



United States Department of Agriculture
Forest Service

Roosevelt Pawnee Arapaho **FORESTS TO** **GRASSLAND** 2012 Accomplishment Report

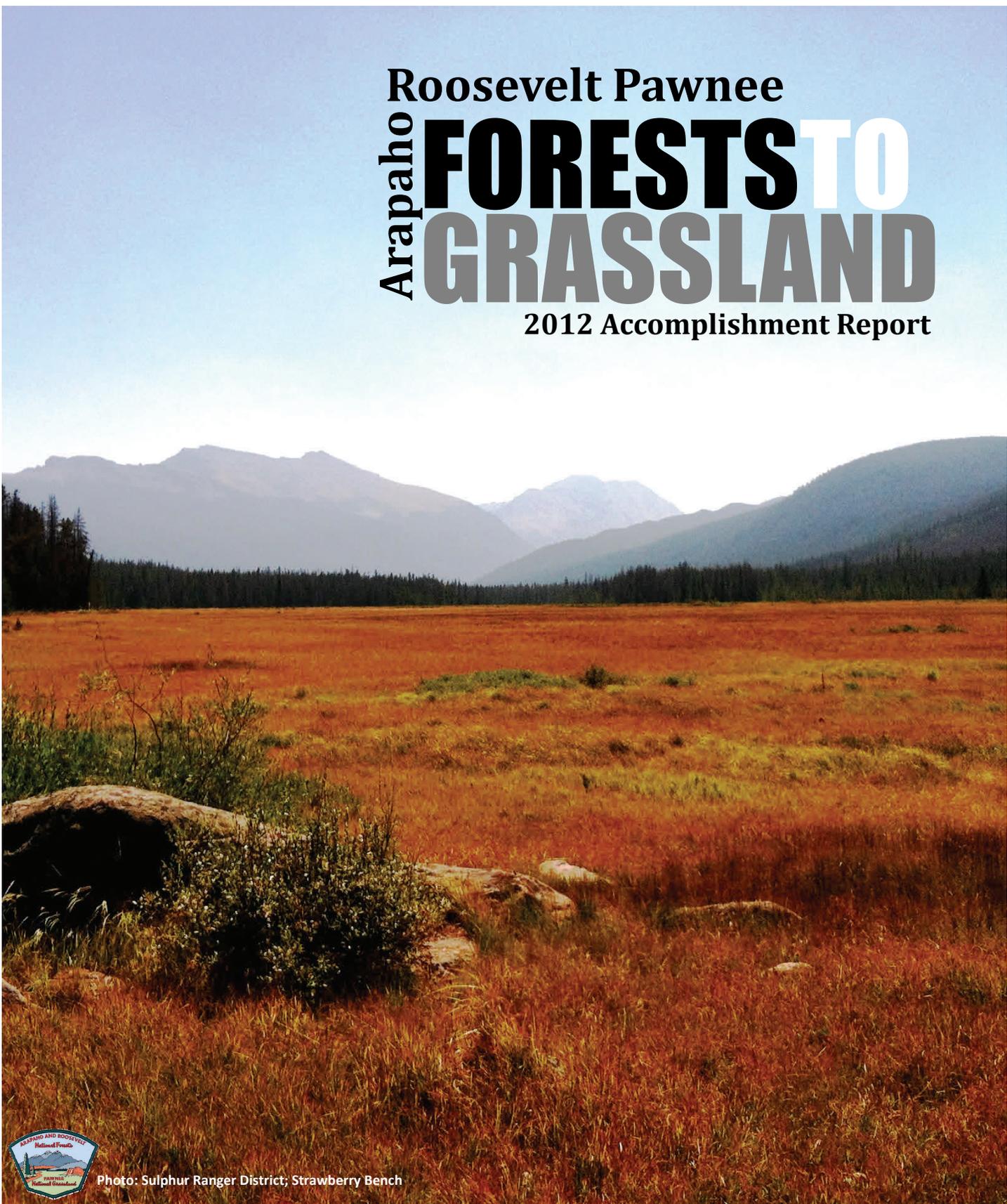


Photo: Sulphur Ranger District; Strawberry Bench

TABLE OF ACCOMPLISHMENTS



RECREATION PAGE 4

Campgrounds, trails, recreational sports shooting, outfitter and guides need assessment



PLANTS PAGE 13

Rare plant findings, weed management, pollinator project, key partnerships



FOREST MANAGEMENT PAGE 6

Mountain pine beetle, hazardous fuels reduction, piles, restoration



LANDS PAGE 14

Little Echo Lake acquisition, U.S. Army partnership, utilities, boundary management



WILDFIRE PAGE 8

Hewlett and High Parks fires, Burned Area Emergency Response, fire preparedness resources



ENERGY PAGE 15

Oil and gas, abandoned mines rehabilitation, stabilization, erosion control and closures



WILDLIFE PAGE 10

Habitat improvement and restoration, lynx, prairie dog management



ENGINEERING PAGE 16

Road maintenance and decommissioning, reducing energy and water consumption



RANGE PAGE 11

Drought, mountain pine beetle and High Park Fire impacts



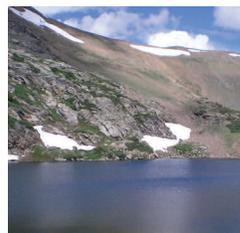
VOLUNTEERS PAGE 17

ARP Foundation, National Public Lands Day, volunteer coordinator of the year award recipient



FISHWATERSHED PAGE 12

Post-fire habitat and watershed monitoring, stream and watershed restoration



BENEFITS PAGE 18

Secure Rural School, tourism, timber markets, ski areas, jobs



Signs posted near the incident command post during the High Park Fire in 2012.

The ARP 2012 Accomplishment Report

Introduction

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) had a busy year in 2012. Fire season started early and gave way to the largest and most destructive fire in our history, keeping us busy with burned area rehabilitation work into the late fall. Despite this fire season we had a very productive year across the Forests and Grassland enhanced by strong support from our partners and volunteers. We appreciate this opportunity to share a few highlights of our achievements in this first issue of our annual Accomplishment Report. We hope that you have had the opportunity to see these accomplishments during your visits and look forward to continuing to serve you in the future.

About the Forests and Grassland

The ARP is located in north-central Colorado and headquartered in Fort Collins. The Forests and Grassland encompasses 1.6 million acres of public land in the Rocky Mountains and plains. Boundaries extend north to the Wyoming border and south to Mt. Evans. The Arapaho National Forest includes lands on both sides of the Continental Divide while the Roosevelt National Forest is confined to the eastern side of the Divide. The Pawnee National Grassland is located 30 miles east of Fort Collins. We manage National Forest System (NFS) lands in Boulder, Clear Creek, Gilpin, Grand, Larimer, Weld and portions of Park and Jefferson counties. Information about our offices is on page 19.

RECREATIONHERITAGE

Trails, campgrounds, permitting



The new Brainard Lake Day Use Area was completed in 2012.

RECREATION 2012FACTS

- Administered **182** recreation special use permits.
- Maintained **398** miles of trails.
- Issued **3,916** national, senior, access, annual volunteer and military passes which provide free or discounted access at federal use fee areas.
- Sprayed **9,700** trees for mountain pine beetle protection in developed recreation and administrative sites.



Canoeing on Monarch Lake, Arapaho National Recreation Area

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) are some of the most visited places in the National Forest System. Their close proximity to the Denver metro area, combined with their intermixed private-public land pattern, provides easy access to a wide range of recreation activities as well as management challenges to address user conflicts, visitor needs and impacts to resources as all types of activities increase. The opportunities are vast, from snowmobiling, snowshoeing and skiing, to camping, boating, rafting, hiking, mountain biking, hunting, fishing, bird watching and scenic driving. The ARP provides more than 1,360 miles of trails, 53 campgrounds, three ski areas, a national recreation area, Colorado's only Wild and Scenic River, and an internationally known birding area. These activities provide a way to connect the public to nature.

► The ARP completed a handful of site improvement projects in 2012. **Rainbow Lakes Trailhead and Campground** reconstruction was completed near Nederland on the Boulder Ranger District (BRD), including campground and trailhead access, and construction of a new parking area, new tent pads, picnic tables and toilets. Projects completed at the **Brainard Lake Recreation Area**, also on BRD, included the reconstruction of the **Pawnee Campground and Brainard Lake Day-Use Area** and the addition of a warming hut, new bathrooms and the expansion and paving of the parking lot at the **Brainard Gateway Trailhead** for winter activities. The **Berthoud Pass Trailhead** project, including trail work, interpretation, benches, landscaping and panels, was completed. With the help of the ARP Foundation, a new fence was installed at the **Main OHV Area** on the Pawnee National Grassland (PNG). The **McQuery Ridge Trailhead** on the Sulphur Ranger District (SRD) was opened, increasing opportunities for hiking and horseback riding in the Cabin Creek area. Through a grant from Headwaters Trails Alliance and the National Forest Foundation's Ski Conservation Fund, SRD was able to complete the motorized **Upper Elk Creek Loop Trail** near Winter Park. The SRD also installed 66 **bear-proof food lockers** throughout the district.

► The Forest updated the **Arapaho and Roosevelt National Forests Visitor map**. The map was last updated in 1998. The new map is based on digital information, which will allow more frequent updates in the future.

► The ARP partnered with Boulder, Clear Creek, Gilpin and Larimer counties, and Colorado Parks and Wildlife, to develop a multi-agency strategic approach for safe and responsible **recreational shooting sports** across the landscape and jurisdictional boundaries. All agencies have contributed to the effort, including funding a project manager. In the meantime, the ARP has increased enforcement, public outreach efforts, signage and educational materials. The environmental assessment for the **Allenspark Shooting Range** on BRD was completed. The PNG's **Baker Draw Shooting Area** design was initiated through a partnership with the U.S. Army Reserves, Colorado Parks and Wildlife and the National Rifle Association, and the road to the area was improved through a partnership with Weld County.

► The ARP managed activities related to the **USA Pro Cycling Challenge bike race** across the BRD focusing on addressing resource impacts, helping visitors access recreation opportunities during the race, and providing information along the race route emphasizing fire prevention.

► The ARP emphasized providing high-quality **visitor information and community outreach** focused on recreating safely in mountain pine beetle areas, being aware of falling trees and staying safe around hazard tree removal projects. The public affairs staff provided frequent updates regarding hazards, wildfires, bears, closures and alternative areas to recreate on the ARP website (www.fs.usda.gov/arp) and Twitter (@usfsarp).

► Canyon Lakes Ranger District participated again in **Picnic on the Poudre**, working with the Latino community in Fort Collins. The district provided recreation and national forest information and introduced youth to natural resource careers. A new fishing fest day was added with the help of partners to reintroduce youth to this outdoor activity. Smokey Bear and firefighters also made appearances at the **Fort Collins Foxes baseball game** and, for the first time in 2012, at the **Colorado Eagles hockey game** for Firefighter Appreciation Night.

► PNG teamed with archeologists to introduce fifth graders from the **Dos Rios Elementary School** to the history of the grassland doing hands-on activities at the former Prairie View School site.

► SRD continued to bring programs to hundreds of Grand County school children, preschool through high school. From **Point Park Day** for second graders and **Monarch Lake Day** for fifth graders to **Save the Frogs Day** for seventh and eighth graders, these programs teach core curriculum concepts while promoting an appreciation for nature and an active outdoor lifestyle.

► Clear Creek Ranger District hosted a **Junior Snow Ranger** program for kids at the Loveland Ski Area reaching more than 80 children who are now certified as Junior Snow Rangers.

► The ARP issued a new five-year **campground concession permit** to American Lands and Leisure (AL&L). Under this permit, AL&L is operating campgrounds and associated day-use areas on the ARP beginning in 2012. AL&L has almost 25 years experience managing public campgrounds and operates some 400 campgrounds on 20 national forests. The ARP negotiated changes in the permit to allow the acceptance of interagency passes for day-use at Brainard Lake Recreation Area, Dowdy Lake, Bellaire, Chambers Lake, Mountain Park and West Lake. AL&L manages 58 recreation sites across the ARP, including campgrounds, picnic areas and day-use sites.



Pawnee Buttes Trailhead, Pawnee National Grassland.



Trail of the Pines, Canyon Lake Ranger District.



A visit to the top of Mount Evans on Clear Creek Ranger District is just one of many recreational opportunities that attract visitors to the ARP.



For more Recreation information visit
www.fs.usda.gov/goto/arp/recreation

FOREST MANAGEMENT

Vegetation, fuels and timber

Since 1996, the mountain pine beetle epidemic has affected more than 1 million acres of forested land on the Arapaho and Roosevelt National Forests (ARP). Forest managers use hazardous fuels treatments, hazard tree removal and restoration-focused projects to improve the health, resiliency and safety of forests impacted by the mountain pine beetle. Such treatments are focused in the wildland in developed recreation areas, along roads and trails, and near infrastructure such as utility corridors and water delivery and storage facilities. These projects continue to be planned and implemented with the help of partners and contractors. Since 2002, hazardous fuels have been reduced on more than 140,000 acres in and around the wildland urban interface.



A new forest begins under mountain pine beetle-killed trees.

► The **mountain pine beetle infestation**, although slowing, continues to grow. In 2012, 56,000 new acres were affected on the Forest. The largest spread occurred in Larimer County, affecting many acres of ponderosa pine. Addressing the hazard tree situation and focusing on promoting resiliency and recovery continues to be emphasized.

► The ARP and the Pike National Forest worked together with contractor West Range Reclamation to support new markets in the fifth year of the **Front Range Long-Term Stewardship Contract**. In 2012, the ARP treated 1,986 acres of National Forest System lands and harvested 13,489 cf or 1,200 truckloads under the stewardship contract.

► The ARP accomplished 13,313 acres of **hazardous fuels reduction** work in 2012. This work treated 4,190 acres in mountain pine beetle affected areas near Nederland, Red Feather Lakes, Estes Valley and Winter Park.

► Hazardous fuels reduction projects on the Forest continue to be supported by the **Front Range Fuels Treatment Partnership (FRFTP)** and **Front Range Roundtable**. The Forest is implementing the **Colorado Front Range Collaborative Forest Landscape Restoration project** with the Roundtable and the Pike National Forest, which includes a multi-party monitoring plan for projects. The Forest also participated in and provided leadership to the **Northern Front Range Mountain Pine Beetle Working Group** and other Roundtable groups such as the Landscape Restoration Team and the Community Protection Team.

► More than 400 acres of hazardous fuels are being treated in the Winter Park area through the **Forest to Faucets** agreement signed with Denver Water. This partnership is focused on promoting forest resiliency in critical Denver Water watersheds. In addition, the forest completed an environmental analysis and issued a decision to treat an additional 1,800 acres of fuels (Forsythe Fuels Reduction Project) to support the Forests to Faucets program.

► Approximately 3,817 acres of forest were treated to **promote restora-**

tion of Ponderosa pine and mixed conifer forests in 2012. More than 15,000 trees were planted on the Canyon Lakes Ranger District (CLRD) and 320 trees on the Sulphur Ranger District (SRD) in 2012 to jump start the recovery of key recreation areas.

► As of the end of 2012, the ARP had more than 110,000 **slash piles to be burned**. As hazardous fuels and timber sale projects are completed, more piles are created each year. To reduce the number of piles, the ARP is working with the Colorado Air Pollution Control Division to pilot ways to burn more piles within air quality standards and burning prescription. Through that program CLRD burned more than 25,000 piles during the 2011-2012 winter. Boulder Ranger District (BRD) initiated an alternative for pile removal in some areas through a chipping contract and chipped piles on 1,072 acres, while burning piles on over 300 acres. For more information about piles visit www.fs.usda.gov/goto/arp/rxburning.

► The ARP sold approximately 40,000 ccf, about 3,600 truckloads, of timber in 2012. Much of this came from bark beetle impacted forests and was used to support a variety of wood products industries, from traditional lumber to pellets, pallets, fence posts, paper pulp, landscaping material and animal bedding.

► In 2012, the Forest cut **hazard trees along roads, trails, power lines, and in developed recreation sites**. Treatment was completed along more than 98 miles of road and 59 miles of trails. Projects included roadside hazard tree work in partnership with Colorado Department of Transportation on Berthoud Pass and Colo. Highway 125; hazard tree work along some 76 miles of roads (involving more than a dozen roads) and 50 miles of trails near Grand Lake and Winter Park on the SRD; hazard tree work on Long Draw Road on the CLRD; and hazard tree work on trails, picnic areas and trailheads in the Brainard Lake Recreation Area in partnership with the Nature Conservancy and Larimer County Youth Corps.

► **Blow down** occurred at various locations across the ARP due to high winds in mountain pine beetle impacted forests. Mount Evans Wilderness was one site that experienced a large number of trees blown down across wilderness trails, and crews responded throughout the season to keep the trails open.

► The ARP issued contracts to spray more than 470 acres of high value trees with pesticide in and around campgrounds and developed recreation sites to reduce the potential for **mountain pine beetle infestation**.

► In an effort to keep local communities aware of all the ARP forest health activities, safety concerns and hazard trees, a number of actions were taken by each ranger district. Information was provided regarding timber sales, hazard tree removal projects, fuels reduction projects and slash management through a number of channels, including press releases, public meetings, field trips, email updates, web pages and others by our **community-based public affairs specialists**.



For more information about prescribed fire visit:
www.fs.usda.gov/goto/arp/rxfire



More than 400 acres of hazardous fuels are being treated on Tunnel Hill in the Winter Park area through the Forest to Faucets agreement signed with Denver Water.

FOREST 2012FACTS

- **Removed hazard trees from 59 miles of trail, 98 miles of road, 103 recreation sites.**
- **Sold 39,613 ccf of timber.**
- **Treated 13,313 acres to reduce the risk of wildfire.**
- **Burned 27,642 slash piles.**



To increase disposal of piles, the ARP is working with the Colorado Air Pollution Control Division to pilot ways to burn more piles within air quality standards and burning prescription.



Regional Forester Dan Jirón at a High Park Fire briefing.

WILDFIRE 2012FACTS

- 67 wildfires burned 50,912 acres on the ARP.
- 43 fires were human caused.
- 24 fires were lightning caused.
- Fort Collins Dispatch Center processed requests for:
 - 196 crews,
 - 2,517 overhead positions,
 - 558 pieces of equipment, and
 - 507 aircraft.



U.S. Forest Service fire crews respond to the High Park Fire.



Smoke seen from Stove Prairie Road during the High Park Fire.

WILDFIRE REHABILITATION

2012 –A long season

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) manages the Fort Collins Interagency Dispatch Center, Jeffco Airtanker Base, the Roosevelt Hotshots, seven engines and one Initial Attack Module. The ARP also has a highly-skilled Burned Area Emergency Response Team.

► The 2012 fire season was busy for the ARP. The wildfire season began in January and a fire burned in the area in every month except December. Record-setting drought and historically low snowpack set the stage for the **Hewlett and High Park fires on the Canyon Lakes Ranger District (CLRD)**. The High Park Fire was ignited by lightning on private land June 9, 2012, and burned 87,284 acres (more than 42,000 of National Forest System lands), destroying 264 homes and resulting in one fatality. The fire was contained June 30, 2012. The High Park Fire burned into and around the Hewlett Fire, which burned 7,685 acres in May 2012. Both fires were in the area of the Cache la Poudre River with both impacting watersheds for Colorado’s Front Range.

► Fire restrictions were put in place in April, expanded in June and lifted in August. Fire restrictions included discharging a firearm due to a number of fire starts being caused by shooting activities.

► In 2012, the **Fort Collins Interagency Dispatch Center (FTC)** managed the mobilization of firefighting resources in the northern Front Range and Northeast Colorado for the ARP; Rocky Mountain National Park; U.S. Fish and Wildlife Service; Colorado Department of Fire Prevention and Control (areas within the zone); and Boulder, Clear Creek, Gilpin, Grand and Larimer counties. **FTC supported 209 large fires across the nation** and mobilized eight Type 3 teams, two Type 2 teams, four Type 1 teams and one National Emergency Management team between April and December for use in the FTC zone. The first team was mobilized for the Hewlett Fire on the CLRD and the last was for the Fern Lake Fire in Rocky Mountain National Park. **The FTC zone had 129 fires**, which burned a record breaking **145,925 acres**.

► The **Roosevelt Hotshots**, based on the CLRD since 2001, is a national firefighting resource. During the 2012 season, the crew traveled to four states and responded to 18 fires.

► **Jeffco Airtanker Base** supported 24 wildfires with 850,376 gallons of retardant, 478 flights, 148 U.S. large airtankers, 209 Canadian airtankers, and 19 MAFFS C-130 flights.

► Since the fires, much work has been occurring on both private and public lands, involving **multiple jurisdictions and interagency teams** in the development of both assessments. Collaborative work continues with state and county governments and local water providers to implement **emergency watershed stabilization measures** to protect against flooding, erosion and debris flows in the aftermath of the fires.



The High Park Fire was visible across Horsetooth Reservoir in Fort Collins.

► A summary of the work completed by the ARP can be found below. Larimer County, Natural Resource Conservation Service, and water providers have been working closely with private landowners to implement much-needed restoration work adjacent to National Forest System lands.

2012 Burned Area Emergency Response (BAER) Work

High Park

- Aerial mulching (wood shreds): 881 acres
- Trail stabilization: 9 miles
- Road stabilization: 4 miles
- Hazardous tree removal along trails

Hewlett

- Aerial mulching (agricultural straw): 998 acres
- Trail stabilization: 3.2 miles
- Hazardous tree removal along trails

Other Response Actions

- Work with partners as part of the High Park Restoration Coalition and other collaborative efforts.
- Monitor and implement the need for closures in some areas and roads for public safety and rehabilitation efforts.
- Work with partners to monitor conditions and identify additional needs.
- Rapid Assessment of the feasibility of reforestation opportunities within the High Park Fire burn area.



Aircraft helped support ground crews during the High Park Fire.

HIGHPARK FIREFACTS

- **87,284** acres of private and public lands burned.
- **264** homes lost.
- **819,456** gallons of fire retardant dropped.
- **2.7 million** gallons of water dropped.
- **Some 4,000** evacuations required.
- **More than 2,000** personnel on scene during the peak of the fire.
- **1 fatality (resident)** due to fire.



Firefighters in the field during the High Park Fire.

WILDLIFE HABITAT

Protecting habitat, monitoring species

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) provides wildlife habitat for more than 500 species and eight threatened and endangered proposed species. Habitat improvement focuses on projects to ensure vegetative structure and diversity.



A bull snake on Pawnee National Grassland.

WILDLIFE 2012 FACTS

- Improved **6,300 acres** of habitat through **20 miles** of road obliteration.
- Installed **8 bat gates**.
- Improved **160 acres** of habitat through the removal of **1 mile** of barbed wire fence.
- Restored **65 acres** of wetlands.
- Hosted **8 education** events.
- Temporarily closed **3 areas** for raptor nesting.



A wildlife biologist tests boreal toads for signs of disease in the Upper Williams Fork area on Sulphur Ranger District.

▶ The ARP completed a variety of **wildlife habitat improvement projects** including riparian restoration on the Boulder (BRD), Canyon Lakes (CLR) and Clear Creek (CCR) Ranger Districts where unofficial dispersed campsites were relocated away from streams, trails were improved and modified to protect watersheds, and sediment catchment ponds were constructed to improve stream quality.

▶ The Forest partnered with Colorado Parks and Wildlife (CPW) to **monitor wolverine habitat**.

▶ Wildlife biologists **restored habitat** through a variety of projects on each ranger district. BRD relocated a road to prevent further damage to the Jenny Creek Stream. The District also partnered with the Trail Ridge Runners OHV group to restore areas damaged by motorized use and prevent further damage through the installation of barriers and planting of native seed. Fences were constructed on CLR to manage recreation and grazing in sensitive habitats in Elkhorn area. Sulphur Ranger District (SRD) partnered with the **Rocky Mountain Elk Foundation** volunteers and internal partners to restore habitat, reduce fragmentation, and provide security by continuing effective road obliteration and barbed-wire fence removal programs removing one mile of fencing.

▶ Canyon Lakes Ranger District partnered with the **Wild Sheep Foundation** to install interpretive signs along the Cache la Poudre Scenic Byway, a popular bighorn sheep viewing area on the CLR.

▶ Sulphur Ranger District continued community education efforts in Grand County through the annual **Christmas Bird Count, adventure backpack program, and Save the Frogs Day**.

▶ The Forest reduced the number of human/wildlife interactions by partnering with **American Lands and Leisure** campground concessionaire and CPW to educate campers about safely coexisting with bears.

▶ The ARP **installed eight gates on abandoned mines** to protect bats who roost there and the public who recreates nearby on BRD, CLR, and CCR.

▶ Districts implemented short-term **area closures for raptor nesting and fledging** on BRD, SRD, and Pawnee National Grassland (PNG).

▶ Staff worked with adjacent landowners to **manage prairie dogs** and place barriers between private and public lands on PNG.

▶ Volunteers helped **install escape ramps in stock tanks** to prevent drowning and predation of small mammals and birds on PNG.

► Biologists conducted **wildlife surveys** to update data needed for the management of wildlife and species conservation. Surveyed species included: raptors (osprey, goshawk), bats and amphibians (boreal toad, northern leopard frog). On PNG, biologist also surveyed mountain plover and swift fox as well as mapping prairie dog towns.

► The ARP cooperated with the White River National Forest, CPW and Colorado Department of Transportation (CDOT) to apply for funds from from CDOT to complete an ongoing study and expand the **White River lynx/recreation study to CCRD**.

► Trapping for the federally listed (threatened) **Preble's meadow jumping mouse** resulted in known occurrences on CLRD.

► In cooperation with CPW, **remote camera stations** were established in wolverine and lynx habitat on SRD.

► Biologists on SRD authored the region's first lynx linkage assessment, the **Berthoud Pass Lynx Linkage Plan**. The goal of linkage areas is to ensure population viability through population connectivity; broad areas of habitat where animals can find food, shelter and security. The goal of the plan is to assess effectiveness of the Berthoud Pass lynx linkage with the goal of creating, maintaining or improving long-term function in balance with human uses.



Installing interpretive signs for the new bighorn sheep viewing area in the Poudre Canyon on Canyon Lakes Ranger District.

RANGE PROGRAM

Grazing and forage sustainability

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) have an active range program with allotments on each ranger district. Rangeland management includes the production of vegetation for the protection of watersheds to provide high-quality water, stability to the soil, a variety of plants and forage for wildlife and livestock.

► In 2012, permittees, grazing associations and Forest Service personnel worked together to manage rangelands through a **prolonged season of drought**. Range specialists worked with range permittees and two grazing associations to ensure sustainable forage, which included reducing livestock numbers and shortening seasons in response to drought. Livestock use on the forest and grassland was reduced about 45 percent.

► The extensive tree mortality caused by **mountain pine beetles** has complicated rangeland management on the Forest by restricting livestock movements and damaging improvements such as fences. Rangeland management specialists are working with permittees to address these challenges.

► **High Park Challenges:** The High Park Fire in 2012 impacted multiple active and vacant grazing allotments and damaged infrastructure. Rangeland specialists continue to work with permittees in addressing concerns.



Cattle on Canyon Lake's Sand Creek Allotment.

RANGE 2012FACTS

■ **Managed 176 active allotments located on 551,890 acres.**

■ **Administered 137 term grazing permits.**

■ **Authorized 64,096 Animal Unit Months.**

FISHWATERSHEDSOILS

Healthy watersheds, native fish



The ARP partnered with CPW to help prevent Aquatic Nuisance Species such as quagga and zebra mussels from being spread or introduced into Lake Granby and Shadow Mountain Reservoir in the Arapaho National Recreation Area. More than 15,000 inspections and 1,300 boats were disinfected at inspection stations.

FISHWATERSHED 2012FACTS

- **18 miles** of stream restored.
- Acquired Little Echo Lake **(10 acres)**.
- Monitored fish populations in **4 watersheds**.
- Served as a source of drinking water for **2 million people** (13 major reservoirs, 153 authorized water facilities).



The Clear Creek Ranger District organized a kid's fishing day at Rocky Mountain Easter Seals Camp, educating kids on ethical angling and encouraging children to spend time outdoors with their families.

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) provide healthy aquatic ecosystems. With more than 2,400 miles of streams and river, 15,000 acres of lakes and ponds, and Colorado's only Wild and Scenic River; the ARP works to protect, restore and enhance aquatic ecosystems and watersheds from the prairies to the headwaters.

► Biologists continue to **monitor post-fire fish numbers and habitat conditions** in the Cache la Poudre River due to the Hewlett and High Park fires. Flooding caused serious disturbances to large portions of the river and watershed when large, visible plumes of ash and sediment poured into the river. Deposits of black sediment can still be seen along the river but numbers of trout in the lower river have not declined as much as was expected.

► The incident management teams for the **Hewlett and High Park fires** made great efforts to avoid tanked-aircraft, engines, and water tenders from spreading **aquatic nuisance species** (such as zebra mussels and whirling disease) into, between and from the fire areas.

► Partnering with Colorado Parks and Wildlife, the ARP removed more than 450 nonnative brook trout in more than three miles of Bobtail Creek and documented reproductive success of native cutthroat. The nonnative fish were removed to facilitate the persistence of a native cutthroat trout population in the **Upper Williams Fork River basin** in Grand County.

► Wildland Restoration Volunteers (WRV) and Canyon Lakes Ranger District **restored 4 miles of the North Fork Poudre River** by moving unofficial dispersed campsites away from the stream, constructing stream habitat features, and closing user-created roads in riparian areas.

► Watershed restoration projects were accomplished across the Forests. Projects included decommissioning 17 miles of road to improve **watershed and wildlife habitat** by stabilizing the sources of sediment. With the long-standing help of the **Miller-Coors Brewing Co.**, abandoned mine land reclamation, stream restoration, road closures in riparian areas, and watershed improvements were completed in the West Fork Clear Creek watershed on Clear Creek Ranger District (CCRD). Miller-Coors received the **Rise to the Future Partnership Award** for their six years of partnership help and more than 1,500 hours of volunteer labor in the Clear Creek Watershed.

► In 2012, CCRD completed **the High Peaks to Headwaters Watershed Restoration Plan**, which identifies and plans watershed restoration projects in the upper Clear Creek basin, including the South Clear Creek priority watershed.

NATIVE PLANTS

Pollinator species, rare plants

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) are committed to combatting invasive plants, particularly in newly disturbed areas. Heavy equipment is inspected prior to beginning work on the National Forests and Grassland and only weed-free hay and mulch is allowed. Partnerships with counties and local municipalities are an important tool to accomplishing this work.

► In summer 2012, pollinator species such as butterflies and bees were attracted to native wildflowers seeded in a disturbed area on National Forest System (NFS) lands at Winter Park Resort. The seeds were sown in 2011 as part of the Sulphur Ranger District's **Pollinator Projects Partnership** with the Arapaho Roosevelt Pawnee Foundation.

► Not all weeds grow in areas where they can be easily reached with a truck mounted delivery system. Weeds that take hold in **remote areas** pose a challenging threat to native plant populations. Each year, the ARP funds contractors to carry herbicide sprayers on horseback into areas inaccessible by roads and motorized trails to help combat invasive species.

► The ARP is leading the region in surveying and gathering occurrence data for numerous **rare plant species** to better understand their prevalence and diversity. To date, forest botanists have discovered two new species of moonworts, primitive fern-like plants that are rare in Region 2.

► The ARP treated 4,417 acres for the control of **noxious weeds**. The Forest also utilized partnerships to help combat the spread of invasive plants. Volunteers in Larimer and Boulder counties logged several hundred hours in 2012 completing weed inventories or treatments.

► On the Boulder Ranger District, staff has partnered with **TEENS, Inc.** since 2005 to inventory and treat noxious weeds in and around the district. This partnership, which includes Boulder and Gilpin counties and now the University of Colorado began as the YEWTH project (Youth Eradicating Weeds Threatening Habitat) successfully obtaining over \$50,000 in grant funding and treating nearly 600 acres of noxious weeds on NFS lands. This unique partnership provides a valuable job training experience where Nederland's youth become local experts and teach local residents about weeds.

► Canyon Lakes Ranger District and Larimer County have utilized funding under the **Secure Rural Schools Act** to cooperatively treat noxious weeds in areas of high concern on the district. More than 940 acres of treatment occurred in 2012, with areas of the Hewlett and High Park fires targeted for Burned Area Emergency Response funding in 2013.



Purple lady slipper at Winter Park Resort on the Sulphur Ranger District.

PLANTS 2012FACTS

Did you know? Some beautiful plants such as the oxeye daisy are actually noxious weeds that outcompete native plants and ultimately remove food sources for species such as ants, butterflies and bees.



Volunteers from Grand County Wildemess Group participated in the Daisy Demolition/Weed Warrior Day at Monarch Lake, removing more than 260 pounds of noxious weeds, including the oxeye daisy shown here, from the area around the lake.

LANDS USES

Boundary management, utilities



In 2012, the ARP acquired Little Echo Lake adjacent to the James Peak Wilderness Area.

LANDS 2012FACTS

- Accepted and authorized **66 Special Use applications.**
- Acquired **334 acres** of pristine property and **2 easements** across private property.
- Administered **620 permits** (31 major utility lines, 20 reservoirs, 16 communication sites).
- Posted **45 miles** of boundary.



The ARP administers permits for 16 communication sites.

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) have an active lands and special uses program dedicated to securing and protecting the American public's rights, title, value and interest in National Forests and Grasslands. This includes consolidating land ownership through exchanges and acquisitions; surveying and posting boundaries; acquiring road and trail rights of ways; and processing applications for permits such as power lines and communication sites.

▶ The Forest acquired a **15-acre inholding** close to the Berthoud Pass Overlook and **319 acres** adjacent to the James Peak Wilderness, which includes Little Echo Lake, a 10-acre high mountain lake, and more than a mile of stream in Mammoth Gulch.

▶ The ARP established a **Special Use Permit** with U.S. Army for training activities on National Forest System lands until 2017. Additionally, the partnership provides U.S. Army staff expertise and equipment to assist engineering-related projects on the ARP such as the construction of the Baker Draw Shooting Range on the Pawnee National Grassland.

▶ Staff completed **Land Line Survey** for projects across the ARP including the Sligo Cemetery and Winks Lodge encroachment resolution and three fuels reduction projects -two on the Boulder Ranger District and one on the Canyon Lakes Ranger District (CLRD).

▶ CLRD continued **the Middle Bald Communication Site Project**, located in Larimer County, after it had been put on hold by Larimer County Commissioners in 2008. The project was proposed for emergency communication for VHF and the 800 MHz system. Scoping, public meetings and work on the Draft Environmental Impact Statement occurred in 2012.

▶ The Forest coordinated and provided input on the **Western Area Power Authority's** (Western) proposals on the CLRD and Sulphur Ranger District (SRD) to rebuild and reroute transmission lines. The proposal on CLRD consolidates and rebuilds two aging transmission lines on separate rights-of-way into one existing line between Estes Park and Loveland. The SRD project proposes rebuilding and possibly rerouting the transmission line near Grand Lake.

▶ The **High Park Fire** impacted power lines and poles under special use permit and destroyed boundary markers. Permit administrators worked with Poudre Valley REA to facilitate getting the infrastructure replaced and repaired and the site restored after construction. Surveyors continue to restore boundary markers destroyed during the fire to facilitate the rebuilding the homes on private property within the ARP boundary. Survey crews are scheduled to restore more than 30 miles of boundary markers in 2013. Immediately after the High Park Fire several special use permits were issued for **research activities** related to the fire.

ENERGYMINERALS

Oil, gas and minerals

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) have a long history of hard rock mining and mineral exploration. Oil and gas production and exploration continues to grow on the Pawnee National Grassland (PNG). Planning activities continue for both oil and gas production and exploration, as well as other minerals, across the Forest and addressing abandoned mines.

► **Oil and gas** efforts focused on processing five applications for drilling. Completed a 3-D seismic project encompassing 20,000 acres of the PNG. The seismic work helps industry plan for better placement of wells and associated facilities, and eliminates or avoids placement of those wells that prove to be unproductive and are eventually plugged due to low productivity.

► Four water infrastructure projects within or adjacent to the ARP are currently undergoing **Federal Energy Regulatory Commission (FERC)** relicensing or amendments. These include Gross Reservoir and Barker Gravity Line in Boulder County, Cabin Creek in Clear Creek County, and Idlewild Reservoir and Pipeline in Larimer County. The ARP worked closely with FERC and other federal agencies to ensure that resources are protected while providing for renewable energy projects such as hydropower generation.

► The Forest installed **safety closures** on eight abandoned mines on the Boulder Ranger District (BRD) and 13 on the Clear Creek Ranger District (CCRD) in partnership with the Colorado Division of Reclamation, Mining and Safety (CDRMS) and Colorado Parks and Wildlife.

► The ARP completed project development and obtained funding to begin the NEPA process to implement abandoned mine safety closures across BRD and CCRD in partnership with CDRMS.

► CCRD coordinated a **multiagency partnership** for a project of Leavenworth Creek Watershed across multiple ownerships and completed two sampling events to collect surface water, sediment and soil for analysis to determine if historical mining is impacting the watershed. The ARP partnered with U.S. Geological Service to complete groundwater research to identify the surface to groundwater interactions throughout the watershed to provide information for potential project decisions.

► CCRD also completed the **Minnesota Mine/Lion Creek** stabilization and erosion control project in partnership with the Clear Creek Watershed Foundation, Trout Unlimited and Freeport-McMoRan.

► The Forest partnered with the Environmental Protection Agency, U.S. Fish and Wildlife Service, Colorado Department of Public Health and Environments and CDRMS to sample surface water, sediment and soil to analyze the **Gamble Gulch watershed** during low and high flows to determine potential impacts from the Perigo and Tip Top Mines.



Mine safety closure.

OIL&GAS 2012FACTS

■ *As of fall 2012, there were **62 active oil and gas wells** on the Pawnee National Grassland.*

■ *Accepted **14 Plans of Operations or Notices of Intent**, approving **12** and completing **12 inspections** across the ARP in the **Minerals Program**.*



The ARP started a preliminary analysis of the current and potential level of oil and gas development on the PNG to determine future planning needs.



Forest Engineers helped with the design and installation of bottomless culverts. This project restored access to 2.5 miles of stream for native cutthroat trout in Trail Creek on the Sulphur Ranger District.

ENGINEERING 2012 FACTS

- Decommissioned **4 miles** of system road and **19 miles** of unauthorized routes.
- Maintained **302 miles** of passenger-car roads.
- Maintained **77 miles** of high-clearance roads.
- Maintained **126 miles** of roads for Roadside Hazard Tree and Bark Beetle mitigation work.
- Removed **22 buildings** at the Clear Creek Dude Ranch with majority of materials recycled.



6 kilowatt solar photovoltaic system at the Boulder Ranger District.

ENGINEERING FACILITIES

Roads, bridges and sustainability

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) provide more than 1,570 miles of roads open to motorized travel with 35 road bridges/major culverts, and 168 administrative facilities. Engineering continues to support the resource needs necessary for management of the National Forests and Grassland by continuing to work toward an infrastructure that meets current and future demands.

- ▶ The ARP continues to plan and identify routes for **road decommissioning** on a yearly basis. 2012 focused on a review of the decommissioning program on the Sulphur Ranger District, which has restored more than 100 miles of obsolete logging roads and user-created routes since 2006. This effort has helped **improve watershed quality** and **increase wildlife habitat**.
- ▶ The majority of discretionary road funding is dedicated to **roadside hazard tree removal** and supporting the **long-term stewardship contract**. This effort helped mitigate hazard trees along some 126 miles of roads on the Forests in 2012.
- ▶ The Forest is leading the region in developing and identifying the **Minimum Road System** needed for safe and efficient travel and for the protection, management and use of NFS lands. The process also involves identifying roads that are no longer needed to meet forest resource management objectives and, therefore, should be scheduled for decommissioning or considered for other uses.
- ▶ Boulder Ranger District installed a **6 kilowatt solar photovoltaic system** at its offices. The system will provide roughly 9 percent of the total facilities electrical needs and reduced an estimated seven metric-tons reduction of carbon dioxide emissions.
- ▶ The ARP continues to **reduce its petroleum consumption** and leads the region is having the **best average gas mileage**. To continue this progress, the Forest invested in a plug-in hybrid electric car to add to its 2013 fleet.
- ▶ The Forest completed a self-review of its annual utility bills to identify facilities with the highest energy and water use. This data was used to develop a strategy for **reducing energy and water consumption**.



Check road status before you go:
www.fs.usda.gov/goto/roads

VOLUNTEERS PARTNERS

Caring for the land

Volunteers and partners continue to improve the forest for everyone and serve as a vital role in not only providing the public with recreation and safety information but also helping with forest restoration efforts, wildlife habitat improvements, trail repairs and maintenance, invasive species, building fences, kiosks and collecting data. Volunteers and partners contribute to our success and accomplishments.

► The **Arapaho Roosevelt Pawnee Foundation** supported five projects donating more than \$50,000 and hundreds of volunteer hours on the Forest in 2012. Support was provided for improvements at Point Park on the Sulphur Ranger District (SRD) and Brainard Lake on the Boulder Ranger District. They also supported the Canyon Lakes Ranger District (CLRD) volunteer program, providing funding for much needed materials and recognition items and National Public Lands Day (NPLD).

► The ARP hosted **two NPLD** events in September 2012, attracting nearly 450 volunteers between the two districts. Volunteers worked on projects from tree planting and trash pickup to trail improvements. It was the third annual event for CLRD and the 18th annual event for SRD, making that the longest-running NPLD event in the nation.

► Volunteers came out in full-force following the Hewlett and High Park fires of 2012. **Four trail days** were organized by the Poudre Wilderness Volunteers, with support from the ARP Foundation, on CLRD and many from the community came to help. Volunteers also helped during the fires, answering phones and sharing critical information.

► Kristy Wumkes, CLRD partnership coordinator, was honored by the U.S. Forest Service Washington Office as **the Volunteer Coordinator of the Year** for her efforts leading the second largest district program across the Forest Service. CLRD hosts more than 900 volunteers who donated over \$1 million worth of services to the district.

► **Grand County Wilderness Group** continues to provide integral support to the SRD in providing visitor information services at remote locations in the Arapaho National Recreation Area, including at Monarch Lake Cabin and Junco Lake Cabin.

► **Headwaters Trails Alliance** is in its 12th year of working with SRD on its Adopt-a-Trail program, which allows volunteers to assist with trail maintenance. A total of 177 miles of trail on SRD are currently adopted by private individuals, nonprofits and businesses in Grand County.



Employees and volunteers complete a bridge to protect a riparian area on Sulphur's National Public Lands Day in 2012.

VOLUNTEER 2012FACTS

■ *More than 1,600 volunteers donated nearly 70,000 volunteer hours on the ARP worth more than \$1.5 million.*

■ *Partnered with more than 100 businesses and organizations.*



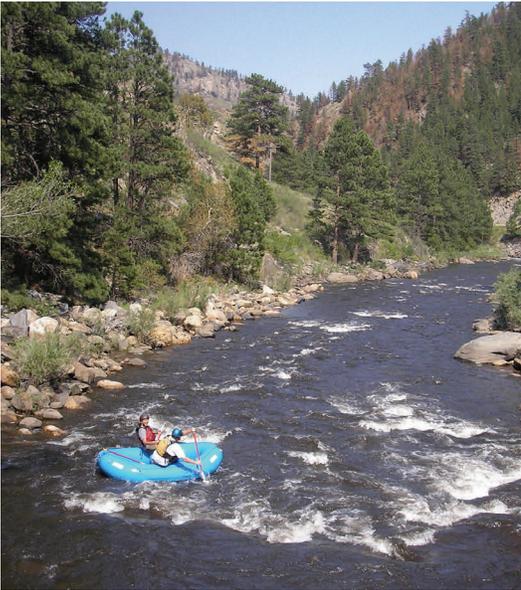
Volunteers plant trees for Canyon Lake's 2012 National Public Lands Day.



Looking for a volunteer opportunity?
www.fs.usda.gov/goto/arp/volunteers

BENEFITS COLORADO

Water, jobs and tourism



The Cache la Poudre River, Colorado's only wild and scenic river, is a popular spot for white-water rafting and just one many recreational opportunities that attract visitors to the ARP.

ECONOMY 2012 FACTS

■ Awarded **82 contracts** totaling over **\$7 million** to private businesses including **\$5 million** for Burned Area Emergency Response efforts for the Hewlett and High Park fires.

■ **\$167,396** provided for projects on National Forest System lands in Larimer County through Secure Rural Schools Act Title II.



The ARP works with local mills to provide forest products for a variety of markets. Mills such as Ranch Creek in Granby (above) use forest products to make everything from 2x4s to pallets, landscaping materials and animal bedding.

The Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) provide millions of dollars to Colorado's economy through multiple sources ranging from tourism, to providing timber for new markets, energy development and contracting with small businesses for a variety of products and skills.

► Situated along Colorado's popular Front Range, the ARP contributes to **tourism** by offering a variety of recreational activities. From snowshoeing to recreational shooting and unique features such as Mount Evans, Colorado's only Wild and Scenic River (Cache la Poudre) and the Arapaho National Recreation Area, the ARP provides the environment for Colorado Citizens and businesses to play and conduct business.

► **Downhill skiing** has drawn tourists to the Front Range for decades and the ARP through special use permits—Winter Park, Eldora, and Loveland ski areas.

► The ARP was the backdrop to Stage 6 of the **USA Pro Cycling Challenge** as it wove through the Roosevelt National Forest west of Boulder. According to IFM North America, the race brought a \$99.6 million impact to the Colorado economy.

► The ARP directly **employs more than 250 Colorado residents**. Through special use permits, contracts and agreements, the Forest helps employ thousands of Colorado residents that work in the timber, hospitality, and tourism industries.

► The ARP's science-based management protects watershed, provides clean air and helps act as a **carbon sink**.

► Through the use of long-term forest stewardship contracts the ARP was able to maintain a **consistent supply of timber** to regional markets. In 2012, the ARP sold of 39,613 ccf of timber products.

► The ARP helps further research through the issuance of special use permits to researchers and by **supporting research projects**.



Looking for a job?

Visit www.fs.usda.gov/goto/arp/jobs

FY12FACTS

Forest Size Total: 1,593,791 acres

- *Arapaho National Forest* — 589,614 acres
- *Roosevelt National Forest* — 810,886 acres
- *Pawnee National Grassland* — 193,290 acres

Employees *Permanent* — 232
Temporary — 220

Annual Budget \$31 million

Elevations *Lowest* - 4,300 feet above sea level
Highest - 14,270 feet above sea level

Wilderness Areas

- Byers Peak
- James Peak
- Rawah
- Cache la Poudre
- Comanche Peak
- Mount Evans
- Vasquez Peak
- Neota
- Indian Peaks
- Never Summer

Wild and Scenic Rivers Cache la Poudre Wild and Scenic River

National Scenic Trails Continental Divide National Scenic Trail

National Recreation Areas Arapaho National Recreation Area

Scenic Byways

- Cache la Poudre Scenic Byway
- Guanella Pass Road
- Mount Evans Scenic Byway
- Pawnee Pioneer Trails
- Peak to Peak Scenic and Historic Byway

Outfitter and Guides 79 permits

Grazing Allotments

- 176 active allotments on 551,890 acres
- 137 term grazing permits

Forest Management and Timber

- Timber Volume sold — 39,613 ccf
- Forest Vegetation improved — 976 acres
- Hazardous Fuels Reductions Treatments — 13,313 acres

Wildfires 67 wildfires
50,912 acres burned

Unique Features or Highlights

- Cache la Poudre River on the Canyon Lakes Ranger District is the only Wild and Scenic River in Colorado.
- Arapaho National Recreation Area on the Sulphur Ranger District is the only U.S. Forest Service-managed National Recreation Area in Colorado.
- The Arapaho and Roosevelt NFs and Pawnee NG are among the top three most visited national forests in the United States.



Headquarters

Arapaho and Roosevelt National Forests and Pawnee National Grassland Supervisor's Office
2150 Centre Avenue, Building E
Fort Collins, Colorado 80526
970-295-6600

Ranger Districts

Boulder Ranger District
2140 Yarmouth Avenue
Boulder, Colorado 80301
303-541-2500

Canyon Lakes Ranger District
2150 Centre Avenue, Building E
Fort Collins, Colorado 80526
970-295-6700

Clear Creek Ranger District
PO Box 3307
101 Highway 103
Idaho Springs, Colorado 80452
970-567-3000

Pawnee National Grassland
660 "O" Street
Greeley, Colorado 80631
970-346-5000

Sulphur Ranger District
PO Box 10
9 Ten Mile Drive
Granby, Colorado 80446
970-887-4100



Visit us at www.fs.usda.gov/arp
Or follow us on twitter @usfsarp



