

Forest Health Awareness



*Understanding Sustainable Forestry,
Current Forest Health on the ANF,
and the Connection to our
Communities and Economy.*

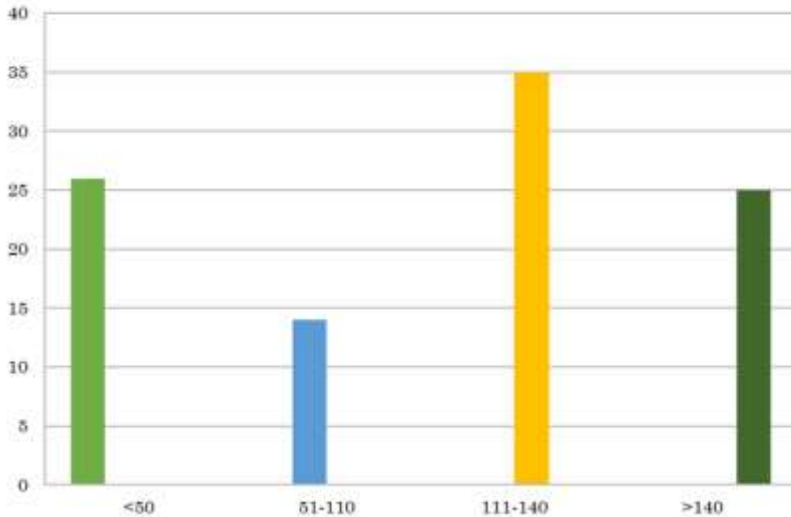
**Sponsored by: Allegheny Forest Alliance,
Forest Area School District and Warren County School District.**

What is Age Class Balance?

What the US Forest Service wants the age of trees to be:

The Allegheny National Forest updates their Land Resource Management Plan (LRMP) every 15 years to guide their management activities. The most recent revision was completed in 2007.

2007 Forest Plan Desired Condition



Early-aged trees are tomorrow's forest and are great cover for wildlife.

On the ANF, trees are ready for harvest at about 80 years of age.

These trees still have harvest and habitat value, and also shade the forest floor.

These trees provide habitat for certain animals and plants.



A private forest with an even distribution of age classes: 1/3 is early regeneration, 1/3 is mid structural (young trees), and 1/3 in late structural (mature trees).

"In the longer term, if even-aged and uneven-aged regeneration harvests continue to be lower than the stated objectives, landscape-level desired vegetative structural stages and age classes will not be sustained at levels sufficient to meet desired Forest Plan ecosystem conditions. In fact, the longer implementation rates are below those listed in Forest Plan objectives, the more skewed age class distribution will become.

Recommendations – It is recommended to increase regeneration treatments on the ANF in order to move forest age class and structural stage distribution toward desired conditions in the Forest Plan.

- ANF Monitoring and Evaluation Report FY 2008—FY 2013

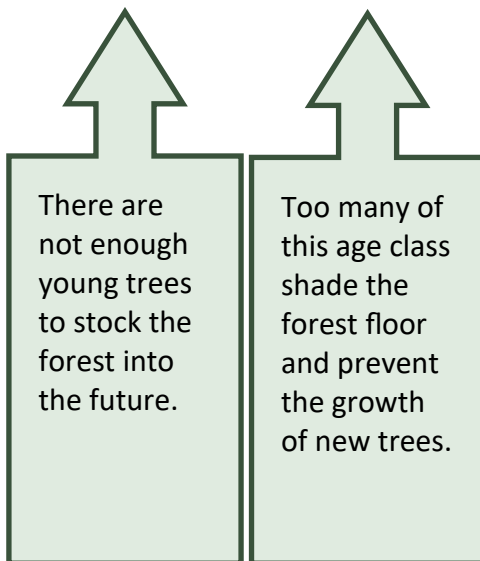
What is Age Class Imbalance?

What the age class actually is on the ANF (as of 2007 Forest Plan):



“Presently, approximately 3.4% of the ANF, or less than half of that desired, is in an early structural condition (less than 20 years old).”

- ANF Monitoring and Evaluation Report FY 2008—FY 2013



“The age class distribution of the ANF is very imbalanced.” The severity is “very significant.”

- ANF Forest Health Collaborative (2017)

Age class imbalance is illustrated here with too many large trees shading the forest floor, preventing light from reaching seedlings and using nutrients that the young trees need. Sustainable forest management harvests mature trees and allows perpetual regeneration of the forest.

What Age Imbalance Looks Like:

Tyler is pointing to two dying trees that should be harvested. There are no seedlings around his feet because the mature trees block the sun. These trees should already have been harvested to:

- 1) make way for the seedlings, and
- 2) harvest the revenue from the trees

It takes the ANF an average of 1—2 years to organize a timber harvest (and as long as 5 years), due to required environmental and historical assessments, and staff and funding limitations.

The trees Tyler is pointing to will have no value by the time they could be cut.



This image shows a stand of forest in the Early Successional age class. It is a young forest with few trees over 30 feet tall and grasses, shrubs and trees that provide food and cover for wildlife.

There is too little Early Successional growth on the ANF, due to insufficient harvest over the last 20+ years.



What Age Imbalance Looks Like (cont'n):



This large Soft Maple looks healthy...



However, from the other side, you can see that it is overgrown and decayed. It now has no timber value.



On the ANF, Soft Maple trees larger than about 22" to 24" are overly-mature. They discolor and rot on the inside, while appearing perfectly healthy on the outside.

As mentioned on Pg. 1, trees on the ANF are ready to harvest at about 80 years of age. If this tree could have been harvested at its prime age, it could have been salvaged before it rotted.

What Age Imbalance Looks Like (cont'n):



Red Rot affects mature Cherry trees. The tree can look healthy from the outside...

...but an inspection of the base of the tree will reveal the inner decay.



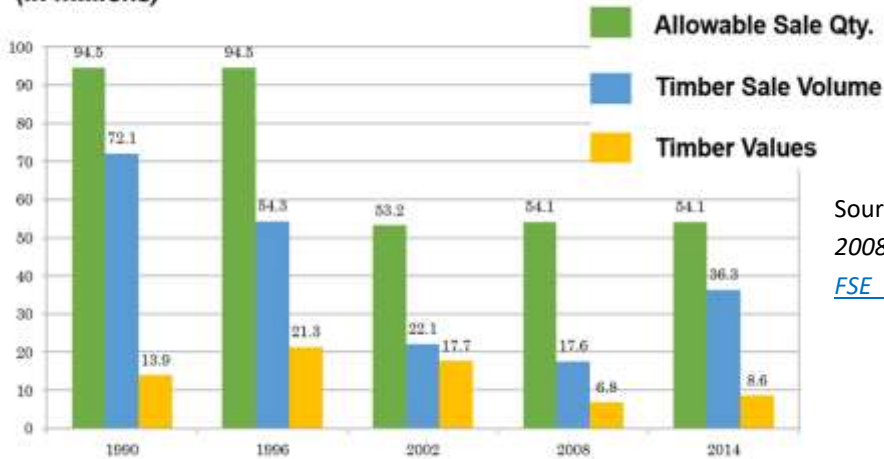
Interior of a Cherry tree suffering from Red Rot.



Again, if this tree could have been harvested at the 80-year prime age, its value could have been salvaged before it was destroyed by Red Rot.

Age Imbalance on the ANF is Growing Worse

ASQ, Timber award volume, Timber award values (in millions)



Source: ANF Monitoring and Evaluation Report FY 2008—FY 2013 www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3821598.pdf

The 2007 Forest Plan calls for two treatments:

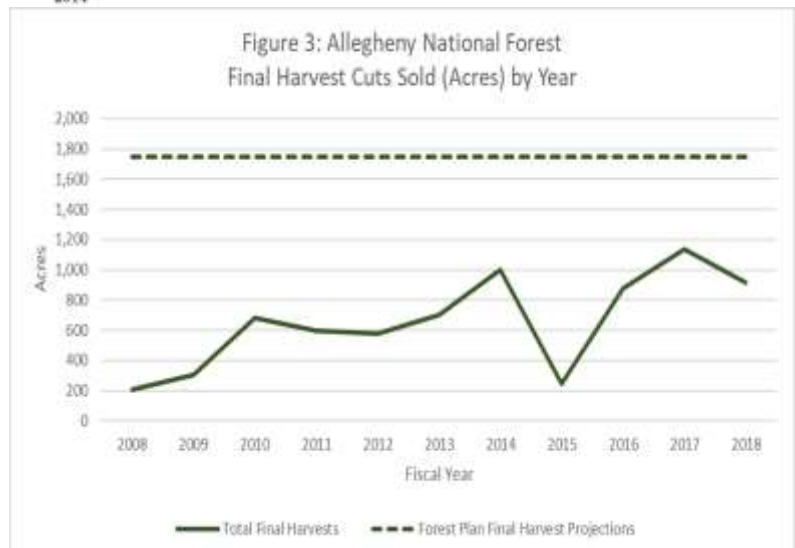
- 1) even-aged management at about 1,400 to 1,800 acres per year (the actual treated was 3 times less at just 477 acres per year)
- 2) uneven-aged management at 300 to 700 acres per year (the actual treated was 20 times less than called for at only 18 acres per year)

As a consequence, Early Successional forest (age 20 years or less) dropped from 8% in 2007 to less than 4% just 5 years later (2012). This will have disastrous long-term results for the future of the Forest and our communities.

During the same period (2007—2012) the ANF exceeded its goals on other, arguably less critical fronts:

- Trail Construction: 16 miles/yr planned; 52 miles/yr achieved.
- Road Maintenance: 125 miles/yr planned; 487 miles/yr achieved.
- Fish Habitat Planning: 30 to 40 acres/yr planned; 312 acres/yr achieved.
- Recreation goals for the Plan's first decade: all achieved or greatly exceeded.

(Sources: 2007 Land and Resource Management Plan, and ANF Monitoring and Evaluation Report FY 2008—FY 2013)



Over the last ten years, the ANF was only able to achieve an average of 36% of Final Harvest Cuts Sold compared to the 2007 Forest Plan projections. Final harvest follows the establishment of adequate seedlings and yields the greatest timber value and volume.

What Does the Future of the ANF Look Like?

If our legislators and the USFS do not give the ANF the resources (staff and funding) it needs, management will not improve and this forest will look VERY different in 10, 20, 50 and 100 years from now:

10 yrs—White Ash will have died, fallen, and be decaying into the soil. Cherry will continue to decline in health and fall.

20 yrs—Cherry will likely be mostly gone and the stand converting to declining Maple, Beech and potentially hemlock (due to Woolly Adelgid).

50 yrs—Soft Maple will be disappearing leaving Sugar Maple, Birch, declining Beech and possibly Hemlock.

100 yrs—The forest will be in decline similar to the Tionesta Scenic Area and Research Natural Area.

The ANF will be a different forest and its productivity and ability to support the huge plant and wildlife diversity it now boasts will be lost. It will have:

- A dense canopy shading light from the forest floor and changing the tree and plant species that can grow on the ANF
- Reduced wildlife diversity, limited to those who depend on late successional habitat
- Regeneration dependent on blowdowns, fires and other natural disasters
- Increased risk of wildfire due to hazardous fuels
- Increased hazards to those who recreate on the ANF



The ANF was created for the purpose of securing **“favorable conditions of water flow and to furnish a continuous supply of timber”** under the *Organic Administration Act of 1897*.

The *Weeks Act* was passed in 1911 and authorized Congress to purchase private land, often denuded and abandoned, for the express purpose of **managing stream flow**. The ANF was one such acquisition in 1923, purchased to reduce flooding along the Allegheny River. It soon re-generated a new forest on its own, setting the stage for a **“continuous supply of timber.”**

In 1960, the *Multiple Use—Sustained Yield Act* was passed, directing equal attention to five areas of management on national forests, none of which were to be given lesser priority: **timber, range, water, recreation and wildlife.**

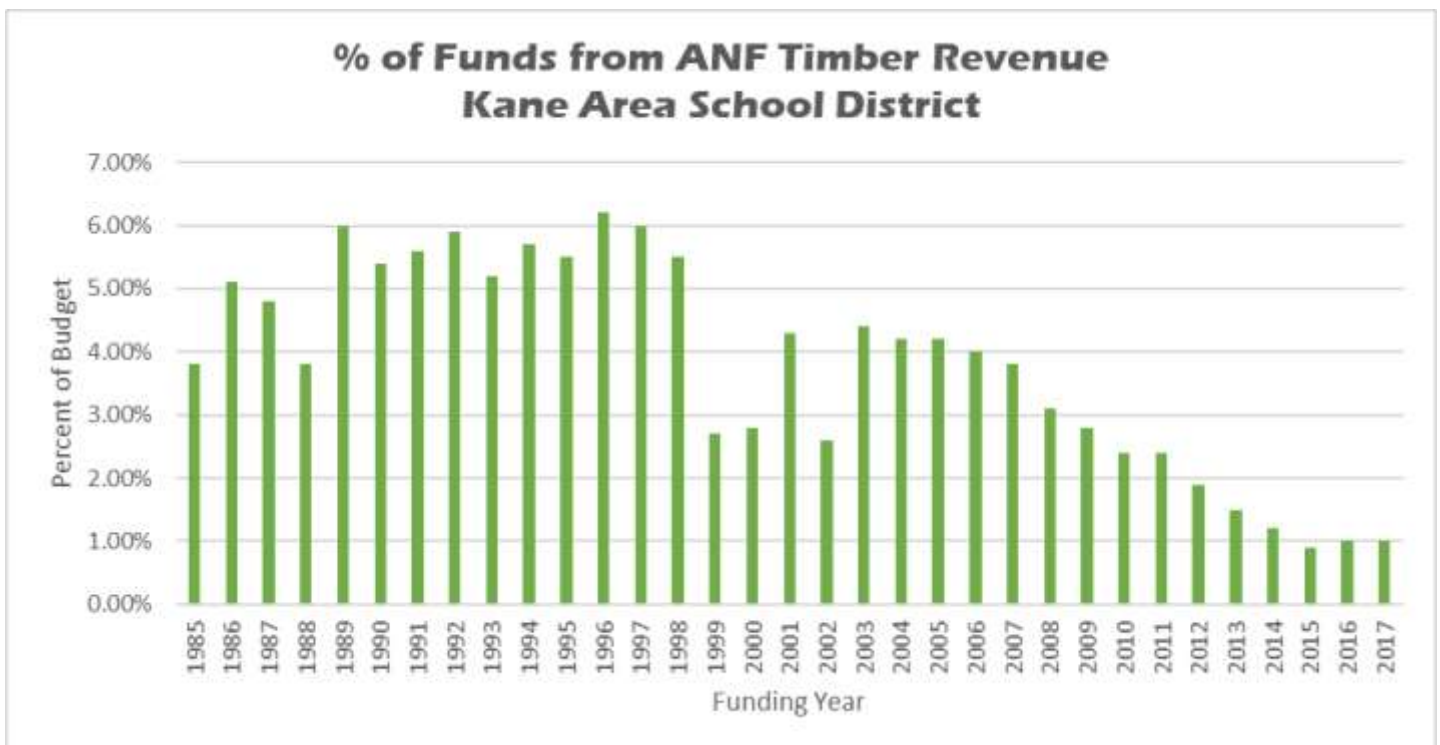
What Does the Future Look Like for ANF Host Communities?

The future of our communities is also at-risk if the ANF is not provided with adequate resources to manage the forest ***as directed by USFS policies, which are based on proven science.***

Seven school districts and 33 municipalities in the four counties hosting the ANF receive 25% of timber sale receipts (not including “Stewardship Sales”) under the ***Good Neighbor Compact*** (Forest Area Schools opted to receive Secure Rural Schools funding) to offset the loss in property tax revenues. These funds, which help cover education and road maintenance costs, have dwindled over the last 20+ years along with timber cuts on the ANF and timber market prices.

The results we are seeing will only grow worse, including:

- deferred road projects
- cutting of school programs
- increased tax burden upon local residents (example: Warren County School District has been forced to raise taxes 7 of the last 11 years)
- closing businesses and lost jobs throughout the timber, lumber and their supportive industries
- declining local tax revenues due to lost jobs and business income
- declining population as workers leave to find work elsewhere
- local businesses closing due to dwindling population (restaurants, grocery stores, service stations, etc.)

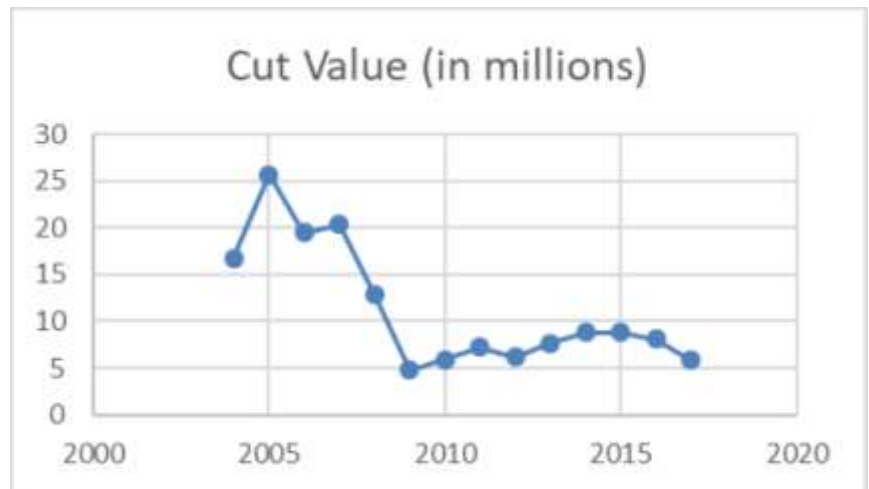


Factors for Decline in 25% Funding:

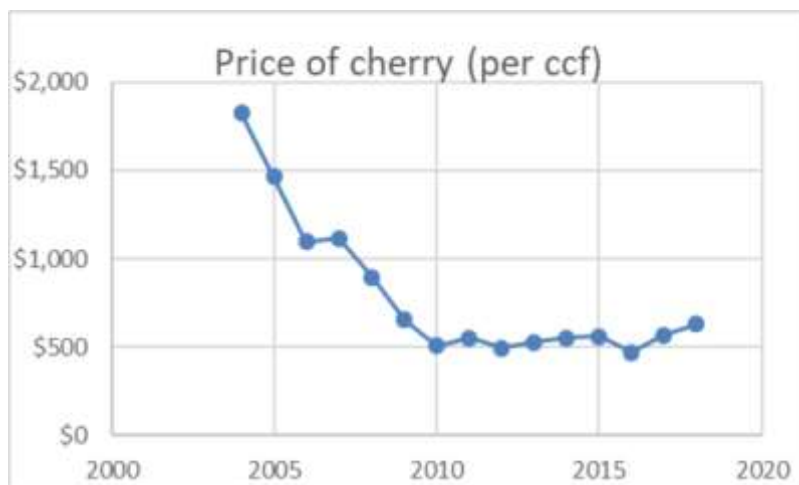
Many things have contributed to the decline in timber harvests on the ANF and, in turn, timber receipt funding:

- **Obstructionist Lawsuits interfering with sound forest management (timber harvest)**
- **Reduced funding for staff and timber sale preparation on national forests**
“Fire Borrowing”, which takes both funds and manpower from the ANF and other national forests to fight fires on western U.S. national forests.
- **Replacement of wood with other materials for construction and manufacturing (i.e., steel, plastics, and fast growing bamboo and hemp)**
- **Decreases in lumber prices, resulting in lower bids for sales of ANF timber**
(Pennsylvania Woodlands Timber Market Reports: <http://extension.psu.edu/natural-resources/forests/timber-market-report>)

Value of Timber Harvested 2004-2017



Price of Black Cherry in ANF Timber Sales 2004-2018



Timber Cut and Cut Value 2007 and 2015

Year	Timber Cut (in ccf)	Cut Value (in millions)
2007	54,369	\$20.4
2015	66,329	\$8.8

Black Cherry makes up 50% of the timber volume harvested on the ANF, and 85% of the value of ANF timber sales.

Source for all timber metrics is the Forest Service’s annual “Forest Products Cut and Sold from the National Forests and Grasslands” available here: <https://www.fs.fed.us/forestmanagement/products/cut-sold/index.shtml>

\$40 Million in White Ash Will Be Lost



The trees with red ribbons are White Ash, collectively worth more than \$1,000, which will die before the ANF staff can harvest them. The Emerald Ash Borer, an invasive insect from Asia, is predicted to ultimately destroy nearly 100% of the Ash trees on the ANF.* The *ANF Monitoring and Evaluation Report FY 2008—FY 2013* stated: ***“Future threats to forest health that may warrant recovery of economic value of timber include ash mortality caused by EAB (Emerald Ash Borer), and hemlock mortality resulting from HWA (Hemlock Woolly Adelgid).”*** The 2007 Forest Plan calls for salvage within two years of an “event” that kills trees (including insect infestation) to recover the value and achieve multiple-use objectives.

* Source: pg. 184, *ANF Monitoring and Evaluation Report FY 2008—FY 2013*

The Challenges ANF Staff Face:

- Funding and staffing less than adequate for the job.
- Cumbersome NEPA (environmental review) regulations take 1—2 years to complete.
- Must satisfy State Historic Preservation Office by surveying every acre treated.
- 513,000 acres of forest to manage and treat.
- Scope of their duties is broad: forestry, recreation, and watershed management
- Monitoring: effectiveness of treatments, invasive species, pests and diseases, etc.
- Frequent staff (particularly leadership) changes.
- “Fire Borrowing” from the ANF and other national forest budgets to fight wildfires.
- Unanticipated natural events (storms damage, pest and disease infestations).

Recent Progress and Accomplishments:

Timber harvests on the ANF have been slowly increasing in recent years, climbing to 40 MMBF in 2018, 42 MMBF to be offered in 2019, and 50 MMBF projected to be offered in 2020. This is approaching the 54.1 MMBF annual Allowable Sale Quantity (ASQ) under the 2007 Forest Plan.

One reason for this is “categorical exclusions”, allowing the USFS to complete salvage projects without having to go through the cumbersome NEPA process.

There is also a renewed dedication at the USFS to meet management/harvest goals, and the directive has been given to individual forests to do so.

Though sporadic, Shelterwood Seed Cuts Sold (step #1 in even-aged regeneration) have been on the rise since 2015 and are now just above the 1,800 acres/yr projected. Site Preparation & Herbicide Application (step #2) has been up since 2014 and is now well above the approximately 2,000—2,400 acres/yr projected. These two steps are required before Final Harvest Cuts can take place and will set-the-stage for a continued increase in harvest volume and value...*if ANF staff can maintain this level of treatment.*

The ANF is also working with local agencies and organizations through the Allegheny Forest Health Collaborative to identify issues affecting forest health and to find and implement solutions.



How Can YOU Help?

→ **Comment on projects on the ANF in support of sustainable, multiple-use management.**

See the current SOPA (Schedule of Proposed Actions) Report online at:

<http://www.fs.fed.us/sopa/forest-level.php?110919>

→ **Educate others about sustainable forestry and the importance of multiple use management on our National Forest.**

→ **Participate in iMap Invasives, reporting aquatic and terrestrial invasive species.**



Website: <https://www.paimapinvasives.org/>

Download the app: <https://www.imapinvasives.org/mobile-tools>

→ **Speak to your legislators at every opportunity, and write to them to comment on legislation relative to national forest management and funding.**

Stress the importance of adequate funding to manage our national forests, and keeping money and key personnel on the ANF, rather than sending these resources to support fire suppression ...

Our forest is facing a disaster too!

→ **Advocate for national forests (sustainable forestry and multiple-use management) rather than national parks (preservation and limited use).**

→ **Become an active member of the AFA, receive communications on important issues, and participate in our programs and events.**

To join, visit our website: <http://www.alleghenyforestalliance.org>



Resources:

The “2007 Land and Resource Management Plan” and associated documents can be found online at:

<https://www.fs.usda.gov/main/allegheny/landmanagement/planning>

The 2008—2013 Monitoring and Evaluation Report can be found online at:

https://fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3821598.pdf

The 2017 (FY2018) 25% Fund payments to counties (see pg. 83) can be found online at:

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd622640.pdf

Commenting on ANF Projects:

How can you effectively comment on ANF vegetation management projects?

Most vegetation management projects on the ANF are developed using a standard process:

1. An area to manage is identified and data on stand conditions are gathered.
2. A silviculturist reviews the data and field conditions to develop a proposal.
3. The proposal is surveyed and refined by a team of resource specialists.
4. The proposal is scoped. Referred to as scoping, the ANF summarizes key information about the proposed action, contacts interested parties, and typically asks for comments back within 30 days.

Schedule of Proposed Actions (SOPA) 04/01/2019 to 05/30/2019 Allegheny National Forest					
<p>This report contains the best available information at the time of publication. Questions may be directed to the Project Contact.</p> <p>Report Contents (click to jump to a section) :</p> <ul style="list-style-type: none"> - R9 - Eastern Region Allegheny National Forest Forestwide (excluding Projects occurring in more than one Forest) - R9 - Eastern Region Allegheny National Forest Bradford Ranger District (excluding Projects occurring in more than one District) - R9 - Eastern Region Allegheny National Forest Marienville Ranger District (excluding Projects occurring in more than one District) 					
Allegheny National Forest, Forestwide (excluding Projects occurring in more than one Forest)					R9 - Eastern Region
Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Penelec First Energy Special Use Renewal CE *NEW LISTING*	- Special use management	In Progress: Scoping Start 03/08/2019	Expected 05/2019	05/2019	Wendy Andersen 814-728-6165 wandersen@fs.fed.us
<p>Description: Reissue six expired special use permits authorizing approximately 68.6 miles of electric transmission lines, electric distribution lines, and related facilities. If approved, the permits will be consolidated into 2 permits issued for a 30 year term.</p> <p>Web Link: http://www.fs.usda.gov/project/?project=55514</p> <p>Location: UNIT - Allegheny National Forest All Units. STATE - Pennsylvania. COUNTY - Elk, Forest, McKean, Warren. LEGAL - Not Applicable. Elk, Forest, McKean, and Warren Counties, Pennsylvania.</p>					
Back To Top					
Allegheny National Forest, Bradford Ranger District (excluding Projects occurring in more than one District)					R9 - Eastern Region
Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Bradford Forest Restoration Project EA *UPDATED*	- Forest products - Vegetation management (other than forest products) - Road management	In Progress: Objection Period Legal Notice 09/18/2017	Expected 09/2019 Actual: 12/11/2018	09/2019	Richard Hatfield 814-383-6096 rhatfield@fs.fed.us
<p>Description: Regenerate declining stands of Allegheny hardwood through tree harvesting and reforestation activities, removal of nonnative invasive plants, and road management activities.</p> <p>Web Link: http://www.fs.usda.gov/project/?project=47650</p> <p>Location: UNIT - Bradford Ranger District. STATE - Pennsylvania. COUNTY - Forest, McKean, Warren. LEGAL - Not Applicable. Warrants 2735, 2877, 4634, 4762, 4712, 4713, 4732, 4738, and 4739 of Sheffield Township and warrants 3195, 3196, 3211, 3234, 3235, 3238, 3239, and 3240 of Cherry Grove Township, Warren County, Warren.</p>					
Cherry Run EA *NEW LISTING*	- Land management planning - Forest products - Vegetation management (other than forest products)	In Progress: Scoping Start 03/20/2019 Est. Comment Period Public Notice 06/2019	Expected 11/2019	11/2019	Richard Hatfield 814-383-6096 rhatfield@fs.fed.us
<p>Description: The Forest Service, Allegheny National Forest (ANF) proposes the Cherry Run Project to improve forest health, streams and fisheries, and wildlife habitat within the 7,578 acre project area, within Sheffield Township, Warren County, Pennsylvania.</p>					

Example of a SOPA (Schedule of Proposed Actions Report) available on the ANF website.

5. The proposal's effects on natural resources are analyzed in an environmental assessment.
6. The environmental assessment is completed. Referred to as the environmental assessment comment period, the ANF releases its analysis for review, informs interested parties, and asks for comments back within 30 days.
7. A decision on the proposal is made.

Comments may request changes to the proposed action, request clarification or ask questions, and/or serve as general expressions of support or disagreement. Comments received during either scoping or the environmental assessment comment period are most helpful if they:

- are submitted in **writing**, within the **requested time periods**;
- give **site-specific** detail regarding the effects of our proposal at specific locations on specific resources;
- identify different activities or implementation methods to consider in resolving identified concerns; and
- provide references to supporting data and scientific literature.

Commenting on ANF Projects (cont'n):

These types of comments receive substantial consideration in project development. Below are some tips and examples:

Good comments:

- Focus on the proposed action or some specific aspect of the analysis;
- Provide additional information we may have missed or show material defects in our analysis or proposal;
- Are written coherently;
- Help with solutions and legitimate, concrete actions that we could pursue.

Scenario:

A member of the public expressed concerns during scoping (step 4 above) regarding our management of age class imbalance and specifically an area proposed to be managed for late structural habitat. When they review the EA, they still feel like the proposed action could benefit by including some trees within close proximity to the proposed project boundary (step 6 above). They identify specific stands and topography, discuss how the proposed action, if modified, could help meet Forest Plan objectives and ask if previously approved decisions may be sufficient to cover this addition. In response, the ANF reviews the proposed changes, notes that this would be permissible under the current plan, help meet forest objectives, and that the area has recent, previously approved wildlife and heritage surveys. We provide responses to the comments and move forward with a decision that approves the action, which has been modified based on the responder's comments.

Not-so-good comments:

- Broad-scale, sweeping generalizations e.g., “cutting trees down is bad.”
- Off-topic or not project specific; e.g., “any blading of roads, anywhere, is a significant impact.”
- Discourteous or invective; e.g., “I hate the Forest Service.”
- Can't be verified; e.g., “my sources say...” with no sources provided.

Scenario:

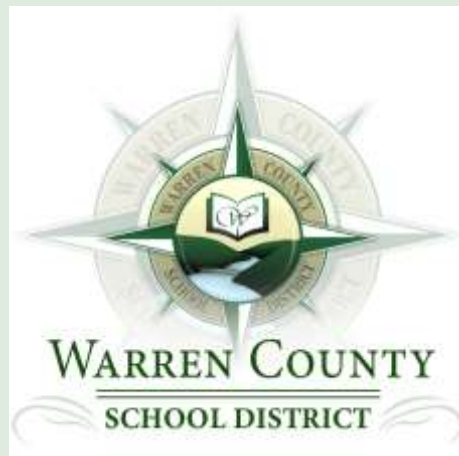
We receive a comment from an individual who expresses their opinion that timber harvesting (in general) has a “catastrophic” impact on nature-based recreation and will “irrevocably” harm the habitat quality needed for species viability. They claim that cheat grass is ruining the rangelands in the Western U.S. and that they believe all lands held in federal ownership should be turned over to the local counties. They cite no literature or references and misidentify the proposed action. The ANF would respond to this comment by clarifying the nature of the project and citing analyses that pertain to project specific impact but no changes would be made to the document or the proposed action.

Considerations to keep in mind:

- Adding more vegetation management to a proposal could be challenging to accommodate on a large scale given field work is generally already completed before scoping;
- Substantially increasing our proposal could delay a final decision and take staff away from work on the next project;
- Instead of waiting for us to request comments, you can work with us during the earlier stages of proposal development.



Forest Area School District



Thanks to the staff of the Allegheny National Forest for their assistance in providing information and data used in the development of this publication.