species.

The Persistent Lodgepole Pine group is functioning at risk because fire exclusion has resulted in older, more decadent stands with more shade-tolerant subalpine fir and less early seral species, particularly aspen and lodgepole pine. Aspen is present in pure stands and mixed with subalpine fir and lodgepole pine; however, some stands are dying out or being replaced by conifers. Older aspen stands are not regenerating. Fire hazard is increasing in conifer stands due to increasing mortality from insect and disease infestations. The Pinyon-Juniper group is not functioning properly in some areas due to fire exclusion and grazing impacts that have allowed older stands to dominate, with fewer younger trees and herbaceous plants than desirable.

Riparian vegetation is functioning at risk in localized areas due to grazing and dispersed recreation impacts, and fire exclusion. In some areas, introduced grasses and noxious weeds are replacing native plants. Cottonwood and willow communities are becoming old and decadent, and are not regenerating due to fire exclusion and/or livestock use. Snag levels are likely at historic levels in most areas due to limited access for fuelwood gathering.

**Botanical Resources** - Currently, no known populations of Region 4 Sensitive species occur within this management area; however one Watch species, Simpson's hedgehog cactus, is known to occur here. No federally listed or proposed plant species are known to occur in the area, but potential habitat exists for Ute ladies'-tresses and slender moonwort. Ute ladies'-tresses, a Threatened species, may have moderate potential habitat in riparian/wetland areas from 1,000 to 7,000 feet. Slender moonwort, a Candidate species, may occur in moderate to higher elevation grasslands, meadows, and small openings in spruce and lodgepole pine.

**Non-native Plants** – Black henbane, diffuse knapweed, and musk thistle occur in the area, especially along travel corridors and in areas of high activity. The main weeds of concern are black henbane and diffuse knapweed, which occur in small, scattered populations. The spread of cheatgrass is also a concern, particularly below 6,000 feet. An estimated 21 percent of the area is highly susceptible to noxious weed and exotic plant establishment and spread.

**Wildlife Resources (Updated** as part of the 2012 WCS amendment) - Low-elevation sagebrush and grassland communities provide habitat for greater sage-grouse, pygmy rabbit, Swainson's hawk, ferruginous hawk and Columbian sharp-tailed grouse and winter range for mule deer. Higher elevation sagebrush provides sage grouse brood rearing habitat and some mule deer winter range. The rim-rock canyons are home to California bighorn sheep and wild turkey, introduced in the late 1980s, and offer peregrine falcon nesting habitat. Nesting and foraging habitats for other Region 4 Sensitive species, including goshawk, flammulated owl, spotted bat and Townsend's big-eared bat, are found in the mid-elevation forests. High-elevation forests provide mule deer summer range and habitat for south hills crossbill. Aspen and cottonwood riparian corridors provide Lewis' woodpecker habitat and habitat for yellow-billed cuckoo can also be found in cottonwood riparian areas with dense understory vegetation. Bald eagles occasionally roost during the winter along Cottonwood Creek. Other species present throughout the area include migratory landbirds, mountain lion, ruffed grouse, golden eagle, long-eared owl, and a small population of elk. This area is within the Central Idaho Wolf Recovery Area, but wolves are not currently known to occur here.

Terrestrial habitat is functioning at risk in some areas due primarily to human-caused disturbance, introduction of invasive species, grazing impacts, changes in the fire cycle and high road densities. Increasing recreation has increased disturbance to wildlife populations year-round. Frequent human-caused fires and the spread of cheat grass are reducing the amount and quality of sage grouse and deer habitat, especially winter range. As a result, sage grouse populations remain in decline. Fire exclusion is impacting other terrestrial habitats, including aspen. Bighorn sheep populations are believed to be declining due to disease transmission from domestic sheep and losses from predation. Current livestock grazing in some areas is not allowing localized areas of historic grazing impacts to recover. Habitat fragmentation from roads, development, and fire is moderate to high.

The area is not within any of the five Canada lynx geographic areas, as identified in the Canada Lynx Conservation and Strategy (2000); and therefore LAUs and lynx habitat mapping were not developed for the area. Consultation for Canada lynx on the Sawtooth NF was completed in 2003 and the US Fish and Wildlife Service concurred with the Forest's findings for lynx. Forest-wide management direction relative to the lynx does not apply in this management area.

Idaho's Comprehensive Wildlife Conservation Strategy (CWCS) was completed in 2005 and provides a framework for conserving 'Species of Greatest Conservation Need' (SGCN), designated by the State, and the habitats upon which they depend. The Forest assisted the State in identifying focal areas, or areas known to be important for SGCN. The Management Area falls within the South Hills designated focal area, or biologically important area. This designation was given to the area due to its exceptional diversity of SGCN based on species' richness models and is identified as core habitat for terrestrial wildlife species including sage grouse, south hills crossbill and California bighorn sheep.

**Recreation Resources** - Management Area 12 has two developed campgrounds—Bostetter and Father and Son—with a total of 37 units. The rest of the area offers year-round dispersed recreation opportunities, including camping, hunting, fishing, horseback riding, snowmobiling, off-road vehicle use, and mountain biking. The area is in Idaho Fish and Game Management Unit 54. Most users come from the Oakley and Burley areas. Most of the trails in the area are

open to some form of motorized use. There is one special use authorization in the area for an outfitter and guide operation for mountain lion hunting.

**Cultural Resources** - Cultural themes in this area include prehistoric, ranching, and Forest Service administration. Prehistoric use is evident in high site density, usually lithic scatters representing quarrying and hunting activities. Naturally occurring ignimbrite/obsidian is abundant in the area. The nearby Goose Creek area has been used by Shoshone-Bannock and Goshute Tribes for hunting, camping, gathering of pine nuts, and travel to winter camps near Fort Hall. Cattle and sheep have grazed this area since the late 1800s. Bostetter Guard Station, constructed in 1906, is potentially eligible for the National Register of Historic Places.

**Timberland Resources** - Of the estimated 4,100 tentatively suited acres in this management area, 600 acres have been identified as being suited timberlands, or appropriate for timber production. This represents less than 1 percent of the Forest's suited timberland acres. The suited timberland acres are found in MPC 4.2, as shown on the map displaying the MPCs for this management area. Lands within MPCs 2.2 and 3.2 are identified as not suited for timber production. Forest management practices include small sales, precommercial thinning, reforestation of commercial and recreation sites, aspen enhancement, wildland fire fuels reduction, and vegetation management plans for developed recreation sites. Forest products such as fuelwood, posts, poles, and ornamentals are also collected in designated areas.

**Rangeland Resources** - The area contains portions of four cattle allotments: Coal Pit, Ridgeline, Big Hollow, and Cottonwood. The area provides 29,100 acres of capable rangeland, which represents about 5 percent of capable rangeland on the Forest. The Cottonwood C&H Allotment has been in non-use status since 1989, and most of the allotment is closed to livestock grazing.

**Mineral Resources** - Although numerous patented mining claims exist, current mining activity is low, and consists mainly of recreational rock collecting. The potential for mineral development is considered low.

**Fire Management** - Wildfires have burned about 5 percent of the management area in the last 15 years. No National Fire Plan communities or wildland-urban interface subwatersheds occur within the area. Historical fire regimes for the area are estimated to be 8 percent lethal and 92 percent mixed 1 or 2. None of the area regimes has vegetation conditions that are highly departed from their historical range. However, 38 percent of the area regimes have vegetation conditions that are moderately departed from their historical range. Wildfire in these areas may result in larger patch sizes of high intensity or severity.

**Lands and Special Uses** – See the Recreation Resources section for recreational special uses.

## MANAGEMENT DIRECTION

In addition to Forest-wide Goals, Objectives, Standards, and Guidelines that provide direction for all management areas, the following direction has been developed specifically for this area.

Resource/Program	Direction	Number	Management Direction Description
<b>MPC 3.2 Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources</b>	General Standard	1201	Management actions, including salvage harvest, may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary (up to 3 years) or short-term (3-15 years) time periods, and must be designed to avoid degradation of existing conditions in the long-term (greater than 15 years).
	Vegetation Standard	1202	Vegetative restoration or maintenance treatments—including wildland fire mechanical, and prescribed fire—may only occur where they: a) Maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or b) Maintain or restore habitat for native and desired non-native wildlife and plant species; or c) reduce risk of impacts from wildland fire to human life, structures, and investments. ( <b>Modified</b> as part of the 2012 WCS amendment)
	Vegetation Standard	1238	Mechanical vegetation management activities, including salvage harvest, shall retain all snags >20 inches dbh and at least the maximum number of snags depicted in Table A-6 within each size class where available. Where large snags (>20 inches dbh) are unavailable, retain additional snags ≥10 inches dbh where available to meet at least the maximum total number of snags per acre depicted in Table A-6. <sup>1</sup> ( <b>Added</b> as part of the 2012 WCS amendment)
	Road Standard	1203	Road construction or reconstruction may only occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty, or c) To support aquatic, terrestrial, and watershed restoration activities, or d) To address immediate response situations where, if the action is not taken, unacceptable impacts to hydrologic, aquatic, riparian or terrestrial resources, or health and safety, would result.
	Fire Guideline	1204	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize suppression strategies and tactics that minimize impacts on aquatic, terrestrial, or watershed resources.
<b>MPC 6.1 Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes</b>	Vegetation Standard	1239	For commercial salvage sales, retain at least the maximum number of snags depicted in Table A-6 within each size class where available. Where large snags (>20 inches dbh) are unavailable, retain additional snags ≥10 inches dbh where available to meet at least the maximum total number of snags per acre depicted in Table A-6. <sup>2</sup> ( <b>Added</b> as part of the 2012 WCS amendment)

<sup>1</sup> This standard shall not apply to management activities that an authorized officer determines are needed for the protection of life and property during an emergency event, to reasonably address other human health and safety concerns, to meet hazardous fuel reduction objectives within WUIs, to manage the personal use fuelwood program, or to allow reserved or outstanding rights, tribal rights or statutes to be reasonably exercised or complied with.

<sup>2</sup> This standard shall not apply to activities that an authorized officer determines are needed for the protection of life and property during an emergency event, to reasonably address other human health and safety concerns, to meet hazardous fuel reduction objectives within WUIs, or to allow reserved or outstanding rights, tribal rights or statutes to be reasonably exercised or complied with.

Resource/Program	Direction	Number	Management Direction Description
<b>MPC 6.1 Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes</b>	Vegetation Guideline	1205	The full range of vegetation treatment activities may be used to restore or maintain desired vegetation and fuel conditions. The available vegetation treatment activities include wildland fire. Salvage harvest may also occur. ( <b>Modified</b> as part of the 2012 WCS amendment)
	Road Guideline	1206	Road construction or reconstruction may occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty, or c) To achieve restoration and maintenance objectives for vegetation, water quality, aquatic habitat, or terrestrial habitat; or d) To meet access and travel management objectives.
	Road Guideline	1240	Public motorized use should be restricted on new roads built to implement vegetation management projects. Effective closures should be provided in road design. When the project is over, these roads should be reclaimed or decommissioned, if not needed to meet future management objectives. ( <b>Added</b> as part of the 2012 WCS amendment)
	Fire Guideline	1207	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize strategies and tactics that minimize impacts to habitats, developments, and investments.
<b>Soil, Water, Riparian, and Aquatic Resources</b>	Objective	1208	Maintain or restore habitat for pure-strain Yellowstone cutthroat trout in the Upper Big Cottonwood Creek subwatershed.
	Objective	1209	Reduce accelerated erosion and sediment delivery to Big Cottonwood Creek from Big Cottonwood Trail.
	Objective	1210	Restore ground cover and reduce soil erosion in the Pinyon-Juniper vegetation group in Big and Little Cedar Canyon drainages.
	Objective	1211	Work with DEQ and EPA to validate the authenticity and cause(s) for listing Upper Big Cottonwood Creek 303(d) as an impaired water body, and determine any Forest Service management activities that may be contributing to the listing.
<b>Vegetation</b>	Objective	1212	Maintain and restore early seral aspen and lodgepole pine components within the Persistent Lodgepole Pine vegetation group, as described in Appendix A, in the southern portion of the management area.
	Objective	1213	Restore and maintain desired size class structure and diversity in the Aspen vegetation group, as described in Appendix A, by promoting regeneration.
	Objective	1214	Restore lodgepole pine stands in the southwest quarter of the management area, creating a mosaic pattern of stands that will begin approaching the desired conditions for species composition, tree size classes, and stand structure, as described in Appendix A.
	Objective	1215	Restore shrub composition in the Low Sage, Basin Big Sage, and Mountain Big Sagebrush cover types; with emphasis on improving wildlife winter ranges in areas degraded by increasing juniper cover.
	Objective	1216	Restore open grassland conditions with desired ranges of native grasses and forbs in Big and Little Cedar Canyon juniper stands by reducing mature juniper stands.
	Objective	1217	Restore willow and cottonwood communities in Big Cottonwood Creek to improve wildlife habitat and vegetation diversity.
<b>Botanical Resources</b>	Objective	1218	Maintain or restore populations and occupied habitat of TEPCS species, including Simpson's hedgehog cactus, to contribute to their long-term viability of these species.



Resource/Program	Direction	Number	Management Direction Description														
<b>Botanical Resources</b>	Objective	1219	Emphasize reducing black henbane and diffuse knapweed within TEPCS plant actual and potential habitat.														
	Guideline	1220	Coordinate grassland/shrubland restoration, prescribed fire, and non-native plant eradication with a Forest botanist to minimize impacts to TEPCS plant species, potential habitat, and pollinators.														
<b>Non-native Plants</b>	Objective	1221	Contain and reduce infestations of cheatgrass in areas below 6000 feet in elevation.														
	Objective	1222	Control or contain black henbane, diffuse knapweed, and other noxious weeds in the area.														
<b>Wildlife Resources</b>	Objective	1223	Maintain or restore bald eagle wintering habitat along Big Cottonwood Creek.														
	Objective	1224	Reduce the risk of disease transmission between bighorn sheep and domestic sheep.														
	Objective	1241	Reduce impacts on wildlife habitat from roads through re-location, reduction of redundant routes, and removal and rehabilitation. ( <b>Added</b> as part of the 2012 WCS amendment)														
	Guideline	1225	Management actions in sage grouse habitat should be designed to meet desired conditions for sagebrush, as described in Appendix A. Where greater than 40 percent of the sage grouse habitat in the management area has less than 10 percent canopy cover, management actions should be designed to maintain or restore cover conditions.														
<b>Recreation Resources</b>	Objective	1226	Develop a recreation management strategy for the Cassia Division that includes addressing access concerns for Forest Service Road 500 and enhancement opportunities for the Father and Sons and Bostetter Campgrounds.														
	Objective	1227	Develop more ATV trail opportunities and curtail inappropriate ATV use of single-track trails to provide motorized recreation opportunities while reducing ATV impacts on other resources.														
	Objective	1228	Achieve or maintain the following ROS strategy: <table border="1" data-bbox="678 1241 1386 1423"> <thead> <tr> <th rowspan="2">ROS Class</th> <th colspan="2">Percent of Mgt. Area</th> </tr> <tr> <th>Summer</th> <th>Winter</th> </tr> </thead> <tbody> <tr> <td>Semi-Primitive Motorized</td> <td>54%</td> <td>94%</td> </tr> <tr> <td>Roaded Natural</td> <td>24%</td> <td>6%</td> </tr> <tr> <td>Roaded Modified</td> <td>22%</td> <td>0%</td> </tr> </tbody> </table> <p>The above numbers reflect current travel regulations. These numbers may change as a result of future travel regulation planning</p>	ROS Class	Percent of Mgt. Area		Summer	Winter	Semi-Primitive Motorized	54%	94%	Roaded Natural	24%	6%	Roaded Modified	22%	0%
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Objective	1229	Implement the Cassia Division Interpretative Plan to enhance visitor education opportunities and recreation experiences.															
<b>Timberland Resources</b>	Objective	1230	Designate firewood-gathering areas to maintain snag and large woody debris components in forested vegetation for wildlife and aquatic habitat, and soil stability and productivity.														
	Objective	1231	Provide for commercial harvest opportunities associated with restoration activities in the upper third of the management area.														
<b>Rangeland Resources</b>	Objective	1232	Whenever possible, modify developed springs and other water sources to restore free-flowing water and wet meadows in sage grouse habitat.														
	Guideline	1233	When constructing or reconstructing fences, design or relocate them to avoid potential sage grouse mortality near leks.														

Resource/Program	Direction	Number	Management Direction Description
<b>Rangeland Resources</b>	Guideline	1234	Within bighorn sheep emphasis areas, maintain the Cottonwood Allotment closure to reduce the threat of disease transmission from domestic to wild sheep.
<b>Mineral Resources</b>	Objective	1235	Provide opportunities for platy rhyolite collection at the North Water Common Use area.
<b>Fire Management</b>	Objective	1236	Identify areas appropriate for wildland fire Use wildland fire to restore or maintain vegetative desired conditions and to reduce fuels. <b>(Modified as part of the 2012 WCS amendment)</b>
	Guideline	1237	Coordinate with adjacent land managers to develop compatible wildfire suppression strategies and coordinated plans for wildland fire management. <b>(Modified as part of the 2012 WCS amendment)</b>