

# SUSTAINABLE RECOVERY AFTER NATURAL DISASTERS

**E**PA is assisting several community-led efforts to build energy efficiency and sustainability into post-disaster redevelopment plans. EPA is one of 16 federal agencies involved in the Federal Emergency Management Agency's (FEMA) Emergency Support Function (ESF) #14 (Long-Term Community Recovery) under the National Response Framework.

Created in response to Hurricanes Katrina and Rita, ESF #14 is a community-based process that facilitates multiple stakeholder involvement in post-disaster recovery decisions and enables communities to prepare for long-term recovery needs. The result of the long-term community recovery process often is a plan, strategy, or framework that allows the community to articulate a vision and rally around goals, objectives, and initiatives that move the community toward a shared vision for recovery.

Under ESF #14, EPA headquarters and regional offices are providing technical assistance, supporting community visioning charrettes, and helping communities plan and implement policies, strategies, and practices for sustainable recovery after natural disasters.

Region 7 was the first EPA Region tapped by FEMA to offer long-term community disaster recovery assistance under ESF #14. Region 7 staff participated in an interagency team that worked closely with residents, local government, local businesses, and other stakeholders in the small, rural community of Greensburg, Kansas, that was devastated by a tornado in May 2007. EPA Region 7 staff also offered sustainable recovery assistance to six

## NEW ENVIRONMENTAL SOLUTIONS

EPA's land revitalization initiatives are producing significant environmental benefits and helping to transform communities into more sustainable and livable places. The strategy of encouraging market-driven redevelopment of brownfields and other contaminated sites for economic reuse is proving to be a successful approach at many sites. However, challenging real estate markets and economic realities can leave some formerly contaminated properties unused, possibly for a long time. New approaches are needed to revitalize these sites and protect human health and the environment.

EPA's Land Revitalization Team is working with communities, states, other federal agencies, academic institutions, nonprofit organizations, and the private sector to develop and test new approaches that recognize valuable reuse alternatives for formerly contaminated properties. Building green infrastructure to help manage stormwater runoff and floods, promoting safe soil management to support urban agriculture, and siting renewable energy on contaminated sites can bring environmental, ecological, and social benefits to communities. Unlocking the potential value of these underused properties often requires creativity and close collaboration with many public and private partners. These projects can help stabilize communities and spur economic development.

small communities in eastern Iowa as they developed a vision for a greener future after major floods tore through their communities in 2008.

EPA Region 8 and headquarters staff worked with FEMA under ESF #14 in North Dakota in 2010 to help the Spirit Lake Tribe build a comprehensive recovery plan. This was the first time that FEMA, EPA, and other federal partners provided comprehensive post-disaster ESF #14 recovery assistance to a tribe. The plan will guide tribal community long-term recovery from several years of flooding in Devil's Lake.

EPA's Office of Sustainable Communities is providing training and capacity-building assistance to the tribe on planning for sustainable living. Region 8's Partner-

ship for Sustainable Communities with the U.S. Departments of Transportation (DOT) and Housing and Urban Development (HUD) is developing a strategy to assist the tribe with recovery once implementation work begins.

The goal of EPA's activities in support of ESF #14 is to help these and other disaster-impacted communities in adopting smart growth, green infrastructure, and green building practices as well as developing land-use policies to rebuild and plan for growth that is good for the environment, community, and the economy.

## HELPING PUT THE "GREEN" IN GREENSBURG, KANSAS

In Greensburg, EPA Region 7 staff worked with a multi-stakeholder "green team" that spearheaded a community-based effort to develop a sustainable redevelopment plan. The plan includes rebuilding all municipal buildings of more than 4,000 square feet to the Leadership in Energy Efficient Design (LEED) platinum standard. The plan also calls for rebuilding the community recycling center, creating a center on sustainability, developing a sustainable master plan, and promoting the adoption of a voluntary green business and green home plan for Greensburg. The plan also calls for using renewable energy whenever possible.

Today, Greensburg is doing exactly what the city's motto says: "Rebuilding Stronger, Better, Greener." The new arts center, made of recycled materials, is the first building in Kansas to receive a LEED platinum rating, and Greensburg's new municipal center is the first in the nation built to meet the LEED platinum standard. Several other buildings received or are awaiting final LEED certification. Greensburg also built a wind farm that can generate enough electricity to power 4,000 homes—in a town with only 1,400 residents. Extra energy will be sold to the Kansas Power Pool.

Greensburg's progress toward realizing its goal of becoming "the greenest town in



*New Arts Center made from recycled material*

America" also boosted the local economy by attracting eco-tourists from throughout the world who are eager to see what sustainable revitalization looks like in practice.

## SUSTAINABLE REDEVELOPMENT PLANNED FOR IOWA CITY'S RIVERFRONT CROSSINGS DISTRICT

EPA Region 7's Land Revitalization Team is assisting Iowa City in designing a conceptual redevelopment plan for a 10-square block portion of its Riverfront Crossings District. The district includes several brownfields and a wastewater treatment plant that will be decommissioned over the next several years. As part of this effort, contractors working with Region 7 and EPA headquarters staff are helping the city develop a

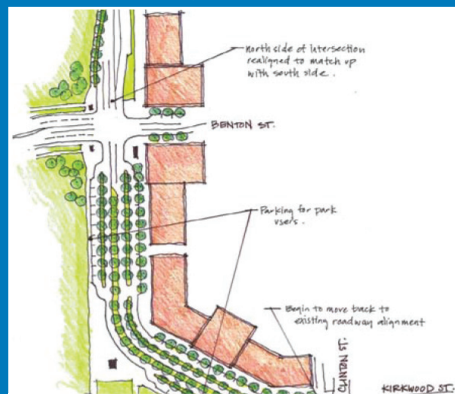
plan for inventorying, assessing, and remediating brownfields in the target area. The plan is expected to become final in mid-2011.

While a portion of the EPA project area lies in the 100-year floodplain, the area outside of the floodplain is being considered for a combination of retail and affordable housing opportunities linked to a proposed Amtrak station and a possible light rail line. The conceptual redevelopment plan also envisions a new urban park on the site where the wastewater treatment plant now stands. The redevelopment plan will transform the area into a high-density, mixed-use, pedestrian friendly, transit-oriented neighborhood. Cleaning up the property, reusing the land, and providing new housing choices will create jobs and new economic opportunities in Iowa City.

The project in Iowa City is one of five pilots under the interagency Partnership for Sustainable Communities, an agree-

ment between HUD, DOT, and EPA to help communities identify opportunities to link housing, transit, and brownfields revitalization. The pilot grew out of EPA's partnership with FEMA to address long-term recovery after major floods hit the area in 2008. As a result, EPA, HUD, DOT, and FEMA are working together to coordinate resources and provide expert assistance to help Iowa City build a sustainable future.

Region 7 also is providing long-term disaster recovery assistance to the communities of Coralville, Cedar Falls, Cedar Rapids, New Hartford and Waverly, Iowa. Assistance includes supporting community design charrettes, developing plans for new green infrastructure to improve storm-water management, and helping the communities review and propose improvements to existing policies and codes that will promote better land use and smart growth.



*Conceptual Redevelopment Plan for part of the district*

### MORE INFORMATION:

Visit FEMA's Long-term Recovery and ESF #14 web site: <http://www.fema.gov/rebuild/ltr/index.shtm>

Visit the Partnership for Sustainable Communities web site at: <http://www.epa.gov/smartgrowth/partnership/>

Visit EPA's Land Revitalization program web site at: <http://www.epa.gov/landrevitalization/>

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