Socioeconomics

Existing condition of Economics

This section describes the socioeconomic environment that could be affected by the proposed action and its alternatives. The focus is on the socioeconomic relationship among and between project implementation and the local and regional economy. Emphasis is placed on those components of the economy identified in the scooping process, specifically concern bout the impacts of the project on the private land values in the area. Counties are the smallest areas for which substantial and consistent economic information is available, although sub-county township-level and zip code information is available for some subject matter (the confidentiality of Census of Agriculture respondents is protected by Title 7 of the United States Code, therefore is not published information in units smaller than zip code; Census of Agriculture zip code data is published every 5 years. The smallest unit available is by county).

The Buttermilk Hill-Talbott Hollow Blowdown project area lies in Jackson County in the southwestern corner of Illinois. The area is largely rural with the town of Murphysboro, the county seat, being located about 11 miles southeast of the project area. National Forest ownership in Jackson County is 47,300 acres, or about 12.6% of the total land base of the county (376,400 acres). The county is affected by management activities on the Shawnee National Forest through direct employment. Indirectly, income is derived largely from recreation activities primarily related to hunting and fishing, but also includes camping, and wildlife viewing, etc.

In Illinois during 2005, the timber industry (forestry and logging timber tract operations, and support industries for forestry) include 26 businesses Although more than a third (137,700 acres, 35.5 %) of Jackson County is covered by forest/woodlands, there were only three business related to the timber industry in operation during 2005, with an annual payroll of $22,000 (Bureau of the Census, County Business Patterns, 2005).

During 2006 there were 92 individuals employed in forestry, fishing, related activities and other (US Bureau of Economic Analysis, Table CA25N, Total full-time and part-time employment by NAICS industry Jackson, IL [number of jobs] 2006). There were only 87 individuals employed full or part time in forestry-related or logging business in Jackson County in 2001 (0.2%) (US Bureau of Economic Analysis, Table CA25N, Total full-time and part-time employment by NAICS industry Jackson, IL [number of jobs] 2001).

Agriculture, however, does have an influence on the county's economy; 53.1% (199,683 acres) of the land within the county was included in farms in 2002 (740 farms)(USDA National Agriculture Statistics Service), making it a much larger contributor to the local economy. However, the clear majority of those employed in Jackson County are non-farm employed (97.5%); only 957 individuals were employed on farms (2.5%).

Twenty-five percent of the monies received from natural resource consumption (25% Funds), such as timber harvesting, mining and recreation, on National Forest lands are

paid to the counties in which these lands are located. Table X-1includes the average annual payment made to Jackson County from 1986 to 1999. In 2001, the enactment of the Secure Rural Schools and Community Self-Determination Act (SRSCS) changed the formula for the payments to states and counties. The Act addressed the decline in revenue from timber harvest on Federal land, which has historically been shared with counties. These funds have traditionally been used for local schools and roads. For each year 2001-2006, the law allows counties to receive a payment from the Federal government based on the State average of their top three years of payments from Federal lands. The purpose of the act was to stabilize payments to counties that help support roads and schools, provide projects that enhance forest ecosystem health and provide employment opportunities, and improve cooperative relationships among Federal land management agencies and users (USDA Forest Service). Counties could choose to take the average for the three high years since 1986 or continue to receive the standard 25% of revenues. The new law commonly referred to as “Payments to States” replaces and fundamentally changes the way the Forest Service has been returning a portion of its annual receipts to jurisdictions falling within national forest boundaries ("the 25 percent fund"). All the Illinois counties having NFS land within their borders, including Jackson County, have chosen the “Payments to States” alternative. Table X-1 includes payments made to counties in southern Illinois prior to the enactment of the SRSCS and in 2007, after the enactment of the Payments to States Act.

Table X-1 Payments to Counties, 25% Funds and Payments to States

Location	25% Funds Average Annual Payment,1986-1999	Payments to States Annual Payment, 2007	Percent Change 1986-2007
Jackson County	11,000	31,798	+189
Forest Counties	64,787	186,572	+188
Illinois	105,800	304,247	+187

Source: U.S. Forest Service

Forest Service payments to states and counties in southern Illinois reached a high of $235,700 in 1987 to a low of $17,200 in 1999, with an average of $64,787. As can be seen, the payments to states and counties has risen dramatically between 1999 and 2007.

If the payments by the Forest Service do not amount to at least $1.75 per acre, then payments in lieu of taxes (PILT) are used to address the shortfall. “Payments in Lieu of Taxes" (or PILT) are Federal payments to local governments that help offset losses in property taxes due to nontaxable Federal lands within their boundaries. PILT payments are administered by the Bureau of Land Management.

PILT payments are made to over 2,300 counties in 49 States, the District of Columbia, Guam, Puerto Rico, and Virgin Islands. The level of these payments and trends over time are important to the individual counties involved. Trends in 25% Funds and PILT are

important because declines or even slow growth can put additional pressure on the area tax base.

Table X-2. PILT Acres and Payments, 1997 and 2007							
County	**Acres 1999**	**Acres 2007**	**Percent Change**	**Payment 1997**	**Payment 1999**	**Payment 2007**	**Percent Change '99-'07**
Jackson	**46,814**	**47,233**	**0.1**	**31,890**	**32,962**	**64,207**	**+95**
Forest Counties	269,686	270,475	0.1	185,880	193,245	368,453	+91
Illinois	284,767	288,383	0.1	324,520	347,230	648,012	+87

Source: Bureau of Land Management

There was very little change between 1999 and 2007 in regard to the amount of Forest Service lands in southern Illinois. However, the amount paid in PILT funds nearly doubled in Jackson County during the same period of time.

Direct and Indirect Effects on the Area Economy

This analysis includes the direct and indirect effects associated with two alternatives, including Alternative 2, the proposed action. Costs, such as general administration and program management are fixed and do not change between the alternatives and are not included in this analysis.

It is also important to recognize that many values generated by many Forest Service activities, both positive and negative, involve goods and services that are not priced in the market place and therefore can not be included in this analysis. These values would include such things as the value of a hunting experience, a hike in the woods, wildlife viewing or the water quality of streams and lakes. Social Scientists have spent considerable time and effort in determining the dollar value on a hunting day or trip, but this analysis is confined to the costs and benefits of the proposed project.

There are other goods and service that do have monetary values, however, including personal safety, and the preservation of farms and livelihoods from wildfires, etc. During 2002 and 2003 Congress recognized the catastrophic costs to individuals and communities located in the vicinity of federal lands as a result of wildlfire, and passed the National Forest's Healthy Forest Restoration Act of 2003 (P.L. 108-148). Thousands of individuals and families had been forced to flee their homes, and thousands of homes and other structures had been destroyed as a result of wildland fire. The Healthy Forest Act was signed into law in order to lessen wildfire risk to communities, municipal water supplies, and adjacent Federal lands. According to social researchers in the South:

> Fires keep ecosystems healthy, but when they happen near urban areas the protection and safety of humans and their properties, rather than ecosystems, take

> precedence. As cities and suburbs sprawl into rural areas across the South, fire is more likely to occur and more likely to damage economic, social, and ecological systems… Many resource managers, decision makers, and citizens are developing a new set of priorities for conserving and managing forest land. Protecting wildlife habitat, improving water quality and air quality, and **preserving the rural character of communities top the list** (emphasis mine) (Monroe et al, 2003: 1).

Effects on economics for each alternative will be discussed as it relates to the preservation of community social and economic health.

Alternative 1. Alternative 1 is the no action alternative. Under the no action alternative, direct effects would include the continued presence of blown-down timber; the risk of a severe wildfire would remain high. Indirect effects might include the loss of private property and agricultural production. The no action alternative may encourage catastrophic wildland fire that could potentially destroy not only homes and farms adjacent to the project area, but also adversely affect the local natural ecosystems present within the study area.

Alternative 2. Under Alternative 2 prescribed fire would be used to treat a total of about 5,650 acres including about 4,375 acres of Forest land and 1,275 acres of private land.

Value of Private Lands and Healthy Forest Restoration. There are no benefits for the surrounding community as a result of implementing Alternative 1. However, there are significant risks associated with the selection of Alternative 1. The downed and dried fuels would remain on the ground and would continue to pose a danger to neighboring homes and farms. Population within the three townships this project is located in has increased 23% since 1970 (Kinkaid, Levan and Sand Ridge)(Table X-X). Even more significantly, housing numbers have increased 40% during the same period of time (Table X-X.), the majority of which have been built since 1970 (Table X.).

Table X-X. Population and Housing: Kinkaid, Levan and Sand Ridge Twp.s, Jackson County, IL

Census Attribute	**Census Year**			
	1970	1980	1990	2000
Population	1508	1841	1761	1953
Housing	496	715	716	832

U.S. Census Bureau

Table X-X. 20th Century Housing Construction: Kinkaid, Levan and Sand Ridge Twp.s, Jackson County, IL

1939 and earlier	1940-49	1950-59	1960-60	1970-79	1980-89	1990-2000	Total
178	39	30	81	247	92	276	943
19%	4%	3%	9%	26%	10%	29%	100%

http://www.city-data.com/county/Jackson_County-IL.html

There are many benefits to the health and safety of the surrounding community through the selection of Alternative 2. There are six homes near the Buttermilk Hill-Talbott Hollow Blowdown project area that are valued over $500,000; there are also eight houses valued around $250,000, and 25 homes valued at or near $100,000 (Table X-X). There are also 219 houses valued at a much more modest, but still valuable $50-$100,000 range. A very conservative value of these 283 houses and homes is $16,257,000 (median value of house in each township, multiplied by the number of houses enumerated in each township).

Table X-X. Specified Owners-Occupied Housing

		Value of Home ($1,000)							
Twp.	**Houses**	Under $50	50-100	100-149	150-199	200-299	300-499	500+	Median
Kinkaid	42	19	23						63
Levan	117	8	70	19	20				75
Sand Ridge	124	74	25	6	5	8		6	39
Total	283	101	118	25	25	8	0	6	

U.S. Census Bureau

The agricultural economy of the region would also benefit from the selection of Alternative 2. There are 150 farms in the two zip code areas that make up the present study area ranging in size from a few acres to over 1,000 acres (Table X-X). The average estimated market value of farm land and associated buildings in Jackson County is $504,574 (National Agriculture Statistics Service). An estimated market value of the total number of farms located within the projects area, as enumerated by Zip Code, is $75,686,100.

Table X-X. 2002 Census of Agriculture: Zip Code Data-Farms by Size					
Zip code	Place Name	Farms by Size			
		All Farms	1-49 acres	50-999 acres	/\ 1,000 acres
62907	Ava	129	24	100	5
62940	Gorham	21	*	13	*

National Agriculture Statistics Service \/ = less than; /\ = greater than; * = data withheld on 1-4 farms

Table X-X. 2002 Census of Agriculture: Zip Code Data-Value of Products					
Zip Code	Place Name	Value of Agricultural Products Sold ($1,000)			
		Total Farms	\/ $50	50-249	250/\
62907	Ava	129	109	16	*
62940	Gorham	21	10	5	6

National Agriculture Statistics Service \/ = less than; /\ = greater than; * = data withheld on 1-4 farms

The selection of Alternative 2 will reduce the risk to catastrophic fire associated with the heavy load of dead and downed fuels that has resulted from the blowdown, and preserve the monetary values of the homes and farms within the three townships located within the project area.

Another aspect of the Healthy Forest Restoration Act, as the name implies, is to protect, restore and enhance forest ecosystem components, in part to promote the recovery of threatened and endangered species, and improve biological diversity. At least one individual was concerned about the impact to private land, including not only the market value of the land and its produce, but also the intangible or intrinsic value of the landscape. This concern is not uncommon. During focus group discussions regarding the wildland-urban interface in a number of southern states, many individuals "mentioned changes in air quality, wildlife habitat, water quality, water quantity, species composition, soil quality, and pollution levels" resulting from population growth (Monroe et al, 2003:3). In addition,

> (Focus group)Participants also readily agreed that the natural features of their region are attractive and valuable—the secondary forests, agricultural areas, trout streams, reservoirs, and recreation areas. **Beauty and rural character are attributes that many people cherish and fear will be lost if appropriate measures are not taken to protect key features (**emphasis mine)(Monroe et al, 2003:3).

The selection of Alternative 2 will reduce the risk of wildland fire and therefore, contribute to the preservation of the forested areas within and around the Buttermilk Hill-Talbott Hollow Blowdown project area, and all the flora and fauna included in those woodlands. Managed prescribed fire will restore and maintain healthy forest and woodland ecosystems, enhance wildlife habitat by encouraging native species growth (e.g. oak seedlings); and maintain and/or improve natural community diversity and species richness, as well as reduce non-native invasive species.

In short, Alternative 1, through inaction, may encourage catastrophic wildland fire that could potentially destroy not only homes and farms adjacent to the Blowdown project area, but also adversely affect the local natural ecosystems present within the study area. Alteranative 2, through the managed use of prescribed fire, would begin to restore the forested hills located within the Buttermilk Hill-Talbott Hollow Blowdown project area, preserving both its wild and rural character.

Cumulative Effects. The area of consideration is Jackson County because the project is located within the political boundaries of the county. In addition, as noted above, counties are the smallest areas for which substantial and consistent economic information is available. The temporal boundary of 10 years was selected because that is the length of the expected life of the effects of the Buttermilk Hill-Talbott Hollow Blowdown project activities as well as the extent of which these effects are measurable and meaningful. In addition, beyond that timeframe any impacts from these activities would have been stabilized and no longer contributing to the cumulative effects**.** Five years was chosen to look back at these specific actions because their effects would be negligible beyond a five-year timeframe.

Past, Present and Reasonably Foreseeable Actions that may effect Regional Economics. Past activities that have occurred within the four watersheds included in the project area include farming and grazing; mining; timber harvest; recreation (trail construction and maintenance, picnicking, fishing, hunting, rock climbing, artifact hunting and collection); wildlife management; hiking, rock climbing and rappelling); unauthorized use of ATV's and OHV's; special use permits (utilities, communications military training, recreational events, vendors, and roads); railroad construction and use; road construction, maintenance and use; and tree planting and timber stand improvements (including the use of herbicides). During the last five years, within the project area, the Forest Service has maintained roads, maintained recreation trails, issued special use permits, and treated acres with prescribed fire.

Present actions within the project area include, but are not limited to, trail construction, maintenance and use; power-line maintenance; ATV use (authorized and unauthorized, see below); timber harvest (predominantly on private lands); agricultural management (row-cropping and pasture) on private lands; fire (wild and prescribed) and fire suppression; use of non-system trails; road maintenance and use; tree-planting; equestrian use; public visitation and outdoor recreational use (hiking and hunting,); special use permitting. Within the project area watershed there is some amount of ATV use on the existing roads and trails. Some of this use is legally permitted use (authorized) and some of this use is illegal (unauthorized). The effects of ATV use are generally spread over the large watershed area.

Reasonably foreseeable future actions in the project area vicinities include all of the above present actions, proposed actions, and some repeat of the past actions including residential development on private lands.

A number of activities have no cumulative effects; there has been and will be no change in regard to cultivated or pastureland acres, timber harvest and timber stand improvement, road and right-of-way, or utility corridor maintenance, special use permits, and non-system trail or equestrian use. These projects/management activities will not have a cumulative effect on the tangible and intangible values of the socio-economic landscape of Jackson County.

A number of projects, management activities and other developments may have a cumulative effect on the region, the great majority of the effects, are beneficial to the private land values in the area. The risk of wildfire will be greatly reduced through the selection of the preferred alternative. Past present and future prescribed fires will have a short term affect on the immediate area, but soot and other short-tern residue of the prescribed fires will be short-lived. Tree planning, non-native invasive species management, brush pile accumulation and openland management will all have beneficial effects on wildlife and therefore will enhance the recreation opportunities in the study area (hunting and hiking, etc). Trail construction and maintenance may also have a cumulative effect by offering additional recreation opportunities to forest visitors. Shoreline and gully stabilization may have a beneficial, aesthetic effect on recreation on

Lake Kinkaid, and attract increasing numbers of visitors to the lake. It may also increase values of current housing and increase housing starts.

Other activities that are likely to occur in the future and may cause cumulative effects include ATV use and real estate development. Increased housing starts and other real estate development may have an adverse effect on the present population adjacent to the project area. It is largely rural and may not like closer neighbors. There is often friction between old "settlers" and new neighbors, especially if the new neighbors are more urban oriented and therefore may have different values. However, Jackson County currently has 101.4 persons per square mile, which is less than half the state's population density at 223.4 persons per square mile. It would take a very large influx of population to "crowd" the rural landscape of the region. Currently the population density of the three townships in which the project area is located is 18.65 persons per square mile.

ATV use may cause unsightly erosional effects as well as effects to the ambient nature sounds of the wild. It may have an adverse effect on adjacent land owners quality of life. Both real estate development and ATV use is uncontrolled and beyond the control of the SHF.

In short, the cumulative effects of the proposed action would contribute in a meaningful way to the local economy through preservation of real estate and agricultural production as a result of the active management of the dead and dried woody fuels resulting from the 2006 windstorm. The proposed action provides for prescribed fire management activities that will begin to restore damaged native ecosystems, increasing the probability of preserving both its wild and rural character, as well as maintain or enhance the values of local property owners.

References Cited

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