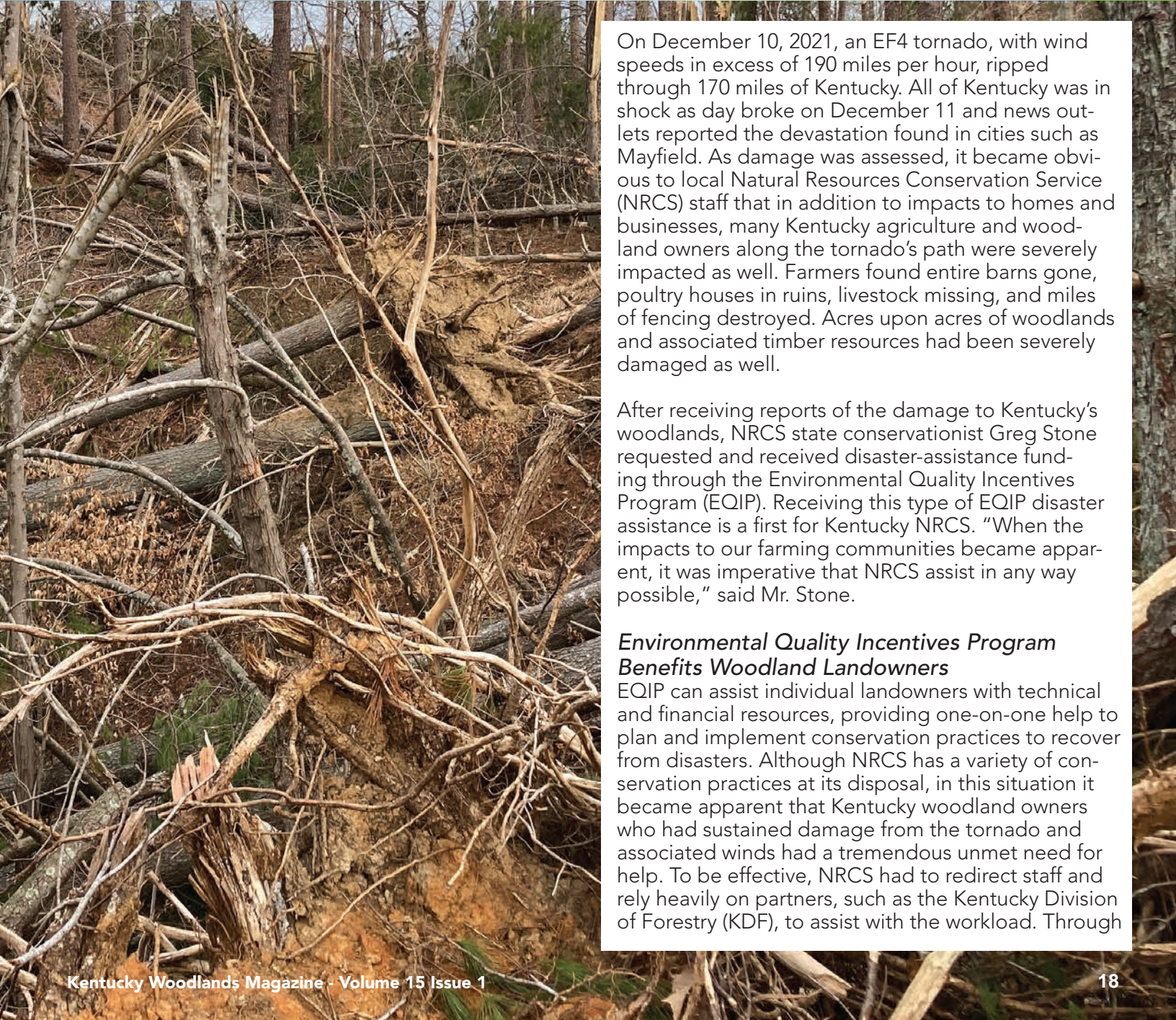




Kentucky Natural Resources Conservation Service

KY NRCS Assists Woodland Owners with Tornado Recovery

by Justin Pius, State Public Affairs Specialist, USDA's Natural Resources Conservation Service



On December 10, 2021, an EF4 tornado, with wind speeds in excess of 190 miles per hour, ripped through 170 miles of Kentucky. All of Kentucky was in shock as day broke on December 11 and news outlets reported the devastation found in cities such as Mayfield. As damage was assessed, it became obvious to local Natural Resources Conservation Service (NRCS) staff that in addition to impacts to homes and businesses, many Kentucky agriculture and woodland owners along the tornado's path were severely impacted as well. Farmers found entire barns gone, poultry houses in ruins, livestock missing, and miles of fencing destroyed. Acres upon acres of woodlands and associated timber resources had been severely damaged as well.

After receiving reports of the damage to Kentucky's woodlands, NRCS state conservationist Greg Stone requested and received disaster-assistance funding through the Environmental Quality Incentives Program (EQIP). Receiving this type of EQIP disaster assistance is a first for Kentucky NRCS. "When the impacts to our farming communities became apparent, it was imperative that NRCS assist in any way possible," said Mr. Stone.

Environmental Quality Incentives Program Benefits Woodland Landowners

EQIP can assist individual landowners with technical and financial resources, providing one-on-one help to plan and implement conservation practices to recover from disasters. Although NRCS has a variety of conservation practices at its disposal, in this situation it became apparent that Kentucky woodland owners who had sustained damage from the tornado and associated winds had a tremendous unmet need for help. To be effective, NRCS had to redirect staff and rely heavily on partners, such as the Kentucky Division of Forestry (KDF), to assist with the workload. Through

these concentrated efforts, NRCS enrolled 120 applicants throughout 16 counties in Kentucky, offering almost \$3.5 million in woodland disaster assistance to impacted landowners.

Damaged woodlands primarily will be addressed utilizing the Woody Residue Treatment (practice standard #384). The practice standard was designed for areas with undesirable woody material that, if left alone, creates harmful conditions to the forest, wildlife, livestock, or landowners. "When the ground is covered with timber, it doesn't give the forest floor the ability to regenerate and grow for the future," explained Jon Shultz, NRCS State Forester.

Untreated woody residue creates habitat for bark beetles, bacteria, and diseases that are hazardous to the regeneration of the forest stand. Bark beetles feed on downed timber, their populations explode, and once that food supply is exhausted, they begin to feed on healthy trees. They also transfer fungal pathogens that kill trees as a secondary vector. Bacteria build-up on degraded timber can cause the trees to grow at a slower rate and, in some cases, kill the tree growth completely. Management of excessive woody residue helps break these cycles. Likewise, it also benefits the forest stand by reducing the risk of wildfires, providing adequate sunlight for regeneration, and accelerating decomposition to improve soil health.

Additional NRCS Assistance

In addition to the EQIP disaster assistance, Kentucky NRCS is aiding the tornado recovery through the

Emergency Watershed Protection (EWP) program. EWP helps protect communities from additional flooding, damages to their watersheds, and soil erosion. Tornado recovery through the EWP program will consist primarily of removing debris within watersheds and helping reshape eroded streambanks. With the cooperation of 15 qualified local sponsors, NRCS has identified 87 sites in western Kentucky that are eligible for the EWP recovery assistance due to the damages sustained during the tornado. All sites have been funded for construction, and the estimated cost for completion is approximately \$3 million.

Helping People Help the Land – the NRCS Mission

The motto at NRCS is "helping people, help the land," and that was certainly needed as disaster struck Kentucky. NRCS wants to thank our partners in forestry for their continued help in recognizing landowners in need and informing them of the assistance that NRCS can provide. A special thank you goes to Brandon Howard, state forester with the KDF. Under Mr. Howard's leadership, KDF has done a fantastic job informing landowners impacted by these storms about the help Kentucky NRCS can provide. Also, Bob Bauer, with the Kentucky Forest Industries Association, has played a role in supplying NRCS program information to local contractors and loggers. These folks are on the ground helping landowners recover from this disaster. As we move forward, we look to strengthen our partnerships in the forestry community by continuing to work with them to help people help the land.



NRCS Programs address critical environmental needs. The photos above show downed timber caused by the December tornados, and these areas will be addressed using Woody Residue Treatment.

Photos courtesy: NRCS