

Clear Creek State Forest

2015 MANAGEMENT ACTIVITIES

The mission of DCNR Bureau of Forestry is to conserve the long-term health, viability and productivity of the Commonwealth's forest and to conserve native wild plants. One of the ways the bureau carries out this mission is through the [State Forest Resource Management Plan](#) (SFRMP), a document that guides the management of the 2.2 million-acre state forest system. The SFRMP is updated approximately every 5 years and includes an extensive public engagement process.

The SFRMP is implemented at the local level by district-specific resource management plans that aim to balance many uses and values of the forest, while maintaining ecosystem health and the wild character of the forest.

The purpose of this Management Activities document is to communicate to the public about upcoming management activities, projects and events that will be conducted to implement the SFRMP on Clear Creek State Forest. For questions, comments or more information about this plan, please contact:

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RECREATION

- Proposed Recreational Events:
Fat Tire MountainBike Race: At the Laurel Fields in June
- Trails:
Blunder Trail (Kennerdell)- Trail will be improved throughout 2015 for non-motorized users. The district maintains 35 miles of multi-use trail system.
- Infrastructure – New Kiosks will be installed at Kennerdell and at the Mill Creek Parking lot.
 - The Interpretive panels along River Road in Kennerdell will be updated.

TIMBER MANAGEMENT

CLEAR CREEK STATE FOREST

Timber management goals are based on the 2014-2023 district timber management plan that ranks treatment areas based on current and anticipated future conditions. Through stand examinations, primarily in fences that already have been treated, high priority treatment areas were chosen to advance the regeneration process toward completion. The district's harvest allocation model was instrumental in developing the management plan. Overstory removal and shelterwood harvest acres were calculated to be on target at the end of the 10 year period. Meeting these allocation goals will help the district balance its age class distribution.

- **Proposed new timber sales for 2015 :**

- The Jimtown Sale, located near the corner of Jimtown Road and Clear Run Road, will receive a 42 acre shelterwood treatment.
- The Klingensmith and Edeburn A2 fences will receive a 66 acre overstory removal treatment. They contain a nice diversity of seedlings, including mixed oaks, which will become the next forest. They are located southwest of the intersection of Pine Run Road and Little Clear Creek Road.
- A 35 acre overstory removal is planned for two fences, north of Clear Run Road. These are known as the Brownlee fences. Having already received a shelterwood treatment, these areas have abundant competitive oak regeneration and are ready for the final harvest.

Ongoing Timber Sales:

- An area that had a windthrow salvage harvest in 1999 will receive treatment. In the four fenced areas, 58 acres will be overstory removal and 11 acres will be a shelterwood. The disturbance from the past has initiated the regeneration process and they are now ready for the next step. The sale is located north of Clear Run Road.
- Three fences along Callen Run and three fences along McNeil Station Road will be combined into one sale totaling 95 acres, with 32 acres of overstory removal, 53 acres of shelterwood, and 10 acres of buffer treatment.

Fence Removal Projects:

- Painter – 47 Acres – East of the intersection of Pine Run Road and Little Clear Creek Road.
- 949 East – 31 Acres – East of Dutch Hill and north of State Route 949.
- Iron Furnace – 30 Acres – South of parking lot at the end of DeWoody Road

KENNERDELL TRACT

- A 94 Acre Overstory Removal is located to the North end of the Kennerdell Tract. The goal is to create a new age class with similar or greater species diversity than the present, allowing the stand to be more resilient to species specific insect and disease threats. Future stand composition should be dominated by Oak and Red Maple and a lesser proportion of Black Cherry, and other mixed hardwoods. Wildlife habitat will be greatly enhanced with the creation of early successional habitat. Residual islands with dens and snags will provide structure to further enhance the habitat.

RESTORATION AND HABITAT PROJECTS

- No new habitat projects are to be completed in 2015. Continual maintenance and sustainment of several wildlife food plots will continue throughout the year.

ROAD AND BRIDGE PROJECTS

The road infrastructure throughout the Clear Creek State Forest serves as an integral part for recreation, timbersale operations, and other administrative purposes. In order to maintain the network of roads regular maintenance and intermittent road closure may occur. The following list are those activities that will occur in 2015:

- **Corbett Road:** A box culvert will be replaced in the spring of 2015. The box culvert is located at the intersection of RT 949 and Corbett Road. The box culvert replacement is part of a continued project from 2014. Last year, in 2014, a bridge was replaced on Corbett Road. With the replacement of both the box culvert and the bridge longevity of the infrastructure will increase and maintenance will decrease. The road will be closed during construction.
- **Clear Run Road:** A Driving Surface Aggregate (DSA) will be applied in 2015. The ideal time of placement would occur while the soil conditions are stable and the frost is out of the road surface. Typically this would occur in late May-July. DSA is applied with a tracked paving machine to a final compacted depth of 6 inches. DSA placement will begin at the intersection of Jim Town Road and proceed toward Fire Tower Road. Temporary road closure will occur during placement.
- **Bylson Road:** A DSA paver placement will be applied in 2015. This will be the last phase to a total replacement and rehabilitation to a parking area and road surface. In 2013-2014 the Blyson Road along with the parking lot were rehabilitated to better serve recreational use in the area and along the Clarion River. Completing this project will



provide a stable and limited maintenance road while providing increased recreational opportunity. Temporary road closure will occur during placement. Time frame of placement is June-Aug 2015.

- **Other Roads:** Continual maintenance activities will occur on the other road surfaces during 2015. These activities include road grading, culvert replacement, aggregate placement, and ditch clearing. During these activities the roads will remain open. Delays may be noticed especially during culvert replacements. Timeframe for maintenance will be throughout the summer and fall.

PRESCRIBED FIRE

- Fire has been associated with the forest landscape throughout its history. It most likely is the reason why the Clear Creek State Forest is abundant with the Red Oak stands today. Today we utilize fire as a tool to remove undesirable vegetation to allow the more desirable growing stock to prosper and grow. In 2015 we plan on using fire for the following sites:
- **Boneyard Fences:** Prescribed fire plots have been established and taken in and between two deer exclosures at the Boneyard Sale. In late 2014 to early 2015 a Prescribed Burn Plan will be written for the site. The goal of this fire(s) will be to control competing vegetation, including mountain laurel, black birch, and red maple while releasing established and competitive sized oak regeneration. The timing of this burn will be spring 2015 once red maple and birch leaf-out.

INSECT, DISEASE, AND INVASIVE PLANT TREATMENT

All of our forests in Pennsylvania, both privately and publicly owned, face threats from numerous causes. One of the most serious threats is that of foreign invasive insects and diseases. These pests can cause significant damage to our forests, resulting in harm to our ecosystems and economy.

Here in District 8, in 2012 and 2013 we had the first major outbreak of gypsy moth in nearly 20 years. We had small spray suppression programs both years, but wet weather encouraged the fungus *Entomophaga maimaiga*, which caused the population to totally collapse in this area in 2014. Eventually the population will rebuild, but we don't anticipate any more problems with gypsy moth for the foreseeable future.

In 2013 we made two major forest pest discoveries in Clarion County. First, in March 2013, we found the Hemlock Woolly Adelgid in Cook Forest State Park. The HWA is a very tiny, aphid-like insect. It is a major pest of eastern hemlock trees, and is known to kill most hemlocks once it is established in an area. We immediately started pesticide treatments of hemlock trees in Cook Forest, home to 2200 acres of old growth forest. Work continued into 2014, and we

have also been working on detailed stand inventories of the old-growth areas in the park. Based on our stand analysis and pesticide label limitations, we treated all hemlocks 33 inches in diameter and up in our work areas. Treatments in 2014 were concentrated in the Forest Cathedral area. As of the end of October, the 2014 treatments totaled 1194 trees on 290 acres, for a total of 45,721 inches of diameter. We used Xytect, which has the active ingredient Imidacloprid. Work will continue in 2015 to treat as many hemlock trees as we can. We are limited by both available labor and also the ounces of pesticide that we are allowed to apply per acre each year. Based on past experience, we anticipate that the treatments should be effective for five years. Research to find an effective biocontrol agent is ongoing. In fact, a “cold-hardy” variety of a predatory beetle from Idaho is being released in Cook Forest this fall. There is also a fungus that will kill the HWA. Researchers continue to test it, and to develop technology to spray it from an aircraft. This may or may not become available in the future.

A forest pest which is causing major destruction is the Emerald Ash Borer. First discovered in the United States in Michigan in 2002, it was found in western Pennsylvania in 2007. We confirmed it in Clarion in March 2013. By the time we found the pest, it was very well established throughout the area. It has killed tens of millions of ash trees across several states since 2002, with essentially 100% mortality in the areas it has invaded. We had already begun treating some trees in Clarion with a pesticide (TREE-äge) in 2011 as a precaution because we knew it was coming. As of the end of 2014 we now have 110 white ash trees being treated on a two-year rotation. We treated 82 in 2014, and will treat the other 28 in 2015. They are located in five state parks, on the Clear Creek State Forest, in Memorial Park in Clarion, and on the Clarion University campus. We are looking for additional ash trees to treat in 2015. Ash trees are now dead or dying throughout the District 8 area, and we expect that essentially all untreated trees will be dead within a few years.

NATURAL GAS AND OIL DEVELOPMENT

Gas development has always been associated within the landscape of the Clear Creek State Forest. Most recently technology and drilling methods have introduced Marcellus Shale to the State Forest. In 2014 Seneca Resources has developed a 4-acre Marcellus Shale Gas pad in Heath Township, Jefferson County. This pad is referred to as Heath N. The Heath pad was constructed in early 2014 and drilled and completed in late summer 2014. The current activity is projected for 2015:

- An interconnect, master meter station, and a compressor station is slated to be constructed in 2015. This infrastructure is required to be able to deliver the newly developed gas to market. The Forest District is working with Seneca Resources to reduce the impact to the area.

OPPORTUNITIES FOR PUBLIC ENGAGEMENT

The Bureau employs service foresters in each county in Pennsylvania to provide technical assistance to individuals, families and clubs that own woodlands, as well as educate on state forest activities. The work of the service forester is to improve the extent of sustainable management on privately-owned forestlands and woodlots throughout Pennsylvania, largely drawing from lessons learned and experiences of management on state forestlands. Service foresters utilize state forestland as examples of sustainable forest management to private landowners, landowner groups and the general public. Service foresters and landowner organizations sponsor events that tour state forestland and highlight our management. Many districts have 'demonstration areas' that are used for this education. Service foresters also communicate why activities occur on state forestland and how to become more involved.

- **Key Public Outreach Events**

Envirothons

School Field Trips

Woodland Owner Groups

Volunteer Days

Friends Group

Clarion County Woodland Owner Conference in February

MAJOR ACCOMPLISHMENTS FROM PREVIOUS YEAR

- 2014 Timber Management – 4 Executed Contracts
185 Acres Overstory Removal - 1,885,083 board feet - \$1,230,372
- Oak Silviculture Course in cooperation with the USFS-Northern Research Station
- Bylson Road and Parking Lot Improvements
- Construction of parking lots at Hindman Road and Millcreek Drive

RESEARCH

- Researchers from the U.S. Forest Service are conducting multi-year and multi-district research projects that will increase our knowledge and improve management activities. Fern can often limit regeneration by producing shade that keeps seedlings from growing. One study looks at the rate of herbicide needed to control the fern but not kill the seedlings. Beech trees often sprout from the root and can only be controlled with herbicide. A new study is trying to determine how long after a tree has been cut can the stump be treated and effectively control the sprouting. A multi-decade study on the



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effects of residual trees left after the final harvest is being done on four sites in the district. The study looks at how these tree impact seeding development, herbaceous vegetation, and song bird habitat.