

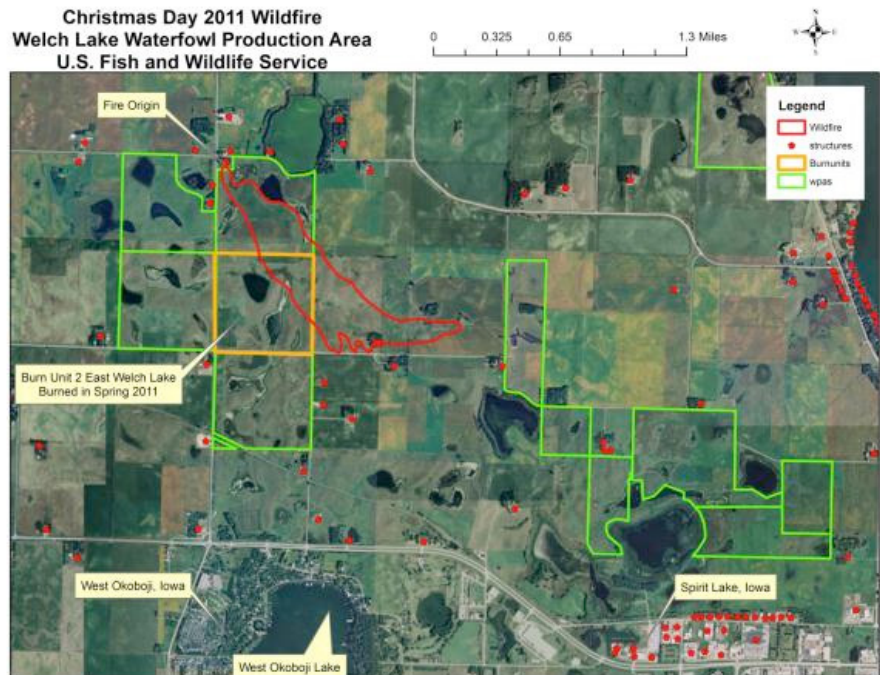


Success Stories from the Northeast Region

Cohesive Strategy Success Story: Christmas Day Fire 2011

On December 25, 2011 at approximately 1:00 p.m. while everyone was celebrating the holidays with family and friends, the call went out to Spirit Lake Volunteer Fire Department in Spirit Lake, Iowa that there was a wildfire two miles northwest of town, started from debris burning on private land. Previous months had left northwest Iowa in extreme drought, with a fall season of exceptionally high fire occurrence on agricultural lands considered non-burnable. An absence of snow cover, plus warm weather conditions in combination with the drought, left the countryside completely brown with cured grasses and agricultural stubble.

Map of Christmas Day 2011 Wildfire with FWS ownership adjacent to West Okoboji Lake and Spirit Lake, Iowa. Continuous wildland fuels border towns in Iowa in areas considered non-burnable agricultural lands.



The fire department promptly responded to the scene and sent a request for mutual aid assistance from Superior and Lake Park, Iowa Volunteer Fire Departments. The fire was large, fuels were continuous, and structures were immediately threatened. From private land the fire spread onto the U.S. Fish and Wildlife Service (FWS) Waterfowl Production Area (WPA) known as Welch Lake WPA.

There had been a previous fuels treatment (prescribed burn) conducted in the WPA, which aided the departments in suppressing the wildfire. The fuels treatment created a reduction in fuel loading in the grass thatch

into which the southwest flank of the wildfire burned. This reduced the fire behavior and in combination with natural barriers of the wetland basins along the southwest flank of the fire, aided the responding fire departments to concentrate fire resources on more critical parts of the fire that threatened homes. After several hours the fire was controlled.

There were a number of factors that aided the fire departments in containing the fire to 217 acres with no structures lost. These included equipment that was purchased by the Spirit Lake Fire Department under the Department of Interior Rural Fire Assistance Program; Skills Crosswalk Training that was conducted by the local FWS fire staff for Spirit Lake Fire Department; and a previous wildland urban interface (WUI) fuels treatment (prescribed burn) that was conducted by FWS and Iowa DNR staff in April of 2011. The fuels treatment was conducted to reduce thatch depth (fuel loading) near adjacent structures and also to benefit nesting for waterfowl and upland birds, and enhance rainwater storage and surface water runoff filtration into West Okoboji Lake through vertical stem development in grasses.

In developing the equivalent of a Community Wildfire Protection Plan (CWPP) a number of needs were identified for the local community of Spirit Lake, Iowa. Needs included improving fire department wildland capabilities, wildland fire training, and WUI and fuels treatments in key areas on Federal lands around the community. This information was utilized by FWS Fire Staff to assist in addressing those needs at the local level and a project was developed in 2007 to address them. WUI and fuels treatments were identified on Waterfowl Production Areas that are interspersed with large continuous blocks of Federal, State and private lands adjacent to the community. Training was completed for Spirit Lake Fire Department, and they competed for and were awarded Rural Fire Assistance Grant monies through the Department of Interior to purchase wildland fire equipment.

Prescribed fire fuels treatments continue to be maintained in key areas adjacent to town based on available funding and a unique partnership that was developed in the mid 1990s between the FWS and Iowa Department of Natural Resources as a result of the Prairie Pothole Joint Venture (PPJV). This partnership allowed for critical wetland habitat to be acquired or restored to native grasses and wetland basins that were once present at the turn of the century and converted to agricultural lands.



Previous fuels treatment with unburned fuels on left on FWS Lands bordering private land. The fire department was able to flank fire and extinguish due to reduction in fire behavior.



Structures adjacent to Welch Lake Waterfowl Production Area



SE Corner of wildfire near occupied structures



These lands now provide critical nesting habitat again as they once did for waterfowl and also provide recreational opportunities, rain water storage and water filtration for West Lake Okoboji – one of only 3 true blue water lakes in the entire world. Water quality of West Lake Okoboji is of great importance to the residents of Iowa and the communities of Dickinson County in particular because of its value for recreation and tourism. The other blue water lakes in the world are Lake Geneva in Switzerland and Lake Louise in Canada.



Through the partnerships developed in northwest Iowa between local FWS refuge and fire staff, volunteer fire departments in Dickinson County and the Iowa Department of Natural Resources, a once resilient landscape has been restored and enhanced within an ecosystem that is fire adapted, creating a fire adapted human community prepared for a safe and effective response to wildfire.

Fuels treatments in native grass units reduce overall thatch depth, which aids in decreasing fire behavior. Left is the previous fuels treatment with 1 year of growth and right is growth in wildfire area from Christmas Day Fire of 2011. Fire burned more aggressively in previously unburned fuels on right than fuels previously burned on left.

For further information, contact:

Chad Loreth

Email: Chad_Loreth@fws.gov

Phone: 712-338-2860 Office

712-251-8901 Cell

