

## Centennial Park Restoration Project

In 2002, there was a significant oil and natural gas well blowout and spill into Clear Creek, a tributary of the Obed Wild and Scenic River in Tennessee. A Trustee Council comprised of the National Park Service, the State of Tennessee, and the U.S. Fish and Wildlife Service was formed to assess natural resource injuries pursuant to the Oil Pollution Act of 1990 ("OPA"), 33 U.S.C. §§2701, 2706, and 15 CFR Part 990. The Trustee Council developed a Damage Assessment and Restoration Plan (DARP) and an Environmental Assessment that documented natural resource injuries associated with the spill and presented to the public potential restoration projects to compensate for those injuries. One of the restoration projects proposed in the DARP involves active stormwater management through the modification of existing drainage channels and the construction of wetlands/rain gardens within the City of Crossville's Centennial Park. These stormwater drainage channels discharge to a tributary of the Little Obed River at several locations within the park. The Obed River downstream of Crossville is also federally designated critical habitat for the threatened spotfin chub.

Contaminated stormwater from adjacent industrial and commercial development areas enters the park and there were also several areas of severe erosion in the existing drainage channels. The stormwater drainage channels were modified to remove built-up sedimentation and to establish appropriate grade to allow for stormwater detention. Where erosion had resulted in channel braiding and overland stormwater sheet flows, a single channel was re-established. The modified channel bottoms were protected with turf reinforced matting, suitable synthetic erosion control matting, and native stone. The drainage channel riparian zones and rain gardens were re-vegetated with appropriate native species.

The total area of rain gardens constructed at Centennial Park in Phase I of the restoration project was approximately five acres. These constructed wetlands and rain gardens increase groundwater infiltration, reduce storm water run-off, erosion, sedimentation, and non-point source pollution, and serve as an environmental education and demonstration area for visitors. Interpretive signage will be installed at several areas within the park. The natural resource trustees plan an additional project later this year that will stabilize a severely eroding slope and section of streambank on the tributary to the Little Obed River. In partnership with the trustees, the City of Crossville's stormwater management program will collect flow and water quality data to document habitat improvements associated with the project.

A formal open house and ribbon cutting ceremony was held at Centennial Park on Tuesday, June 12, 2012. Local dignitaries, representatives from the trustee agencies, and Obed Watershed Community Association members organized and participated in the event. "You can't do this work with just one agency at a time or one organization at a time. We need the different groups for the money and the volunteer work. Clean water is absolutely essential," said Crossville Mayor J.H. Graham, III.



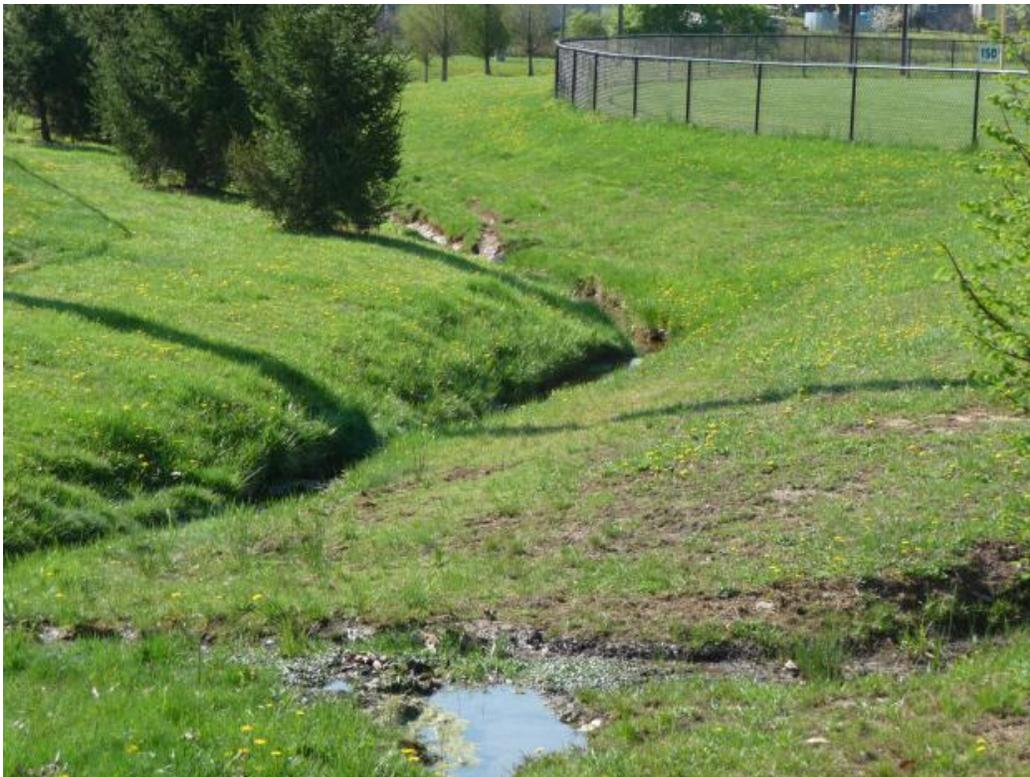
Caption: (L to R) Debbie Duren (NRDAR Program Manager, Tennessee Department of Environment and Conservation); Deputy Commissioner Brock Hill (TDEC Bureau of Parks and Recreation); Dennis Gregg (Obed Watershed Community Association); Mayor J.H. Graham III, Moria Painter (NPS Obed Wild and Scenic River); Niki Nicholas (Superintendent, Big South Fork NRRA), and Steve Alexander (FWS, Tennessee Field Office)



Runoff to Centennial Park from Adjacent Industrial Development Constructed with Iron-laden Fill Material (S. Alexander FWS)



Example Constructed Wetland/Rain Garden at Centennial Park (S. Alexander FWS)



Eroding Stormwater Drainage Channel at Centennial Park (S. Alexander FWS)

# Healthy Rivers Start with Clean Water

## Partnership Efforts Flow Downstream

What is the only river in Tennessee designated as a Wild and Scenic River?

### **Obed Wild and Scenic River in Morgan County**

Protecting remarkable streams like the Obed River is a job for everyone. When an oil spill occurred in 2002 that significantly damaged the pristine resources of the Obed Wild and Scenic River, an assessment and restoration process began to repair those damages. The Centennial Park Stormwater Impact Reduction Projects were selected to improve the quality of the rivers downstream in the Obed River Watershed.

#### **This project is a collaboration of...**

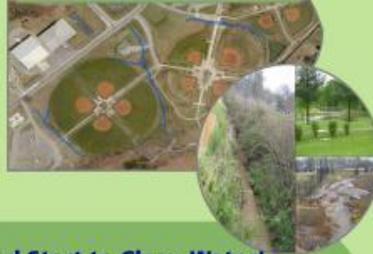
- Federal and State Agencies
- Local Government
- The Obed Watershed Community Association

## Enhancing the Obed River Watershed

A 2002 oil spill and resulting forest fire caused injuries to natural resources in the Obed Wild and Scenic River National Park.



### Centennial Park Stormwater Impact Reduction Projects



## A Good Start to Clean Water!

### Project Benefits

- Reduces runoff that carries pollutants like oil, dirt, chemicals and lawn fertilizers.
- Groundwater Recharge—more water is absorbed into the ground.
- Prevents erosion of streambanks by slowing the flow of water.
- Protects aquatic habitats—by lowering stream temperatures and creating stable stream bottoms, helping promote an abundant and healthy stream life.



**National Pollution Funds Center**  
Funding Policy for a Cleaner Tomorrow

