

ASNFs' Planning Team Supplement to the
Demand Report
December 15, 2009
Amended February 22, 2010 (Wilderness Section added)

The core team reviewed the Recreation, Grazing, Minerals and Timber Demand document prepared by Joshua Wilson and Henry Eichman. While the document helps us understand the capacity and demand of these resources at various scales, there were some inaccuracies or data gaps at the forest level. Below, is some additional information to help supplement that report.

RECREATION

Winter Recreation

The forests are a primary destination for dispersed winter recreational activities (Forest Service 2008a). The ASNFs have approximately 1,500 miles of trails including snowmobile and ski trails (Forest Service 2008). Visitors enjoy winter activities including snowmobiling, ice fishing, sledding, cross-country skiing, snowshoeing, and playing in the snow. Due to climatic variations that have resulted in less snowfall in recent years, declining budgets, and lack of interest from outside proponents, the ski area proposals mentioned in the current forest plan were dropped.

OHV Use

The primary recreation activities are "relaxing and escaping the heat," fishing, hiking, **OHV use**, viewing natural features and wildlife, camping, driving for pleasure, picnicking and large group gatherings, and hunting. Over 19 percent of forest visitors camped outside of developed campgrounds (Forest Service 2008a).

OHV use, referred to in the 1987 forest plan as "off-road vehicle" (ORV) use, was recognized by the Chief of the Forest Service as one of the four threats to National Forest System lands. The numbers of OHVs across Arizona have risen exponentially. The 1990 Arizona OHV Fuel Study estimated that there were over 500,000 OHVs. In Arizona, sales reports show a steady increase in new OHVs sold between 1995 (3,518) and 1998 (7,531), a 29 percent annual increase (Motorcycle Industry Council 1998). An Arizona State Parks off-highway use study found that 29 percent of Arizonans surveyed operate OHVs for recreation. Almost 500,000 Arizona households have one or more OHVs. The NVUM data show that 11 percent of forest visitors used OHVs, but only 4 percent identified OHV use as their primary recreational activity (Forest Service 2008).

Approximately 360,000 acres (18 percent) of the ASNFs is currently closed or seasonally restricted to OHV or motorized vehicle use. The remainder of the forests is open to motorized vehicle use, including cross-country travel. The 2005 Travel Management Rule, when implemented, will restrict motorized vehicle use to designated routes and areas (Forest Service 2008).

Wilderness

The ASNFs have three designated wilderness areas, encompassing 23,359 acres. The forests also manage the 180,000-acre Blue Range Primitive Area as wilderness (Forest Service Manual 2320.3(11)). Wilderness visitor use is concentrated in the two smaller, more easily accessed Wilderness areas, Mount Baldy and Escudilla. Visitor use in Mount Baldy is locally considered high, while visitor use in Escudilla is considered moderate to high. There are minimal trail systems (two to three trails) in these wilderness areas. Use in Bear Wallow Wilderness is lighter because it is less easily accessed and slightly larger. The trail system in Bear Wallow is slightly larger (five trails). In general, visitor use in the Blue Range is perceived as light because of its size, remoteness, and extensive trail system, but trails that are easily accessible from U.S. Highway 191 receive higher use.

GRAZING

The ASNFs manage 128 grazing allotments. Livestock grazing contributes to the livelihood of the permittees and to the economy of the local communities and counties. Livestock grazing on the forests generates approximately 0.3 percent of the labor income and roughly 2 percent of employment within the six counties (Apache, Coconino, Greenlee, and Navajo Counties in Arizona and Catron and Grant Counties in New Mexico) surrounding the ASNFs (Forest Service 2008a).

Grazing activities on the ASNFs contribute to the quality of life in rural communities through ranching and the associated sense of place, social customs, culture, and traditions (Forest Service 2008a).

Ten federal agencies managed more than 22.6 million AUMs on about 235 million acres of federal lands for grazing and land management in fiscal year 2004. Of this total, the Department of the Interior's Bureau of Land Management (BLM) and the U.S. Department of Agriculture's Forest Service managed more than 98 percent of the lands used for grazing. For BLM lands and western Forest Service lands, grazing is a major program; the eight other agencies generally use grazing as a tool to achieve their primary land management goals. In fiscal year 2004, federal agencies spent a total of at least \$144 million. The 10 federal agencies spent at least \$135.9 million, with the Forest Service and BLM accounting for the majority. The 10 federal agencies' grazing fees generated about \$21 million in fiscal year 2004--less than one-sixth of the expenditures to manage grazing. Of that amount, the agencies distributed about \$5.7 million to states and counties in which grazing occurred, returned about \$3.8 million to the Treasury, and deposited at least \$11.7 million in separate Treasury accounts to help pay for agency programs, among other things. The grazing fee BLM and the Forest Service charge, which was \$1.43 per AUM in 2004, is established by formula and is generally much lower than the fees charged by the other federal agencies, states, and private ranchers. As a result, BLM's and the Forest Service's grazing receipts fell short of their expenditures on grazing in fiscal year 2004 by almost \$115 million. The BLM and Forest Service fee also decreased by 40 percent from 1980 to 2004, while grazing fees charged by private ranchers increased by 78 percent for the same period. If the purpose of the fee were to recover expenditures, BLM and the Forest Service would have had to charge \$7.64 and \$12.26 per AUM, respectively; alternately, if the purpose were to gain a fair market value, the agencies' fees would vary

depending on the market. Differences in resources and legal requirements can cause fees to vary; however, the approaches used by other agencies could close the gap in expenditures and receipts or more closely align BLM and Forest Service fees with market prices. The purpose of the grazing fee is, ultimately, for the Congress to determine (Government Accountability Office 2005).

On the ASNFs, many of the permittees graze year-round and also utilize other public lands (State) lands, therefore it is anticipated that costs to the permittees are less. Permittees may be reluctant to reduce their AUMs because the cost on NFS lands is so inexpensive. (Mitchel White, Planning Team Ecologist).

Permittees on NFS lands may encounter less efficiency in managing their livestock on NFS lands than private (rounding up cattle, non-irrigated pastures, rugged terrain, more management restrictions, wildlife conflicts, etc). Seasonal exclusions on the ASNFs are rare.

Sheep grazing continues on the ASNFs on the Springerville and Black Mesa Ranger Districts. The Heber-Reno Sheep Driveway traverses across the Sitgreaves portion of the ASNFs. Over 20,000 head months of occupancy were recorded in 2008 for sheep (Forest Service 2009).

Number of Livestock Authorized on the Apache-Sitgreaves National Forests in 2008 (head months* of occupancy)	
Cattle	75,672
Sheep	20,213
Horses	1,772
Burros (used in managing sheep allotments)	65
*head month = 1 animal for 1 month	

MINERALS AND ENERGY

Source: Forest Service 2009a

There are no known oil and gas leases, identified oil shale, coal permits or leases, or geothermal leasing areas.

There is a coal field spanning across the lower portion of the Sitgreaves National Forests. The development of coal reserves is uncertain and largely dependent on future energy prices.

There is also a narrow area running from Springerville, AZ to Luna, NM that probably contains low-temperature geothermal waters in the subsurface.

There is a moderate to high potential for photovoltaic and solar power.

Wind potential ranges from low to moderate.

TIMBER

Nationally, timber harvest on national forests declined from 9.9 billion board feet to 1.1 billion board feet between 1986 and 2003. Associated with this decline is the reduction in capacity to process timber by 37 percent. Similar trends can be observed on the ASNFs (figure 15). This downturn was related, in part, to increasing litigation, listing of the Mexican spotted owl, and loss of timber companies. Recent increases in production are the result of White Mountain Stewardship Project (WMSP) contract, Rodeo-Chediski fire salvage, other mechanical treatments, and improving markets (Forest Service 2008a).

Firewood gathering is an important component of the local social and economic fabric; the personal use volumes depicted in figure 15 primarily represent personal use firewood sales (Forest Service 2008a).

The decline of timber sales and the disappearance of most local wood product industries over the last several years have resulted in the ASNFs having to pay for most treatments to manage and care for trees. Decline of local processing capacity was evidenced by the closing of several sawmills and the paper mill near Snowflake, Arizona, converting to using 100 percent recycled paper material in the late 1990s. However, recent trends show an improving marketplace. As of May 2008, seven businesses were utilizing small diameter logs and fiber harvested from the forests (Forest Service 2008a).

In 1987, timber sale revenue funded forest improvements such as road reconstruction and maintenance or was returned to the Federal Treasury. In about 2000, direction shifted to emphasize fuels management projects within the wildland-urban interface (WUI) treating primarily small-diameter trees. These projects return little revenue to the ASNFs. However, the intent of these projects is to reduce the fire hazard on forest lands adjacent to private property (Forest Service 2008a).

In August 2004, the first large, 10-year stewardship contract in the Nation for the White Mountains Stewardship Project (WMSP) was awarded. The contract is for treatment of approximately 5,000 to 25,000 acres per year over the 10-year contract term. As of February 2008, task orders for the treatment of over 33,000 acres have been issued, over 23,000 acres of thinning completed, and more than 600,000 green tons of biomass removed from the forests. Development of this project began with the goal to restore forest health, reduce the risk of wildfire to communities, and encourage new wood product industries. These objectives are not identified in the current forest plan (Forest Service 2008a).

In 2008, task orders for the treatment of 5,547 acres were issued, 8,691 acres were treated, and 187,300 green tons of woody material were removed from the forests. Since the start of WMSP 30,900 acres have been treated and 631,600 green tons of woody material have been removed and utilized by a growing number of local businesses. WMSP supports over 240 full-time jobs in the White Mountains. Fourteen businesses spent 11 million dollars locally (Forest Service 2009).

In 2008, 53,815 CCF (hundred cubic feet) of merchantable tree products (including woody material from the WMSP with a value of \$344,000 were removed from the forests. Sawlogs (timber larger than 9 inches in diameter measured 4.5 feet from the ground) accounted for 30,100 CCF. If all the timber were measured in cords it would be approximately 73,715 cords. The ASNFs provided fee and free-use permits for the collection of 12,076 CCF of fuelwood for personal use and 1,311 CCF of fuelwood for

commercial use. The total fuelwood sold measured in cords equals 16,868 cords. Over 2,000 permits for Christmas trees were issued from the Black Mesa and Lakeside Ranger Districts through the Arizona Sale-by-Mail permit system. Springerville, Alpine and Clifton Ranger Districts provided over 3,500 over-the-counter Christmas tree permits. Another 1,500 permits were issued forest-wide for wildlings and other miscellaneous products like tree boughs or cones (Forest Service 2009).

In 2008, the ASNFs planted trees on 243 acres, another 409 acres regenerated following site preparation, and 860 acres regenerated naturally for a reforestation total of 1,512 acres. The forests accomplished 6,224 acres of precommercial thinning of small diameter trees. This thinning occurs in areas in which high tree densities are causing unhealthy forest conditions and hazardous fuel ladders. By thinning the trees and reducing competition, the remaining trees are able to receive the amount of water, nutrients, and sunlight they require. The forests also harvested 10,570 acres of timber stands infected by insect and disease. This type of harvest is referred to as a sanitation harvest. Typically, the infected trees are felled and removed to prevent the infection from spreading to surrounding trees (Forest Service 2009).

Information on the ASNFs forest resources can be found in the forests' databases and reports, including:

McClure Consulting, LLC. 2009. 2008 White Mountain Stewardship Project Economic Assessment. Prepared for White Mountain Stewardship Project Multi-Party Monitoring Board.

White Mountain Stewardship Contract Multi-Party Monitoring reports can be found on <http://www.fs.fed.us/r3/asnf/stewardship/multi-party-monitoring.shtml>

U.S. Forest Service. 2003. Forest Resources of the Apache-Sitgreaves National Forest. Rocky Mountain Research Station. Paul Rogers. 13 p. <http://www.fs.fed.us/rm/ogden/pdfs/apachesit.pdf>

Hampton, H.M., S.E. Sesnie, B.G. Dickson, J.M. Rundall, T.D. Sisk, G.B. Snider, and J.D. Bailery. 2008. Analysis of Small-Diameter Wood Supply in Northern Arizona. Forest Ecosystem Restoration Analysis Project, Center for Environmental Sciences and Education, Northern Arizona University. <http://www.forestera.nau.edu/docs/Products/WoodSupply/WoodSupplyAnalysisFinalReportWithAppendices2008.pdf>

One of the largest risks to maintaining a sustainable timber inventory is wildfire. There are additional constraints on lands that can be harvested, identified in the timber suitability (Monica Boehning, Planning Team Silviculturist).

REFERENCES

U.S. Forest Service. 2008. Forest Plan Revision Resource Evaluations Apache-Sitgreaves National Forests. 107 p. <http://www.fs.fed.us/r3/asnf/plan-revision/plan-set/ASNF-Resource-Evaluations-2008-07-18.pdf>

U.S. Forest Service. 2008a. Comprehensive Evaluation Report. Apache-Sitgreaves National Forests. December 2008. 40 p. <http://www.fs.fed.us/r3/asnf/plan-revision/plan-set/ASNFs-CER-2008-12-11.pdf>

U.S. Forest Service. 2009. Apache-Sitgreaves National Forests 2008 Annual Report. 10 p.
<http://www.fs.fed.us/r3/asnf/publications/documents/ASNF-2008-M-E-Report.pdf>

U.S. Forest Service. 2009a. Apache-Sitgreaves National Forests Mineral Resource Report December 2009. 26 p.

U.S. Government Accountability Office. 2005. Livestock Grazing: Federal Expenditures and Receipts Vary, Depending on the Agency and the Purpose of the Fee Charged. GAO-05-869.
<http://www.gao.gov/products/GAO-05-869>