Indiana Department of Natural Resources Division of Forestry



Resource Management Guide Division of Forestry – Oak Wilt Salvage and Sanitation 30-day Public Comment Period: November 16, 2020 – December 15, 2020

The Indiana State Forest system consists of approximately 158,000 acres of primarily forested land. These lands are managed under the principle of multiple use-multiple benefit to provide forest conservation, goods and services for current and future generations. The management is guided by scientific principles, guiding legislation and comprehensive forest certification standards which are independently audited to help insure long term forest health, resiliency and sustainability.

For management and planning purposes each State Forest is divided into a system of compartments and tracts. In general terms compartments are 300-1,000 acres in size and their subunits (tracts) are 10 - 300 acres in size. Resource Management Guides (RMGs) are then developed for each tract to guide their management through a 15-25 year management period. There are approximately 1,600 tracts in the State Forest system. During annual planning efforts 50-100 tracts are reviewed and RMGs developed based on current conditions, inventories and assessments.

The RMGs listed below is in response to Oak Wilt on State Forests.

Oak Wilt Salvage and Sanitation

To submit a comment on this document, go to: www.in.gov/dnr/forestry/8122.htm

You must indicate the State Forest Name, Compartment number and Tract number in the "subject or file reference" line to ensure that your comment receives appropriate consideration. Comments received within 30 days of posting will be considered and review posted at http://www.in.gov/dnr/forestry/3634.htm.

Note: Some graphics may distort due to compression.

Draft Resource management Guide November 4, 2020 Indiana Division of Forestry Indiana State Forests Oak Wilt Reduction/Oak Wilt Salvage and Sanitation

Oak wilt is a fatal disease on oaks, especially in the red oak group. It is very common in the Lake States. It is found throughout most of Indiana, stretching from Lake Michigan to the Ohio River. Oak wilt has been identified in virtually all the counties containing state forest lands. This includes positive results from 2020 samples examined by the Purdue Plant Diagnostics Lab.

Oak wilt is a vascular wilt disease that attacks oak trees, most particularly in the red oak group, in this region. It is very adapted to situations where trees in the red oak group are growing in close proximity in mostly pure clusters. It travels between groups of trees when spore mats form on other infected trees in the area, or by hitching a ride on insects. Once it infects one tree in a cluster, it can readily move through root grafts that form between the oak trees in the cluster. Once infected, a tree can die within a year. Spore mats that are formed then send out spores to infect new hosts. Removal of clusters of infection can significantly reduce the number of spores produced, preventing the infection of other oak trees. Oak wilt clusters are often readily apparent by the progressive nature of the infection. One central tree will be infected through airborne infection processes. Then neighboring trees will become infected, usually through root grafts, and this process will continue to radiate out through the cluster.

The oak salvage and sanitation will, where practicable, remove clusters of oak wilt infection. The goal is to reduce the prevalence of spore mats, and thereby reduce spread of the wilt to other trees. In order to safely drop and remove the target trees, an occasional non-target tree may need to be removed.

Water quality and soil conservation Best Management Practices (BMPs), cultural resource protection measures and Natural Heritage data will be utilized during the planning and implementation of salvage harvests to conserve these resources.