

Orange County Commission for the Environment
Tour of OWASA Mitigation Tract – Forest Management Activities
May 2, 2013

CFE present: May Becker, Peter Cada, Bill Kaiser, Tom O'Dwyer, Gary Saunders, David Welch

OWASA staff present: Ed Kerwin, Mason Crum, Ruth Rouse, Pat Davis, Johnny Riley

OWASA forestry advisors present: David Halley (True North), Tom Craven (True North), Kelly Douglass (NC Wildlife Resources Commission), John Howard (NC Forest Service) and David Jones (NC Forest Service), Dr. James Vose (USDA Forest Service)

DEAPR staff present: Rich Shaw, Tom Davis

Ruth Rouse provided a brief introduction and overview of OWASA's acquisition of this property to help mitigate the loss of wildlife habitat caused by the creation of the Cane Creek Reservoir.

Kelly Douglass described the wildlife management objectives for the property, including providing habitat for a variety of songbirds, mammals, and amphibians. One goal is to keep common species common. WRC has observed an overall increase with forest management.

David Halley provided an overview of the forest management plan for this property and the activities that have occurred thus far. He noted he has also helped manage forestland for Eno River Association, Triangle Land Conservancy, and the Land Trust for Central North Carolina.

Halley said he would like this 490-acre property to be considered a model demonstration site for forest management in Orange County. The forest management plan will improve forest health by improving and maintaining species diversity and improving wildlife habitat. It will preserve 151 acres of stream buffer. They will harvest trees in selected areas ("group openings") of the hardwood forest to allow partial sunlight to reach the forest floor. These early successional habitats will allow the regeneration of young hardwoods. They will not convert the hardwood areas to pine stands. In some places they will replace shortleaf pine with loblolly pine.

Site 1 (24 acres) - Hardwood Improvement area ("impact cut")

Halley explained this area was managed to promote the growth of oaks and hickories, which are longer lived and are considered to have better wildlife value. Maple and poplar were among the species that were removed, thereby selecting for higher-value trees and allowing filtered light to reach the forest floor. The canopy was reduced by about 30 percent. This will help undue the many years of "high-grading" that occurred on this property (removing the high-value trees and leaving the rest behind). They hope to conduct a controlled burn throughout this area, which will serve as a "natural herbicide." The harvested trees were sold for saw timber, wood chips, and pulp wood.

Site 2 (26 acres) – Pine Clear-cut area

Halley explained this area consisted primarily of Virginia pine prior to Nov 2010 clear cut. It was replanted with loblolly pine in Jan 2011. The plan calls for a pre-commercial thinning in 6 years. Hardwood sprouts are spot treated with herbicide by certified crews (only one treatment in 45 years). The clearing of this site will allow a new pine forest to grow and enable a wide diversity of plants to re-establish from seeds that existed in the soil but received no sunlight to allow plant growth. There are few if any non-native species in this area. Halley discussed the advantages of loblolly pine over Virginia pine (e.g., reduced likelihood of a wildfire). Halley said after 40 – 45 years of growth this pine forest could be allowed to convert to a hardwood forest.

Site 3 – Stream Crossing through Forest Buffer

Halley provided overview of the planned construction of a temporary bridge that will enable trucks and other equipment to cross the stream and access the southern parts of the property. The roadway will be 16 – 18 feet wide, and will cross the stream perpendicularly through the wide riparian forest buffer located on both sides of stream. David Jones explained water quality monitoring that the NC Forest Service will conduct before and after the bridge construction. They will measure suspended sediment upstream and downstream of the crossing. John Howard showed how the width of the forest buffer for this site compares with the 50-foot minimum required by the Jordan Lake nutrient management rules. He noted that the Jordan Lake rules would require 44 acres of protected stream buffer versus the 151 acres planned for this site. James Vose explained the benefits of stream buffers. He also explained how forests change over time naturally and that proper forest management helps to control the change in beneficial ways by enhancing the ecosystem services provided by the future forest habitat.

Summary by Rich Shaw, DEAPR staff