Chapter 6: A Socioeconomic Assessment of Forest Service Recovery Act Projects: Huron Fuels Treatment Project, Michigan

Huron National Forest

Huron National Forest

Pamela Jakes[1]

Summary

"Iosco jobless rate passes 20 percent" read the headline in the *Oscoda Press*, February 3, 2010 (Nelson 2010). Although never described as prosperous, in the past, Iosco and neighboring Alcona, Crawford, and Oscoda Counties had benefited from diverse economies, with jobs found in small manufacturing plants, timber harvesting, wood processing facilities, and four-season recreation. But the economic downturn has been felt even in the relatively isolated communities of the Huron National Forest. When the opportunity arose to propose projects for Forest Service Recovery Act funding, staff on the Mio and Huron Shores Ranger Districts asked how they could develop a safe project that would provide jobs, support local governments, and invest in area businesses. Wildfire is recognized as the number one natural hazard in the area, with forests composed of one of the Nation's more volatile forest types and individual homes or developments scattered among the trees. The recovery project designed by the districts resulted in the hiring of eight students under the Student Temporary Employment Program (STEP) and 80 individuals as temporary employees who reduced the wildfire risk in east-central Michigan by constructing new fuelbreaks and maintaining fuelbreaks established as early as the 1940s and 1950s, mitigating wildfire risk in the wildland-urban interface, and improving the health of federal forest land. Counties received more than $270,000 to extend mowing along roads and provide support to the Forest Service

> Everyone's benefiting in the county 'cause the money's flowing in through all those paychecks every 2 weeks… That's the best stimulus you could do.
>
> —*Forest Service employee*

Fast Facts

Total Forest Service Recovery Act Investment in Michigan (as of 09/08/09): ~$39,382,290 (Michigan projects: $34,557,000; Michigan share of multistate projects: ~$4,825,290)

Total Forest Service Investment in Huron Fuels Treatment Project Case Study: $3.8 million

Project Location: Mio and Huron Shores Ranger Districts, Huron National Forest, Michigan

Counties: Alcona, Crawford, Iosco, and Oscoda

Project Type: Constructing new fuelbreaks, maintaining existing fuelbreaks, reducing fuels in the wildland-urban interface, improving health of federal forest land

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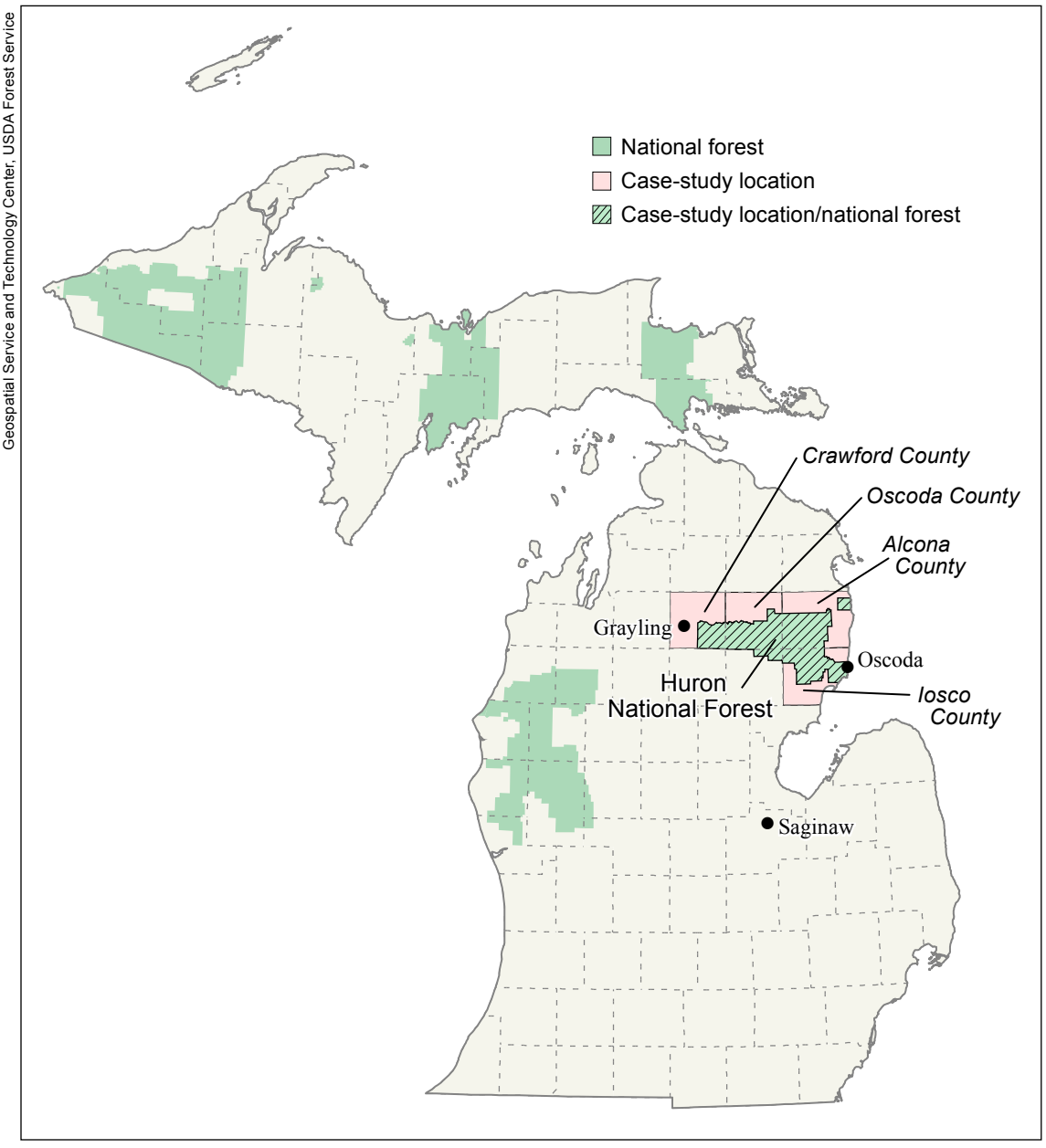
recovery crews. The forest and Oscoda County partnered to obtain high-resolution photography of the entire county, improving emergency response and planning, and allowing the county to more equitably assess property taxes. More than $1 million went to private businesses, with the largest contracts awarded for equipment rental, vehicle leasing, and to reduce fuels and improve wildlife habitat using a stewardship contract. In addition to providing income to residents and boosting the local economy, the project created, maintained, and protected infrastructure; built human capital; and improved the quality of life. Environmental benefits included reduced fuels loads, conversion of sites to more ecologically appropriate species, improved Kirtland's warbler (*Dendroica kirtlandii*) habitat, and creation of barrens for wildlife habitat.

The Case

The communities in Alcona, Crawford, Iosco, and Oscoda Counties (fig. 6-1) have been referred to as "little towns in the big woods." Nearly two-thirds of the land area in the



Geospatial Service and Technology Center, USDA Forest Service

Figure 6-1—The Huron Fuels Treatment Project case study included Michigan's Alcona, Crawford, Iosco, and Oscoda Counties, and the Huron Shores and Mio Ranger Districts of the Huron National Forest.

four counties is forested, ranging from a low of 46 percent for Iosco County to a high of more than 84 percent in Crawford County (Pugh et al. 2009). Stands of pines (*Pinus* spp.), aspen–birch (*Populus* spp.–*Betula* spp.), northern hardwoods, and oak (*Quercus* spp.) are most common. The Huron National Forest was established in 1909 and worked with partners to restore "the lands that nobody wanted." More than half of the forest land in the area is now in public ownership, with the Huron National Forest being the largest public land manager. These forests supported a booming lumber industry in the mid-1800s, but by the end of the century the merchantable pine had been logged and the area experienced a series of devastating fires. Large fires continue to occur in the area approximately once every 28 years (Simard et al. 1983), with the most recent, the Meridian Boundary Fire, burning more than 8,500 acres on May 18, 2010.

Prescribed forest burning is a long-established practice in the area (fig. 6-2). The Huron National Forest burns approximately 3,500 acres per year to achieve management objectives including fuel reduction and site preparation.

Huron National Forest

Figure 6-2—The prescribed forest burning conducted by Recovery Act employees continued a long-established practice on the Huron National Forest.

It is an important tool for creating wildlife habitat, and, historically, has been used to manage jack pine (*Pinus banksiana* Lamb.) for the endangered Kirtland's warbler. The practice has not been without incident and was temporarily discontinued after the 1980 Mack Lake Fire. On May 5, 1980, a prescribed fire was ignited in jack pine slash to prepare the site for regeneration. The fire escaped, resulting in the death of one firefighter, the destruction of 44 structures, and the loss of 24,000 acres of forest (Simard et al. 1983). More recently, forest staff have demonstrated their commitment to prescribed burning for hazardous fuel reduction by conducting many burns, including one around the ranger compound adjacent to the town of Mio. Local residents now generally accept prescribed burning as a management tool.

Logging is still important to the area's economy, but it is only a small fraction of what it was in the past. Today's wood processing facilities (including oriented strand board, lumber and other construction material, and furniture manufacturers) contribute to an economy that includes small manufacturing plants supplying parts to the automotive industry, shops overhauling aircraft, construction and real estate businesses meeting the demand for retirement and second homes, and the many establishments serving recreationists. Jobs in many of these sectors have been disappearing over the past decade. It has not been uncommon for employees with more than 20 years of experience losing jobs they expected to retire from.

The unemployment rate in the area has exceeded that of the state of Michigan (fig. 6-3), and measures of individual and household economic health have been generally worse here than in the state as a whole (figs. 6-4 through 6-6). Since the mid 2000s, population in the four case-study counties has declined faster than in the state (fig. 6-7), with many of those who continue to live in the area feeling that they cannot look for employment elsewhere because of shared child custody agreements, the need to care for an elderly parent, or because they were loathe to leave their support system behind. School enrollment has also declined during this period (fig. 6-8).

The Mio and Huron Shores Districts decided that the best approach for helping their neighbors persevere during the latest down-turn, would be to provide temporary jobs working in the woods to reduce wildfire risk and improve or restore ecosystem health. The first Recovery Act employees arrived on July 5, 2009, more than doubling the size of the Mio District. The Recovery Act employees participated in 4 weeks of training that stressed safety (including first

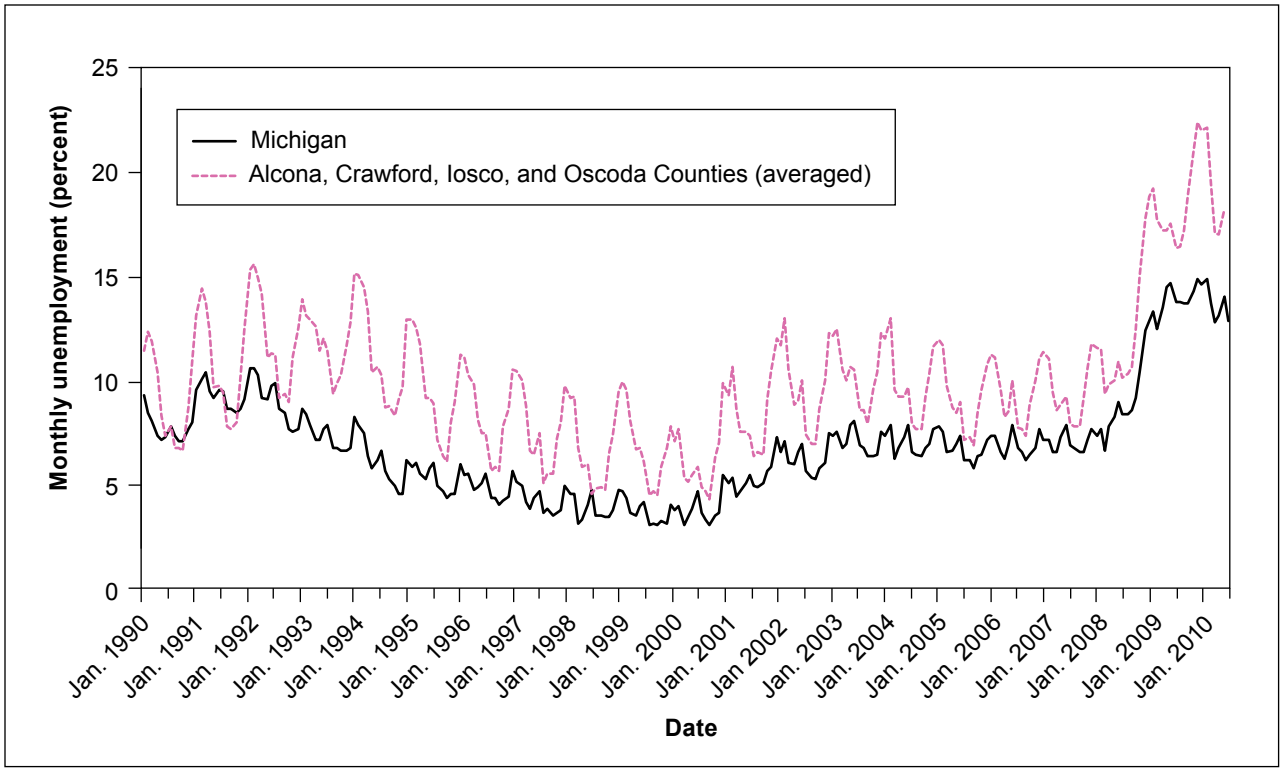


Figure 6-3—Monthly unemployment rates for Michigan and an average for the four Michigan case-study counties, 1990–2010 (USDL BLS 2010).

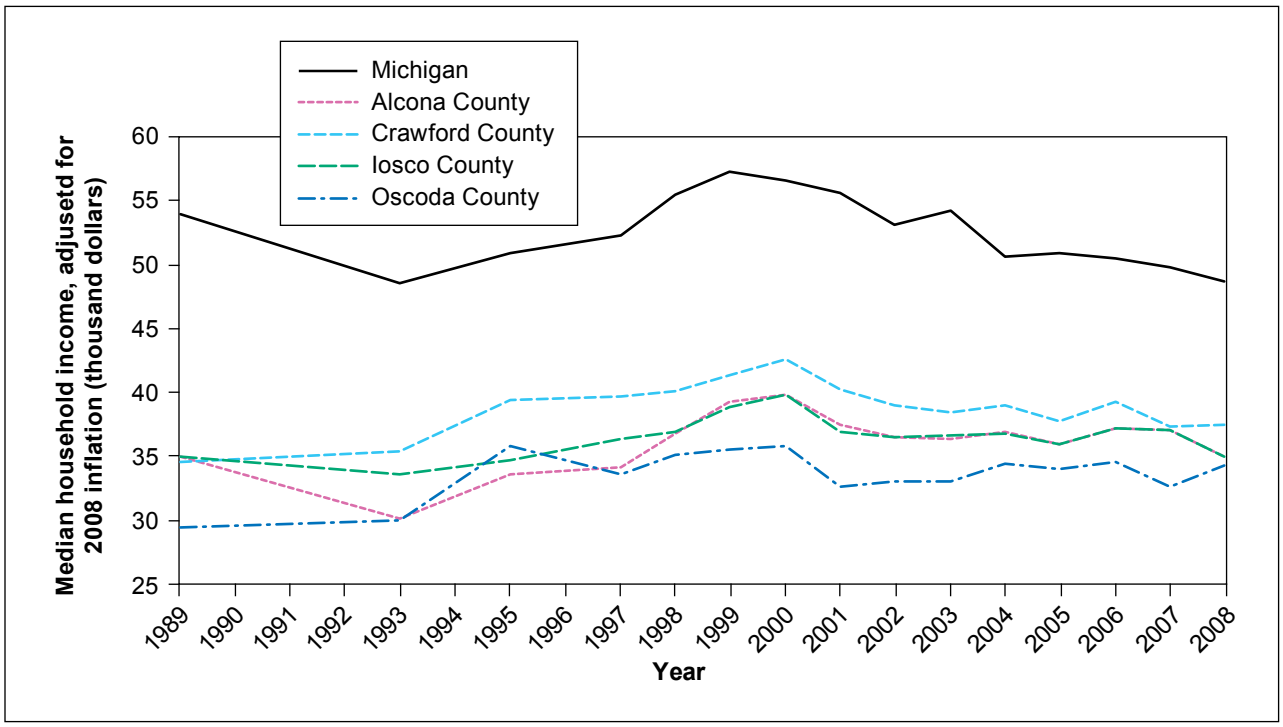


Figure 6-4—Median household income for Michigan and each Michigan case-study county, in 2008 dollars, 1989–2008 (USDC BC 2010b).

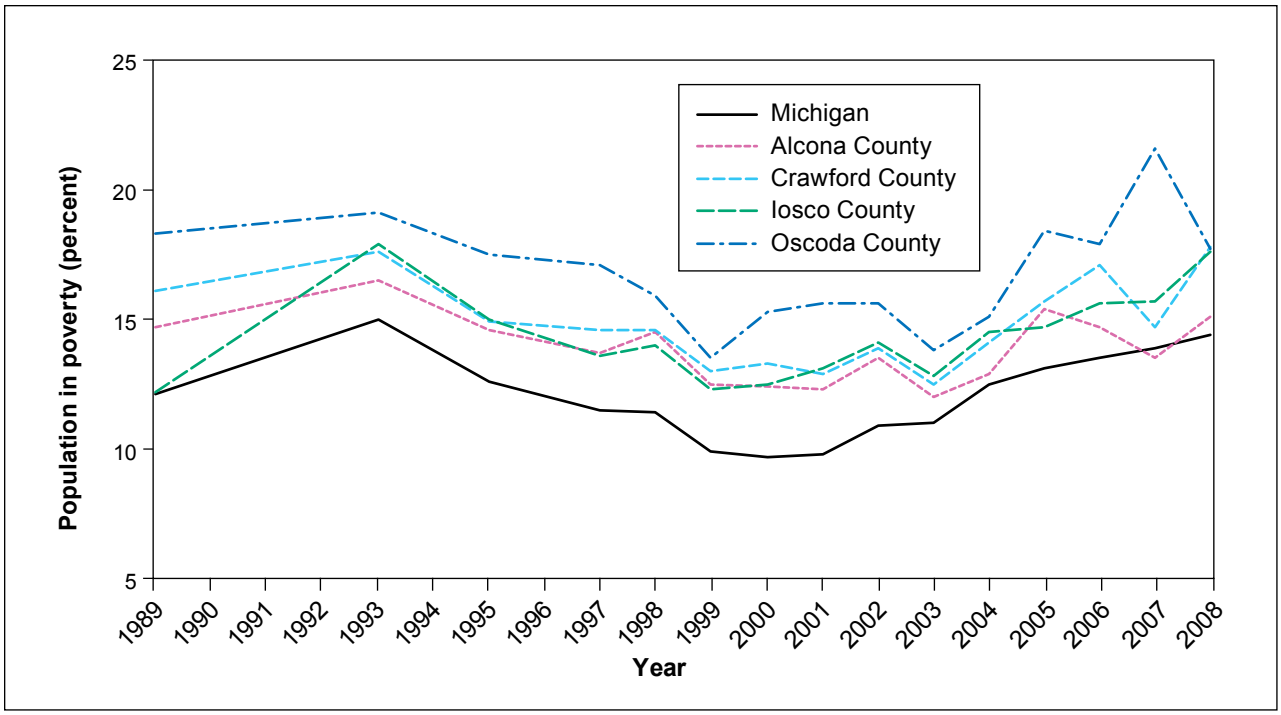


Figure 6-5—Percentage of population living in poverty for Michigan and each Michigan case-study county, 1989–2008 (USDC BC 2010b).

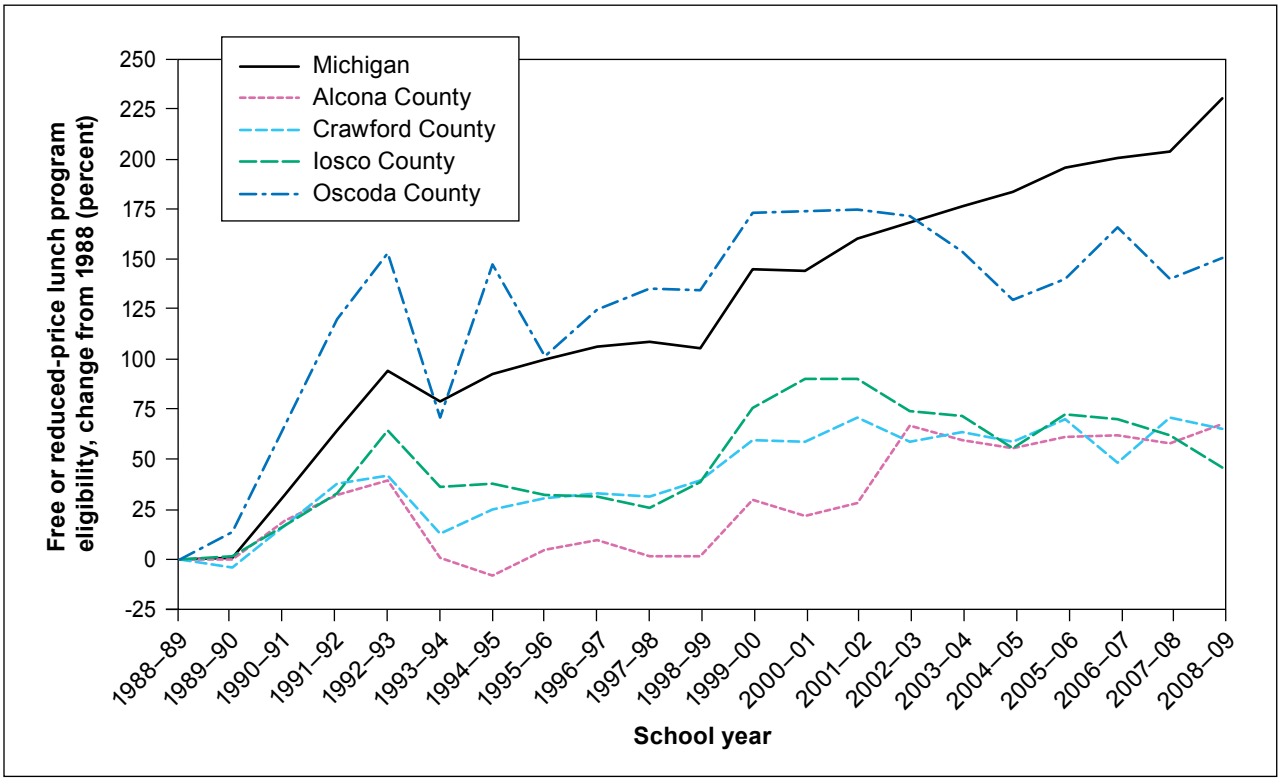


Figure 6-6—Change in number of students eligible for free or reduced-price lunch programs in Michigan and each Michigan case-study county, 1988–2008 (USDE NCES 2010). Note: reduced-price lunch added in 1999.

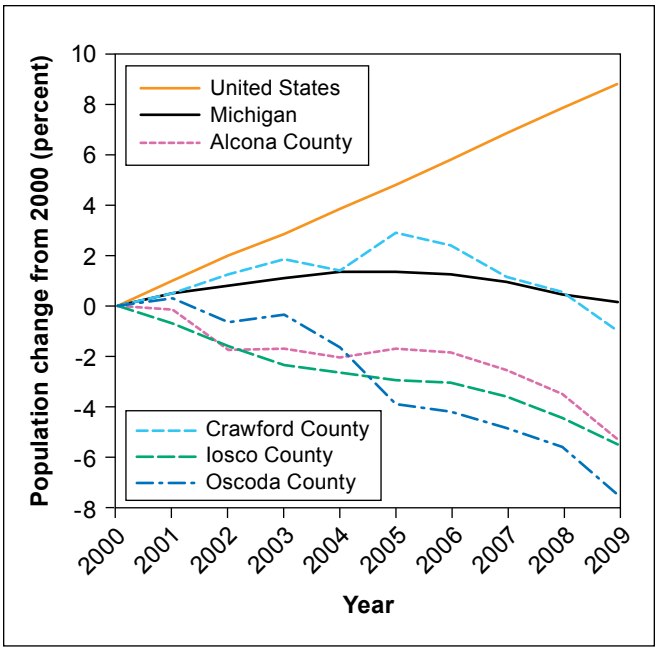


Figure 6-7—Change in population for the United States, Michigan, and each Michigan case-study county, 2000–2009 (USDC BC 2010a).

aid and cardiopulmonary resuscitation), firefighting skills, chainsaw operation, heavy equipment operation, physical fitness, and what it means to work for the Forest Service. Additional firefighting training resulted in their being red card qualified for wildland fire suppression. After classroom training, the new employees served as apprentices in the woods before transitioning to their jobs clearcutting jack pine to create fuelbreaks, thinning red pine (*Pinus resinosa* Aiton) to reduce fuels and promote more valuable timber, creating barrens for wildlife habitat, and prescribed burning in an attempt to put fire back in the ecosystem. The training was repeated in March 2010 when the second field season began. In addition to their planned activities, Recovery Act employees helped suppress wildfires in the area, including the May 2010 Meridian Boundary Fire. The crews also assisted with reforestation projects and restoration of areas damaged by off-road vehicles. Several Recovery Act employees traveled to the Wayne and Chequamegon-Nicolet National Forests as members of a special Huron-Manistee National Forests fire use team.

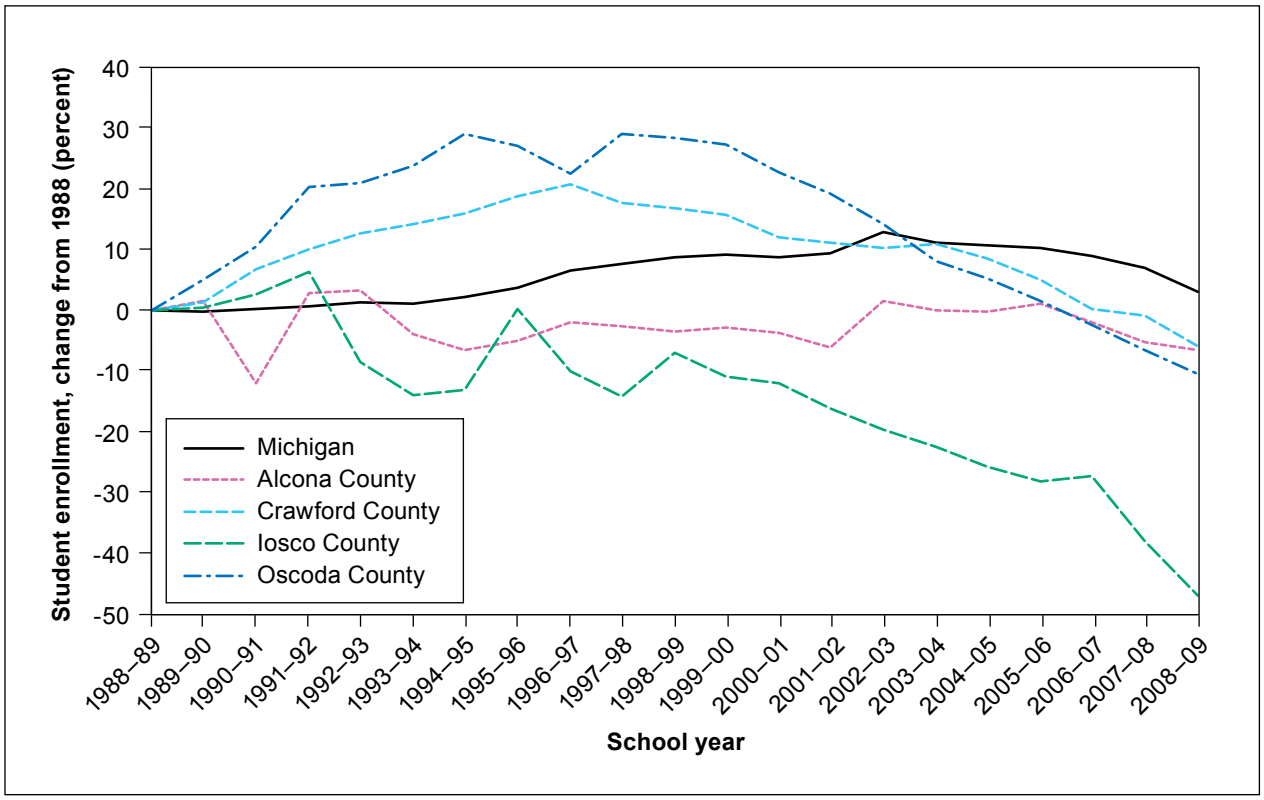


Figure 6-8—Change in school enrollment for Michigan and each Michigan case-study county, 1988–2008 (USDE NCES 2010).

> At the moment they're pretty glad to see that their neighbors are employed… . They've all just driven down the highway and seen the ARRA project signs… but they don't know those people, and they see that a big company got some more money to do a project. But when they see this it gets them a little that we've employed some people, and it's local people.
>
> —*Forest Service employee*

The districts have purchased fuel, equipment, and other supplies for the crew from local businesses. Agreements with counties call for a number of services that complement ongoing projects. County crews are expanding normal right-of-way brush removal operations into the forest to create fuelbreaks along potential evacuation routes. In some areas, they are constructing new fuelbreaks. They are filling water tanks to support prescribed burns and moving Forest Service machinery between field sites. A stewardship contract was awarded in September 2010 for projects to reduce fuels and improve forest health. These contracts and agreements will extend into 2012, with contract work scaling up as the temporary employees leave in September 2010.

Methods

This case study was conducted using both qualitative and quantitative social science research methods. Qualitative data were gathered during face-to-face, semistructured interviews with people involved in the recovery project. Interviews took place between February and July 2010. A total of 24 individuals were interviewed for this case study. Interviewees included nine Forest Service employees who helped develop or implement the projects; seven local government, business, and nonprofit organization representatives who received Recovery Act funds; and eight individuals who benefited from jobs created or retained as a result of the project. Data were collected from another 36 Forest Service regular and Recovery Act employees during three focus groups. Additional qualitative data were obtained from published sources such as newspapers and local government publications, Forest Service documents, and federal Web sites. Quantitative data regarding the recovery project and jobs were obtained from Forest Service databases and federal Web sites, including Recovery.gov and USAspending.gov. Socioeconomic indicator data describing the local population and economy of the case-study area came from a number of sources, such as the U.S. Census, the Bureau of Labor Statistics, and the Bureau of Economic Analysis. For more information on study methods and data sources see the appendix.

Project Recipients and Partners

Nearly $1.5 million of the $3.8 million received for this project was used by the Mio and Huron Shores Ranger Districts to hire temporary Forest Service employees (table 6-1). Most of these temporary employees were local residents, with one employee commuting 2½ hours each direction. Prior to coming to the Forest Service, Recovery Act employees held a variety of jobs including waitress, cook, teacher, toolmaker, builder, contractor, mechanic, and assembly-line worker. A portion of these funds were also used to cover the salary and travel for detailers from other Forest Service units to supervise field crews.

> It's put all of us back on our feet again. There's nothing to really say about it. It saved my life… I'd be belly up… [before the recovery job] there was weeks when I made $30 a week. That's what I lived on.
>
> —*Recovery Act employee*

Counties have received more than $418,000 from the Huron Fuels Treatment Project and have provided $261,647 in matching funds to support the agreements. Recovery Act participating agreements were established with the road commissions in Crawford, Iosco, and Oscoda Counties to construct and maintain fuelbreaks, remove brush from roadsides, move Forest Service equipment across the district as needed by the field crews, and haul water to drop tanks to support prescribed burning projects.

Table 6-1—Huron Fuels Treatment project recipients and funding awarded as of June 30, 2010

Recipient	Project description	Total funding amount
		Dollars
County:		
Iosco County Road Commission	Hazardous fuel treatment, maintenance of fuelbreaks along county and Forest Service roads	111,000
Oscoda County Road Commission	Maintenance of fuelbreaks along county and Forest Service roads	117,954
Crawford County Road Commission	Construction and maintenance of fuelbreaks along county and Forest Service roads	41,128
Oscoda County	Procurement of 565 square miles of high-resolution aerial photography	148,573
Businesses:		
ACME Auto Leasing LLC	Truck leasing	284,592
LCM Surveying and Engineering	Cadastral surveys of property boundaries	106,617
Bob Mitchell and Associates	Cadastral surveys of property boundaries	65,487
Cedar Ridge Forestry	Timber marking and volume estimation	28,772
International Trading Cct LLC	Equipment rental	442,096
Northern Timberlands, Inc.	Fuel treatments and habitat improvements	394,806
Forest Service:		
Temporary employees	Fuel treatments, habitat improvements, forest management	1,448,908
Detailers to serve as crew supervisors	Fuel treatments, habitat improvements, forest management	38,476
Travel for crew supervisors	Fuel treatments, habitat improvements, forest management	7,750

Oscoda County also entered into an agreement with the Huron National Forest to obtain high-resolution aerial photography of the entire county, with each structure in the county photographed from four sides and above. The new photography will allow county assessors to track changes in property value, and ensure fair and equitable property taxation. County commissioners also see its usefulness in supporting more efficient provision of emergency services and a variety of county marketing activities. However, as one commissioner observed, "we're one of the poorest one or two counties in the state of Michigan and there's no way we could afford to do it." Mio District staff heard about the project and recognized its value for work in the wildland-urban interface. They worked with the county to purchase the photography as part of the Huron Fuels Treatment Project.

> …it's been a wonderful thing for our business. And personally I don't even know if I'm in favor of all the money that's [going out the door for Recovery Act projects], but it has had a great impact and a definite benefit on our company, and personally on myself and the other two gentlemen I work with.
>
> *—Recovery Act funding recipient*

More than $1 million was awarded to businesses to carry out and support Huron Fuels Treatment Project activities. The largest contract was awarded to a Michigan company to lease heavy equipment. Another significant amount, more than $390,000, was awarded in September 2010 for a stewardship contract that includes an 863-acre timber harvest that will create more open and less volatile vegetation conditions, restore and maintain watersheds, produce habitat for rare and endangered species, and promote healthy forests. A large contract went to a Connecticut company for vehicle rental, and the contract was filled with 12 new Ford pickups, benefitting Michigan's automotive industry. Contracts for land surveying were awarded to two local firms. Local businesses continue to provide supplies, lodging, and equipment for crews through micro-purchasing authorities.

Other Recovery Act Projects

The Huron-Manistee National Forests received recovery funding for two other wildland fire management projects: $200,000 for fuel reduction and timber sale marking and $420,000 for land-line surveys. Ten projects totaling nearly $4 million in recovery funding were undertaken to improve infrastructure such as trails, facilities, and roads. In addition, the Huron-Manistee National Forests received $430,000 through the Forest Service's Northern Research Station for roads and watershed projects in the Udell-Pine River Experimental Forest. The Huron-Manistee projects are among a number of regionwide Recovery Act projects (solar wells, well abandonment, environmental compliance, and water/waste water condition surveys) that are funded at the regional level. The Huron Fuels Treatment Project is not directly linked to other ongoing recovery projects.

> I personally love [this type of work]. I could do it every day for the rest of my life.
>
> —*Recovery Act employee*

Economic Benefits

For the field season beginning July 5, 2009, 70 employees were hired by the Huron National Forest, including 8 students. Of those hired in 2009, 53 returned to work for the 2010 field season, and 18 new employees were hired to cover attrition from the previous year. Over the two field seasons, 88 individuals were temporarily employed by the forest on the recovery project. Temporary employees were hired primarily at the GS-2 and GS-3 levels, but the experience gained in the first field season meant many of those who returned for a second field season were hired at higher GS levels.

Recovery Act employees indicated that the Forest Service jobs were very different from jobs they had held previously. For many, the salaries (generally $10.75 to $12.00 per hour) and benefits (annual and sick leave) were better than what they could have obtained in the private sector. The "military-like" rules and organization that characterizes the Forest Service were different from previous jobs, and some employees, particularly those with military experience, found them reassuring because expectations were clear and they knew who to approach with questions or issues. Employees talked about the agency's focus on safety and working as a team as being major differences from other jobs they have held. People live in this area of the state because they love outdoor activities, so the opportunity to work outdoors was a definite plus for these individuals (fig. 6-9). Women, in particular, talked about an increase in self-confidence as they learned how to use chain saws and drive larger heavy-duty vehicles. Fifteen of the 88 employees have moved on to other jobs in both the private and public sectors. The recovery jobs were bridges for eight employees who were able to move to seasonal jobs on the Huron-Manistee National Forests and forests in South Dakota and New Mexico, and were life rafts for seven other individuals, keeping them afloat until they were called back to old jobs or found new permanent jobs.

> It's… watching out for each other, you know we drilled that into their heads, your guys go out as a team, you come back as a team, you take care of each other, you're only as strong as your weakest person… .
>
> —*Forest Service employee*

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Figure 6-9—Many of the Recovery Act employees live in the area because they love the outdoors, so they were enthusiastic about the outdoor nature of their new jobs.

Agreements with counties generally did not result in new jobs, but allowed the counties to retain employees and provided them more flexibility in how they spend their funds (table 6-2). For example, the Iosco County Road Commission maintains an emergency account that they use when work exceeds the amount budgeted. In the past, they have primarily accessed the account to respond to emergencies, such as road cleanup following snow, ice, and windstorms. Because incoming department funds from vehicle registration and fuel taxes have declined, the Road Commission anticipated having to draw on this account to cover employee salaries for routine construction-season projects, potentially decreasing their ability to respond to emergencies. However, they were able to avoid this drawdown because Road Commission employees worked on Recovery Act projects, and that portion of their salaries was covered by Recovery Act dollars. Recovery Act funds directly contributed to public safety by covering the costs of mowing vegetation along roads thereby improving visibility, especially in regard to avoiding deer-vehicle collisions, and decreasing fire risk (priorities for the county and Forest Service), and indirectly contributed to the county's ability to respond to emergencies by providing an alternative to the expenditure of emergency funds for routine projects.

> … if [the Road Department] didn't have [the recovery project] I don't know what we would have done.
>
> *—Recovery Act funding recipient*

Oscoda County and the Huron National Forest entered into an agreement, using Recovery Act funds, to obtain aerial photo coverage of the county. Although these Recovery Act funds did not directly create any new jobs, the usefulness of these photos to the county for fair and equitable taxation, the provision of emergency services, and other as yet undefined uses has encouraged the county to hire an employee to manage the county's information technology system. The county had one person working part-time (5 hours per week) providing services related to geographic information system (GIS) applications, but because they anticipate that this photography will be extremely useful for a variety of purposes, a commissioner said, "we turned it into a full-time position because of this project." So, although this new position is not being funded by Recovery Act dollars, the availability of photos paid for by Recovery Act funds directly contributed to the creation of this position.

Table 6-2—Full-time equivalent jobs reported for Huron Fuels Treatment project

	Reporting period				
Recipient	**Feb.–Sept. 2009**	**Oct.–Dec. 2009**	**Jan.–Mar. 2010**	**Apr.–June 2010**	**July–Sept. 2010**
			Number of jobs[a]		
Crawford County Road Commission	—	—	0	0	0
Iosco County Road Commission	—	—	—	0.09	0.11
Oscoda County	—	—	—	3.00	3.00
Oscoda County Road Commission	—	—	—	—	—
ACME Auto Leasing LLC	—	—	0	0	—
Bob Mitchell and Associates	—	—	0.47	0.25	0.60
Cedar Ridge Forestry	—	—	—	3.00	0
International Trading CCT LLC	—	—	—	—	—
LCM Surveying and Engineering Northern Timberlands, Inc.[b]	—	—	0	0	0

Note: A dash (—) indicates that no quarterly report was available.

[a] See appendix for reporting method.

[b] Contract awarded in September 2010.

For at least one private business, the Recovery Act dollars "probably kept us in business." This business provides services necessary to property development, but with the downturn in the economy, demand for these services decreased dramatically and the business lost significant income. The recovery-project-generated work enabled this business to keep a three-person office open that they thought would have to close at least temporarily.

Local businesses providing supplies and equipment (e.g., fuel for vehicles, chain saws and chain-saw parts, timber-marking paint, posts of boundary markers) and lodging for detailers working on the recovery project indicated that the increased income was welcome, but did not necessitate hiring additional employees or directly result in the retention of employees.

Many of the departments and businesses the Huron National Forest worked with on the recovery project were departments and businesses they had worked with previously. This was less likely to be the case for contracts sent to Economic Recovery Operations Centers. Because of the extraordinary focus on allocating the funds as quickly as possible, it was easier to work with known partners than take the time to identify new partners or develop the relationships necessary to begin projects.

Social Benefits

Besides the income and increased revenue entering local communities through the recovery project, social benefits fall into four categories: create, maintain, and protect infrastructure; boost the local economy; build human capital; and improve quality of life.

Recovery Act funds contributed to local infrastructure by creating and maintaining fuelbreaks and removing brush along roads. Emergency managers anticipate that when the area experiences a wildland fire in the future, these and other recovery project accomplishments will reduce damage to infrastructure and prevent the loss of homes and structures by decreasing fire intensity and improving access for firefighters.

Related to fire suppression, several of the Recovery Act employees are members of local volunteer fire departments. The knowledge and experience they gained in wildland firefighting is being carried back to volunteer fire departments and improving suppression capabilities throughout the region (fig. 6-10).

Huron National Forest

Figure 6-10—Wildland firefighter training received by Recovery Act employees made them competitive for positions in other Forest Service units.

In terms of the local economy, businesses have benefited not only from purchases made to support recovery project activities, but also from the additional dollars Recovery Act employees have spent locally. Recovery Act employees indicated that because they know their jobs are temporary, they have not invested their paychecks in major purchases, like a new car, but have used the money to pay their bills and purchase every-day necessities.

The recovery project built human capital within the region by educating and training temporary employees. Employees developed a number of skills that can be transferred to other jobs. District staff served as mentors to Recovery Act employees, providing training and experience that qualifies them for other Forest Service employment. Interested employees have been shown how to apply for federal jobs online. The intensive classroom and field training in fire suppression and chain-saw operation has made many of these employees highly competitive for fire-suppression positions. Eight Recovery Act employees have found other Forest Service seasonal employment on the Huron-Manistee, Cibola, Black Hills, and Medicine Bow/Routt National Forests. Several students hired under the STEP program have changed their majors and are now looking forward to careers in natural resource management.

> "I know a number of businesses in town that are really thankful that [the Recovery Act project is] here, because people have steady paychecks... the bars that sell food and stuff like that, the pizza place, the Shell, the Marathon, Verizon. All these businesses have money coming from the people who work [on the Recovery Act project]… I would say a lot of money pours out into this town from the stimulus, especially on paydays."
>
> *—Recovery Act employee*

The recovery jobs had major positive impacts on employees' quality of life, particularly on health. Recovery Act employees participated in a forest-wide health fair that provided health screening and education at no cost to employees. They started each day with 1 hour of physical activity, including long hikes while wearing a firefighter's pack. Self-confidence and pride also improved. Recovery Act employees talked about wearing their "HMF Fire Management" shirts into local businesses and being asked about what was happening on the forest. They took pride in being able to talk about the importance of projects they were working on.

A greater sense of community developed as a result of the project. People who would not normally associate with each other were brought together on field crews, including employees of different ages and education. These individuals worked together productively, and have been enthusiastic participants with coworkers and their families in potluck lunches, the district holiday party, and other social activities.

Finally, the Recovery Act employees are experiencing what is for many of them a different kind of employment. Safety and teamwork are emphasized. This knowledge and skills will serve them well in future employment and in their lives.

Environmental Benefits

The goal of the project is to treat more than 8,000 acres of national forest land to:

- Reduce surface fuel loads through prescribed forest burning.
- Reintroduce fire in the ecosystem through prescribed burns.
- Disrupt fuel continuity by clearcutting jack pine.
- Convert sites to more ecologically appropriate species.
- Improve Kirtland's warbler habitat (fig. 6-11).
- Create barrens for wildlife habitat.

Specific activities being funded by recovery dollars, anticipated accomplishments and objectives are shown in table 6-3.

Pamela Jakes

Figure 6-11—Recovery Act employees completed a number of projects that improved or created habitat for the endangered Kirtland's warbler.

> … as far as getting stuff done, this is a rare moment… [the number of acres being treated are] not something we could do in a normal year. So we're definitely getting a lot of critical work done in the fuel reduction area that we couldn't get done if we didn't have this opportunity.
>
> *—Forest Service employee*

Table 6-3—Activities undertaken, amount accomplished, objectives achieved, Huron Fuels Treatment Project, October 1, 2010

Activity	Accomplishment	Objective(s) achieved
Land survey	40 miles	Prepare for future management activities by establishing property boundaries
Timber harvest	730,000 cubic feet	Reduce wildfire risk by managing fuels and improving forest health, support local timber economy
Timber marking	767 acres	Reduce wildfire risk by preparing for future harvests that will manage fuel and improve forest health, support local timber economy
Timber harvest stewardship contract	863 acres	Reduce wildfire risk by managing fuels and improving forest health, create habitat for rare and endangered species, support local timber economy
County mowing along roadways	899 acres	Reduce wildfire risk by maintaining existing fuelbreaks, contribute to public safety by maintaining visibility along roads, support local government
County fuelbreak construction	184 acres	Reduce wildfire risk by constructing new fuelbreaks, support local government
Forest Service prescribed burning	2,000 acres	Reduce wildfire risk by managing fuel and improving forest health, create local jobs
Forest Service hand clearing	3,000 acres	Reduce wildfire risk by managing fuel and improving forest health, create local jobs
Obtain high-resolution 6-inch aerial photography	565 square miles	Improve emergency response by obtaining data for wildfire preattack planning, support local government

These projects have been planned and are occurring across the landscape. Implementing fuel treatments and other forest management projects at a landscape scale is more efficient than implementing them piecemeal as funding becomes available. The former approach maximizes desired impacts, because such projects complement each other.

Effects on the Agency

The project is enabling the districts to meet vegetation management goals at an accelerated rate, halving the backlog of approximately 3 years worth of National Environmental Policy Act (NEPA) approved projects.

The project is being managed as an incident, using the same assignments and responsibilities found on a Type II incident management team. Because many district employees have fire experience, this organization has made project deployment easier. Those without incident experience say this organization helps facilitate communication within the team, clarifying decisionmaking. It also provides experience that qualifies some career employees for new positions on future incidents. District staff is gaining experience developing and implementing stewardship projects, including designing and marketing sales of submerchantable material. District employees feel the recovery project has helped them become more efficient managers and administrators.

Support from district leaders has allowed a number of employees to set aside normal work for high-priority recovery work. Other employees have been responsible for supervising recovery field crews in addition to their normal workload. For these employees, stress has been significant and morale has suffered. Two conditions were cited as having negative impacts on morale. Summer is the time when employees often go on details to gain training and experience necessary to advance within the agency, and earn overtime working on weather and condition-dependent field projects. Perceptions of some Huron National Forest

employees were that they had to pass up detail opportunities and had fewer opportunities to earn overtime because of the recovery project. However, both the 2009 and 2010 western fire seasons were slow, and detail opportunities were limited for permanent employees. Permanent seasonal employees' work periods were extended by several months because of the recovery project, and overtime was paid to permanent employees who had dual responsibilities to support the project and handle their normal duties. Hiring detailers to supervise recovery field crews helped reduce some of the workload.

Occasionally, approved forest management projects on the districts were delayed because agency funds were not available for the necessary preliminary work such as surveying landlines or marking timber. Some of these tasks were completed as part of recovery projects, allowing other forest management projects to move forward. The additional timber harvesting associated with these forest management projects helps support local loggers, truckers, and people employed in forest product industries. The districts feel that the fuel reduction work accomplished as part of the recovery project will help them compete for additional Huron-Manistee National Forests funds. If this happens, districts may have funds in the future to continue hiring a limited number of people on a seasonal basis.

Finally, the recovery project helped build relationships between the districts and the community. Local businesses were encouraged to compete for recovery contracts and benefited from the local purchasing of supplies to support field crews. They credit Forest Service leadership for making the community aware of Recovery Act opportunities and helping businesses work their way through the contracting and agreement processes. As a result, local residents have developed a better understanding of what the Forest Service does on public lands.

Challenges

Challenges most often mentioned by Forest Service employees working on the recovery project involve administration and budget. Normally, when the agency is involved in a disaster or emergency situation, staff are "unleashed" and given the freedom to work creatively. However, with Recovery Act funding, Forest Service employees describe a "political fear" that led to perceived extraordinary and excessive amounts of oversight.

For example, restrictions on the use of micropurchase check-writing authority prevented the agency from using some local small businesses who do not accept credit cards. Micropurchase cardholders needed the written approval of the Forest Supervisor for even the most basic supply purchases. Normally these cardholders would have the authority to make these procurements. Working with Economic Recovery Operations Centers presented another administrative challenge. Heavy equipment needed for the crews did not arrive for 4 months, after crews had been laid off for the season. Ironically, in a state dependent on the automotive industry, the company awarded the contract to lease new vehicles was located in New Haven, Connecticut. (The contractor did purchase 12 new Ford pickup trucks to meet the requirements of the contract.) Most local Forest Service employees feel that if they had been allowed to work with their normal contractors and contracting officers, the project could have delivered more benefits to local communities in less time.

Because the district spent the majority of Recovery Act project dollars on temporary employees, they experienced a tsunami of new employees. This resulted in a high demand for trainers, supervisors, and mentors, with some permanent employees filling all three roles at once. Purchasing equipment to dress and equip more than 50 new employees for wildland fire and fuel management work was difficult given restrictions placed on the purchase of durable goods and use of credit cards. The districts were not allowed to use Recovery Act funds to purchase critical durable items like chain saws, radios, or other firefighting equipment. Finding vehicles to transport the field crews was a challenge early on, with some permanent employees changing their work schedules to guarantee access to necessary transportation.

Finally, the use of stewardship contracts to achieve wildland fire and forest restoration objectives necessitated the development of new skills in contracting. Stewardship contracts require more documentation and approvals than normal service or timber sale contracts. This significantly lengthened the time and effort to get this contract out for

advertisement. District staff have had to learn how to mark and market sales that will produce material for which there is virtually no market and therefore little economic value. However district staff are learning to work with this new tool and are identifying new partners who can utilize small-diameter material.

District employees felt that the key to meeting many of these challenges was patience. Their experience was that as higher level administrators clarified direction in regard to Recovery Act funds, they became more comfortable in approving requests that had previously been denied.

Key Findings

Forest Service leadership played a number of critical roles that contributed to the successful implementation of the Recovery Act Project. First, leadership played a strong role selling local government and businesses on the benefits of accessing Recovery Act funds for local projects. Second, they were willing to let some normal work slide in order to develop and implement the project. Third, leadership insisted that the first priority in designing the project was safety, and they took the time to train Recovery Act employees to help insure a safe and productive work environment. Because of limits on what Recovery Act funding could be used for, leadership was willing to use other nonrecovery resources to make the project work. Finally, they worked with staff to identify training and skill development opportunities within the Recovery Act project for regular district staff.

Project success built on previously established relationships. Strong long-established relationships between the districts and county governments allowed the districts to move quickly to establish agreements and get the Recovery Act money out the door.

The project was well accepted within the community because it addressed critical local needs. There was significant local need for jobs, and the Recovery Act project created jobs in the woods that built on the local outdoor culture, which generated broad interest in and support for the project. The project reduced wildfire risk thereby addressing a recognized critical need in the community. Improved Kirtland's warbler habitat built support for the project outside the local area.

Hiring a large number of local citizens created a number of benefits. Local hiring helped spread the economic benefits of the project throughout the community. Recovery Act employees were able to talk about Forest Service priorities and projects and contributed to increased understanding of district programs throughout the community. Finally, hiring a large number of local residents generated a great deal of good will within the community.

It pays to be prepared. The Huron National Forest was well prepared to conduct the project. First, the forest had NEPA projects on the shelf, which meant that Recovery Act employees were working on critical projects immediately. Forest Service regular staff wanted to make sure that Recovery Act employees felt like they fit into the established district structure and culture, so they discussed challenges to bringing in so many new employees prior to their arrival. Finally, they organized the project using an Incident Management Team, which established clear lines of communication and responsibilities.

The districts were able to accomplish a significant amount of mission-critical work while contributing to the local economy and reducing the impacts of the recession on local citizens. Although the work could have been performed by contractors, the level of contracting that would have been required could not have been accomplished within the given timeframe. In addition, district staff felt that local businesses would not have been competitive if the project had been developed as one or two large service contracts, and that a nonlocal contractor would have had limited local economic benefits. Hiring temporary employees was the quickest way to get the most money into the local community. Recovery Act and regular Forest Service employees said that it would have been more helpful to have a longer time to spend Recovery Act funds internally—to have hired fewer employees for a longer period of time. All the Recovery Act employees who have not found other employment will be unemployed at the end of fiscal

year 2010. Although they appreciate that Forest Service employment has allowed them to develop new job skills, build some savings, and extend unemployment benefits, they see that there is even more work to be done on the forest and would like the opportunity to improve the health of the local forests while they improve their own health (economically and physically).

Lessons Learned

Be prepared. The experience of the Huron Fuels Treatment Project reinforces the Boy Scout motto of "Be Prepared." The forest was prepared in that it had long-established relationships with the local counties and businesses. These relationships allowed the forest to move quickly to bring local counties and businesses in as partners on the recovery project. In addition, the forest was prepared in that it had several years of NEPA-approved projects ready to go, allowing the forest to put Recovery Act employees to work immediately on high-priority projects.

Take the time to know the local community and its capacities. Leaders were well acquainted with the local economic and social contexts, helping them develop a project that not only benefited the forest, but also local residents, businesses, and governments. This resulted in a project that generated significant local benefits, including broad-based support for the recovery work and Forest Service work in general. Developing this type of local knowledge takes a Forest Service leader who is out in the community, talking to and working with local individuals and organizations, and who is in place long enough to build relationships that benefit all partners.

Even short-term jobs or small amounts of extra funding can produce significant benefits. Even though the jobs created by the districts as part of the recovery project were temporary and relatively short term, they had significant positive social and economic impacts on the individuals and families affected. In addition, the money that went into the pockets of the Recovery Act employees was quickly spent on necessities, spreading the economic benefits to local businesses. Although bringing on such a large number of employees caused some stress and required some flexibility for Forest Service employees, the positive impacts were felt quickly throughout the community.

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