POTOMAC-GARRETT STATE FOREST
ANNUAL WORK PLAN

FISCAL YEAR 2025

The mark of responsible forestry

Prepared: _____ _____
(Forest Manager) Date

Reviewed: _____ _____
(Regional Forester) Date

Approved: _____ _____
(Environmental Specialist) Date

Potomac-Garrett State Forest
FY-25
Annual Work Plan

18,604 Total Acres
18,077 Certified Acres

Potomac-Garrett State Forest
FY-25 Annual Work Plan

I. State Forest Overview

The Potomac-Garrett State Forests situated in southwestern Garrett County in Western Maryland have the distinction of being the birthplace of forestry conservation in Maryland. The generous donation of 1,917 acres by the Garrett Brothers in 1906 not only serves as the foundation of the Garrett State Forest, but is the root of both Maryland's present Public Lands system and Forest Service. Mountain forests, streams and valleys make up the 18,604 acres of this State Forest, of which 18,077 of these acres are third party certified. Uncertified acreage includes powerline rights of way, roadways, campsites footprints, etc.; areas that cannot/will not be managed. The forest cover is predominantly a second growth mixed hardwood forest dominated by mixed oaks, sugar and red maples, black cherry, basswood, ash and birch. The geography of this area provides for a wide range of growing conditions from the harsh, wind and ice swept ridge tops of Backbone Mountain to the deep rich slopes above the North Branch of the Potomac River. Much of the State Forest lands contain excellent quality hardwoods.

Potomac-Garrett State Forest has been intensively managed over the past nine decades. Forest harvest and grooming operations are undertaken to thin overstocked stands, to effectively deal with public safety concerns, to harvest mature, diseased/dying trees, to improve habitat for certain wildlife species, to assist and provide for certain research needs, to address aesthetic concerns and to increase the proportion of age/height diversity of forested stands.

II. Annual Work Plan Summary

The FY-25 Annual Work Plan for Potomac-Garrett State Forest was formulated in 2023. It contains projects to be undertaken in the areas of Special Projects, Maintenance and Operations, Recreation, Watershed Protection, Ecosystem Restoration / Protection, and Wildlife Management. In addition to the routine operations and management of the State Forest, the FY-25 Annual Work Plan for Potomac-Garrett State Forest details land management projects that will be the focus of the State Forest management staff for FY-25. All projects and proposals within this Plan have been developed to meet one or more of the Land Management Guidelines and Objectives outlined in the Potomac-Garrett State Forest Sustainable Management Plan including:

***Forest Economy**: management activities intended to maintain an economically sustainable forest and contribute to the local economy through providing forest-related employment and products.*

***Forest Conservation**: management activities with a purpose to protect significant or unique natural communities and elements of biological diversity, including Ecologically Significant Areas, High Conservation Value Forests and old growth Forests. Old growth forest management serves to restore and/or enhance old growth forest structure and function.*

***Water Quality**: management activities designed to protect or improve ecological functions in protecting or enhancing water quality.*

***Wildlife Habitat**: management activities with a purpose to maintain and enhance the ecological needs of the diversity of wildlife species and habitat types.*

***Recreation and Cultural Heritage**: management activities with a purpose to maintain and enhance areas that serve as visual, public camping, designated trails, and other high public use areas.*

A. Special Management Projects Include:

1. Continued Development of the Certified, State Forest Sustainable Forest Management Plan - with special focus on addressing items identified as in need of improvement resulting from the 2023 FSC/SFI Certification Audits.

2. Forest Stand Delineation, Inventory and Monitoring - Completion of the project to re-inventory and redefine stands on the entire forest. This critical project will continue in FY-25. To date, 100% of the forest wide data collection has been completed. The project will allow a thorough analysis of this complete data set from which further management plans will be derived. Inventory work will continue in the form of follow-up monitoring protocols associated with the initial inventory and certification requirements.

3. Non-Native Invasive Species (NNIS) Inventory and Control Work - The Sustainable Forest Management Plan calls for various responses to NNIS and the Forest Inventory Project has allowed for a broad view of the problem forest wide.

4. Ecologically Significant Area (ESA) Management Plan Development - Wildlife and Heritage staff developed descriptions and management plans for the ESAs to be included in the Potomac-Garrett State Forest Sustainable Forest Management Plan guidance document. These plans offer a look at the critical habitat elements that make up each of the designated Ecologically Sensitive Areas, and offer insights on management approaches that will assure continued protection of critical habitats, including some of the active management that has taken place to further assure protection of the rare, threatened and endangered species these areas are set up to protect.

5. Irreplaceable Natural Area (INA) Management Plan Development: On May 16, 2022, House Bill 784 was approved, establishing the Irreplaceable Natural Areas (INA) Program. Wildlife/Heritage Services and Fisheries Services personnel collaborated to develop the INAs, which focus on biodiversity and further protections for rare, threatened and endangered species found throughout the state forests. Similar to ESAs, management strategies, including compatibles use, have been established for each site to ensure that all critical habitats and unique features are retained. The majority of the proposed INAs share a common delineation with the established ESAs and High Conservation Value areas and have a minimal impact on the harvestable management acreage of either state forest *(See Figure 2, page 9).*

HB 784

AN ACT concerning:

Department of Natural Resources – Irreplaceable Natural Areas Program – Establishment

FOR the purpose of establishing the Irreplaceable Natural Areas Program in the Department of Natural Resources to preserve Maryland's native biodiversity on State–owned land managed by the Department; and generally relating to the Irreplaceable Natural Areas Program.

BY adding to
Article – Natural Resources
Section 3–501 through 3–503 to be under the new subtitle "Subtitle 5. Irreplaceable Natural Areas Program"
Annotated Code of Maryland
(2018 Replacement Volume and 2021 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article – Natural Resources

SUBTITLE 5. IRREPLACEABLE NATURAL AREAS PROGRAM.

3–501.

(A) IN THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(B) "BIODIVERSITY" MEANS THE FULL RANGE OF LIVING ORGANISMS NATIVE TO A REGION.

(C) "IRREPLACEABLE NATURAL AREA" MEANS AN AREA WITH HABITAT NECESSARY TO SUPPORT:

(1) A UNIQUE NATURAL COMMUNITY; OR

(2) A PLANT OR ANIMAL SPECIES LISTED AS THREATENED OR ENDANGERED UNDER TITLE 10, SUBTITLE 2A OF THIS ARTICLE.

(D) "PROGRAM" MEANS THE IRREPLACEABLE NATURAL AREAS PROGRAM.

(E) "UNIQUE NATURAL COMMUNITY" MEANS AN AREA THAT:

(1) HAS AN ASSEMBLAGE OF NATIVE PLANTS OR ANIMALS THAT IS RARE OR DECLINING IN THE STATE; OR

(2) SUPPORTS AN UNUSUALLY PRISTINE EXAMPLE OF A NATIVE ECOSYSTEM TYPE.

3–502.

(A) THERE IS AN IRREPLACEABLE NATURAL AREAS PROGRAM IN THE DEPARTMENT.

(B) THE PURPOSE OF THE PROGRAM IS TO PRESERVE MARYLAND'S NATIVE BIODIVERSITY ON STATE–OWNED LAND MANAGED BY THE DEPARTMENT FOR CURRENT AND FUTURE RESIDENTS OF THE STATE.

3–503.

ON OR BEFORE JULY 1, 2023, THE DEPARTMENT SHALL ADOPT REGULATIONS TO CARRY OUT THIS SUBTITLE, INCLUDING REGULATIONS:

(1) DESIGNATING IRREPLACEABLE NATURAL AREAS ON STATE–OWNED LAND MANAGED BY THE DEPARTMENT; AND

(2) ESTABLISHING MANAGEMENT OBJECTIVES FOR IRREPLACEABLE NATURAL AREAS, INCLUDING:

(I) A MAP DEPICTING BOUNDARIES FOR EACH AREA;

(II) A DESCRIPTION OF THE UNIQUE FEATURES AND THREATS FOR EACH AREA; AND

(III) COMPATIBLE AND INCOMPATIBLE ACTIVITIES FOR EACH AREA.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 2022.
Approved by the Governor, May 16, 2022 (Ch. 420 2022 LAWS OF MARYLAND).

As published in the Maryland Register on August 25, 2023
Volume 50, Issue 17, Pages 761-784

Subtitle 03 WILDLIFE

08.03.17 Irreplaceable Natural Areas

Authority: Natural Resources Article, §3-503, Annotated Code of Maryland

Notice of Final Action

[23-091-F-I]

On August 15, 2023, the Secretary of Natural Resources adopted new Regulations **.01** and **.02** under a new chapter, **COMAR 08.03.17 Irreplaceable Natural Areas**. This action, which was proposed for adoption in 50:13 Md. R. 517—520 (June 30, 2023), has been adopted as proposed.

Effective Date: September 4, 2023.

JOSH KURTZ
Secretary of Natural Resources

B. Land Management Projects Include:

1. Continuation of the ecosystem restoration project involving control of invasive and exotic plants forest wide. Follow-up monitoring and retreatment, where necessary, will continue for the 31-acre NNIS control project in Compartments 30 and 32 completed in FY-23 that focused on herbicide treatments on Japanese barberry (*Berberis thunbergii*) and multi-flora rose (*Rosa multiflora*). Treatment efforts will be expanded into the adjacent stands in an effort to further control these unwanted species.
2. Two Silvicultural projects including:
A 2-acre hardwood crop tree release and a 31-acre understory mowing of interfering understory vegetation.

Forest harvest operations are undertaken to utilize mature and dead/dying/diseased trees; to thin overstocked stands; to improve and diversify wildlife habitat; to effectively correct public safety concerns and issues; to reduce the forests vulnerability to insect attack, disease or wildfire hazard; to facilitate certain approved research needs; to improve certain aesthetic aspects of an area; and to improve the proportions of age class and species diversity within stands and management blocks. This forest has been intensively managed since its inception, utilizing both even and uneven-aged techniques via selective removals and regeneration harvests. Early records indicate that as cut over land was acquired, foresters culled the forest, removing the poorly formed and damaged timber left behind in the wake of the cut and run practices employed by early timber speculators. By removing these undesirable trees, newly forming seedlings were released from competition and were thus cultured into the future growing stock of trees that we enjoy today. The benefits of this work have been significant including improved wildlife habitat diversity, improved forest health and more abundant mast production, improved utilization of insect-damaged trees, reduced forest fire hazard, and the considerable financial contribution of management to the state and local economies as well as to those employed in the forest products industry.

The FY-25 Annual Work Plan outlines 2 non-commercial silvicultural projects on 33 acres. The silvicultural work laid out in this work plan is focused on initiating seedling development, retaining established regeneration, particularly mixed oak species and timber stand improvement. This cultural work will safeguard the long-term sustainable management of these important forest resources. The cultural operations and management projects outlined within the FY-25 Annual Work Plan are selected to provide significant contributions to the sustainability of forest resources found within Potomac-Garrett State Forest and the ecosystems associated with it. No new timber harvests are proposed for the FY-25 Annual Work Plan, but approved harvest proposals from the FY-17 (PG-17-S-15) and FY-24 (PG-24-S-2) Annual Work Plans will be completed in FY- 25, producing a harvest of approximately 275,000 board feet of sawtimber accounting for an estimated $110,000 worth of raw wood products entering local markets.

III. General Location Map for FY-25 Land Management Project Proposals

Approximately 33 Acres

Map Key

1. Compartment 25 Stand 26 — *2-acre Crop Tree Release*

2. Compartment 45 Stand 2 / Compartment 46 Stand 10 — *31-acre Understory Mowing*

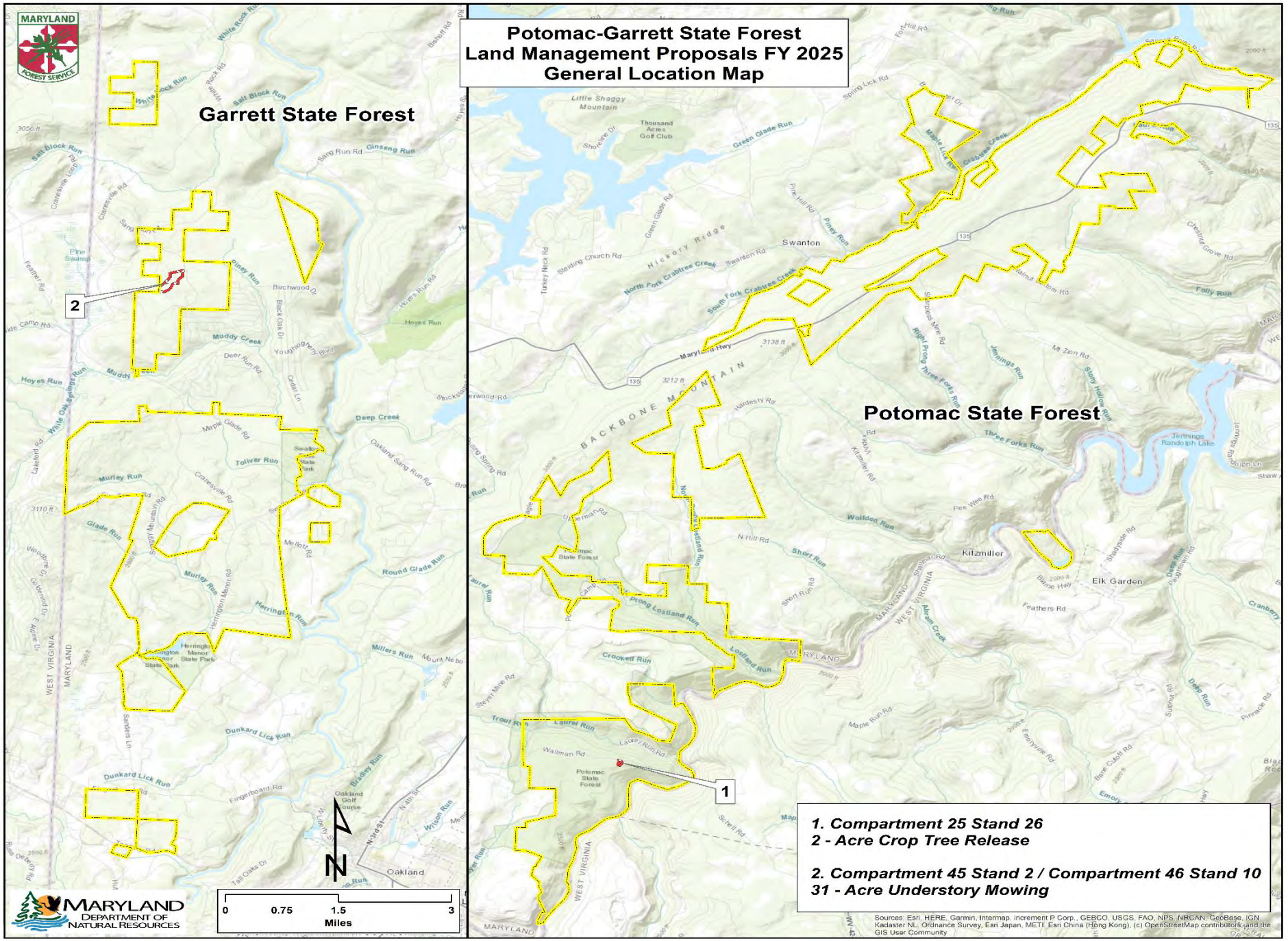


Figure 1. General location map for FY-25 land management proposals.

IV. Special Projects - Forest Resource Management and Planning

A. Continued Development of the Certified State Forest Sustainable Forest Management Plan.

Beginning in 2011, the Forest Service began revising the long-term sustainable management plans for all three of the State Forests in the Western Region. The initial framework follows the sustainable management plan format established for the State of Maryland's Chesapeake Forest on the Eastern shore. The Department's goal was to have the updated sustainable forest management plans receive dual third-party certification under both the Forest Stewardship Councils (FSC) and Sustainable Forestry Initiatives (SFI) standards and guidelines.

Throughout the course of the next two years, broad resource assessments were carried out identifying the various management units and features located on the forests including identification and mapping of High Conservation Value Forest Areas (HCVF), much of which was formerly identified as the State Forests "Special Management Zone". Within the HCVF are located a broad range of Ecologically Significant Areas (ESA). These areas typically contain rare, threatened or endangered species and their critical habitats. By spring of 2011 initial drafts of the Forest's Sustainable Management Plan were developed and shared with stakeholders for initial comment and review. The plans were submitted to both the FSC and SFI organizations in the spring of 2011, at which point audits had been completed on all three of the western state forests. Following the audits, draft plans and audit findings were presented to the State Forests Citizen Advisory Committees for review and comments. The Draft Sustainable Management Plans were made available for public comment fall of 2011. Revisions and updates to the Sustainable Management Plan are made on an annual basis.

Each year the State Forests Management Program is audited for compliance to the standards set forth by the Certifying Organizations. Any shortcomings in the programs identified during the audits are identified in Corrective Action Reports (CARs) and/or observations identified as needing improvement in order to be "certified" as sustainably managed forest lands under the internationally recognized FSC and SFI standards. These corrective actions vary from simple formal documentation of routine practices, to more complex policy and procedure development involving various stakeholders and partners. The program requires that all these items be addressed before the next annual audit, with some needing more immediate attention. State Forest staff time and field operations are adjusted and redirected to assist in addressing any Corrective Action items in the course of the next year. No CARs were issued by either auditing entity during the 2023 Silvicultural Audit (See Appendix 2 and Appendix 3 for a summary of audit findings).

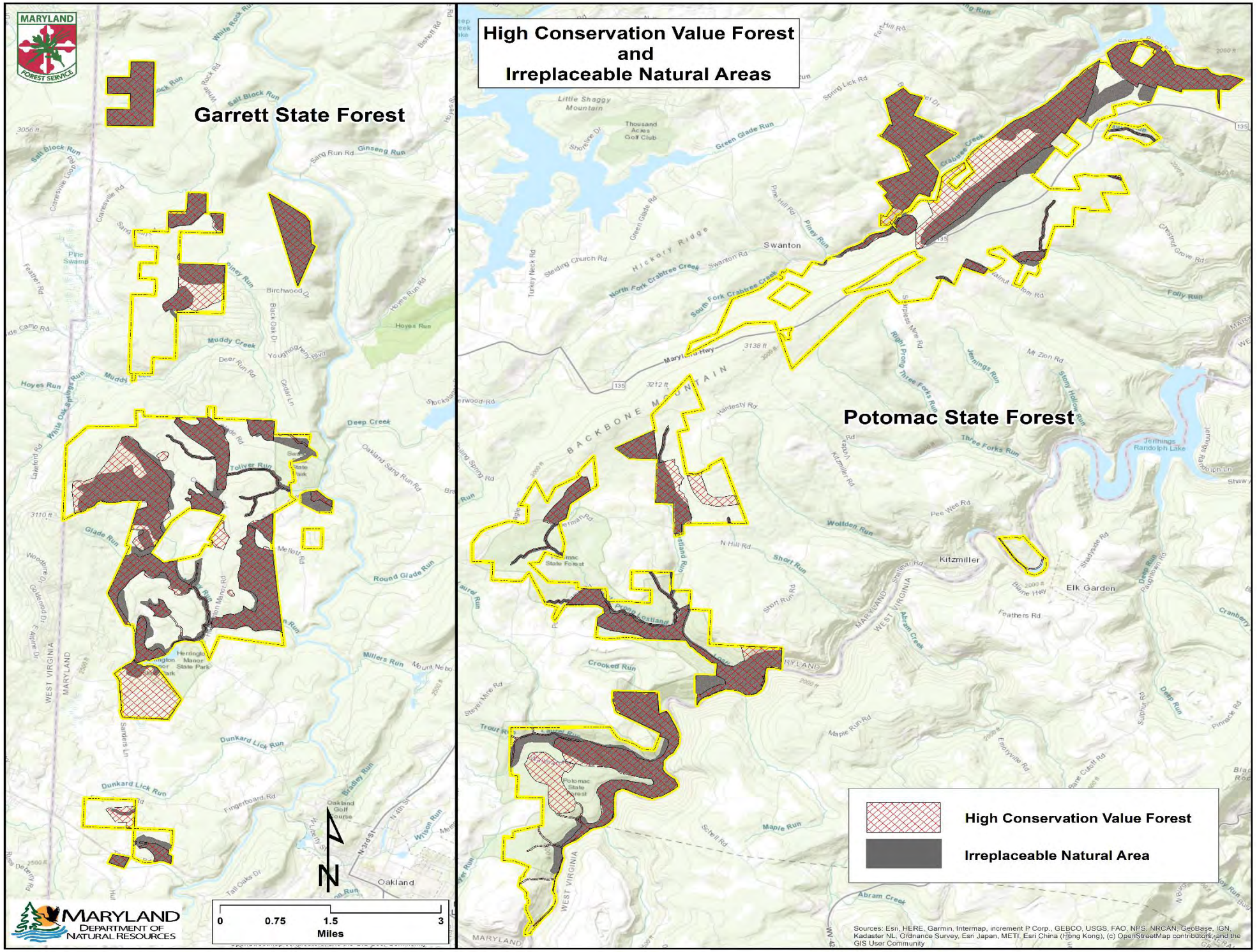


Figure 2. Designated High Conservation Value Forest and Irreplaceable Natural Areas

B. Forest Stand Delineation, Inventory and Monitoring

A critical part of developing long term sustainable management plans is the availability of up-to-date forest inventory data. Initial stand data collection has been completed on the harvestable areas of the forest using the SILVAH Inventory System developed by the US Forest Service which incorporates intense surveys of both the overstory and understory to assist in the formulation of appropriate silvicultural prescriptions in specific forest types. The demand for this important data set is increasingly evident as special projects evolving out of demands placed by Forest Certification Standards utilize this data set for project planning including the Annual Work Plan and the Non-Native Invasive Species Inventory. With the close of the fifth inventory season in 2016, the initial forest wide data collection has been completed on this stage of the forest monitoring program and processing of this data has been completed.

What had historically been carried out on a 10-year interval offering a snap shot in time view of the forest, has evolved into an annual sampling approach that gives a more frequent look at overall forest condition throughout the years. This approach will allow a much closer watch on developing forest conditions and allows for more rapid and timely responses. This approach is especially valuable in light of the numerous and frequent introductions of foreign insects, diseases, and invasive plants that can rapidly disrupt forest systems. The initial Stand Delineation and Inventory Project will be continued as a Forest Monitoring program as required under certification in order to allow for documented observations of changing conditions throughout the forest. Program focus will include: monitoring of developing regeneration sites allowing for the timely response to the investment in intensive silvicultural work such as herbicide control of invasive and interfering plants and prescribed fire; NNIS monitoring and control work; silvicultural results with respect to management objectives and outcomes and recreation/visitor impacts, etc.

V. Maintenance and Operations

Aside from the detailed cultural work planned for the State Forests, the following is a partial list of projects that are often on-going from year to year and are an integral part of State Forest operations: Routine maintenance projects include building repair and maintenance, vehicle maintenance, mowing at the office facility, snow removal, repair and replacement of fire rings and tables at the camp sites, brush hogging trails and repair of road surfaces.

A. Maintenance and Management of Roads and Trails

There are approximately 79.2 miles of trail and hardened road surface on the forest and approximately 1/3 of the mileage is maintained each year. Maintenance in these areas includes brush hogging, mowing, and rehabilitation of road surfaces. Herbicide usage has been integrated into the road maintenance regime in order to control growth in areas where mechanical control methods are not feasible (i.e., steep slopes, narrow paths, rocky areas). The use of herbicide along forest roadways can also reduce operational costs for the maintenance staff by controlling unwanted vegetation along these travel corridors for several years, when applied properly.

In FY-25 maintenance staff will concentrate on carrying out planned trail maintenance as outlined in the National Recreation Trail Grant (NRT) detailed in the Recreation Section of this plan. This will be carried out in addition to basic maintenance on the segments of multiple-use

and motorized-use trails that have been rehabilitated using National Recreation Trail Grants over the past 5 years, along with routine maintenance of the roads and trails as outlined in the road maintenance plan.

As a result of the State Forests Certification Audit, State Forest staff has developed a formalized transportation plan in which the entire transportation infrastructure has been inventoried and assessed for management, use and maintenance needs. From this assessment, the State Forest staff develops annual maintenance plans geared toward making the roads and trails system sustainable. Information gathered for this plan is presently being used to prioritize improvements to be made with the access trails grant referenced above, NRT Grant funds, Critical Maintenance Projects, etc. As work is contracted out, plans will be updated with regard to needs. All 79.2 miles of roads and trails have been classified based on desired use and condition. A detailed breakdown of the road management classification is available upon request at the Potomac-Garrett State Forest Headquarters.

B. Boundary Line Maintenance

Potomac-Garrett State Forest currently has 130 miles of boundary line, including interior lines, exterior lines and road frontage. Boundary maintenance is critical to the management of all public lands. In order to keep up with this effort, State Forest staff maintain approximately 30 miles of line each year. In addition to routine marking and painting, considerable effort is spent on researching, relocating, or establishing missing and/or new line, as well as addressing boundary conflicts. As conflicts arise, every effort is made to resolve the issue in a timely and professional manner. Often, this work leads to the need for a licensed surveyor and legal recourse in order to resolve the issue. With the assistance of Land Planning and Acquisition staff, all previously unpainted and/or missing boundary lines are to be reestablished until the entire forest boundary is demarcated.

C. Campground Operation and Maintenance

Potomac-Garrett State Forest offers year-round, primitive camping in five separate areas of the State Forest; Lostland Run, Laurel Run/Wallman, Snaggy Mountain and Piney Mountain. Within each area is a group site, a rustic trail shelter and several primitive campsites offering a picnic table, lantern post and fire ring. Vault toilets have been installed in each of the five areas to improve sanitary conditions for campers and forest visitors. Campsites and trail shelters are available on a first-come, first-served basis. A self-registration kiosk is available at the entrance to each area.

Major campsite maintenance coincides with major holidays, the end of winter and at the traditional end of the camping season in late summer/early fall. The campsites are also frequented during the white-tailed deer firearms seasons in the fall and winter, during spring turkey season in early spring and during the opening weekend of trout season in late winter/early spring. Maintenance and operation of these primitive campsites includes: managing group site reservations; maintenance of information / bulletin boards; camper contacts to insure policies are understood; self-registration fee collections and deposits; weekly site inspection and cleaning; hazardous tree evaluation and removals; grass mowing (typically the week before the summer holidays and otherwise as needed); maintenance and replacement of picnic tables, lantern posts, and fire rings; and site impact monitoring.

D. 3-D Archery Range Maintenance and Management

Potomac-Garrett State Forest offers the only 3-D Archery Range in Maryland's Public Lands System. Maintenance and operation of this facility includes: promotion of the facility; maintenance of information / bulletin boards; weekly inspection and cleaning; periodic maintenance and replacement of targets; hazardous tree evaluation and removals; brush removal as needed; site impact monitoring, annual overhaul and patching of targets; seasonal set up and take down for the off season.

The archery range, located behind the state forest headquarters, is open daily from April through mid-September from dawn to dusk and offers a 30-target course, with four separate skill levels at each target. Rules and regulations are posted at the range. Cost per round is $7.00 for adults, $5.00 for ages 12-16 and free for children under 11. An unlimited season pass can also be purchased for $35.00 per season.

E. Interpretation and Education

With limited staffing resources, interpretive efforts have been focused on Sustainable Forest Management Programs for targeted audiences using the interpretive features at the Kindness Demonstration Area located off Fingerboard Road in Compartments 43 and 44. Primary audiences have included leaders in the fields of agricultural and natural resources, extension service personnel, forestry board members, forest landowners and forest land managers. The facility is set up as a self-guided lesson in forestry and wildlife management practices and is available to groups and individuals wishing to learn more about sustainably managing forests. Silvicultural projects are ongoing, including a white oak timber stand improvement project being conducted by Appalachian Crossroads.

VI. Recreation

A. Recreation Opportunities (See Figures 3-5 pp. 13-15)

1. Hiking and Biking Trails

Potomac-Garrett State Forest has over 80 miles of trails open to hikers, mountain bikers and horseback riders of any ability. Not all trails are open to all recreational pursuits and it is recommended that before engaging in any activities patrons should visit or contact the state forest headquarters to become aware of any trail restrictions. A backpacking permit must be obtained at the forest headquarters or at any of the self-registration areas for overnight hiking trips. Trail guides featuring a topographic map and trail descriptions can be purchased at the forest headquarters.

2. Off Road Vehicles

A variety of off-road vehicle types, including side by sides, four wheelers, motorcycles, snowmobiles, 4 x 4s, etc. are permitted on trail sections that are blazed green. These areas include Snaggy Mountain Road, Burkholder Road, Piney Mountain Road, Laurel Run Road* and Wallman Road. Riders should consult ORV maps and regulations for each state forest. Riders are required to obtain an annual registration and current Department of Natural Resources ORV permit, available online at www.dnr.maryland.gov. **Laurel Run Road remains closed due to* unsafe *conditions following the collapse of the roadbed.*

3. Hunting

Hunting is permitted throughout the forest, except where posted with safety zone signs. The nearly 19,000 acres of Potomac-Garrett State Forest includes two state park areas (Herrington Manor and Swallow Falls) where hunting is prohibited. The forest boundaries are marked with yellow paint on trees - a yellow bar as you enter the forest and a yellow dot as you exit the forest. Hunting on or crossing private land within or near the state forest requires the written permission of the landowner. Parking is permitted along roadways providing traffic is not blocked. Hunters must have a valid Maryland hunting license and should refer to the current Maryland Guide to Hunting & Trapping for season dates and specific regulations.

Several access roads are opened every fall to accommodate hunters. These gated roads are opened prior to squirrel season in September and remain open through January 31. Opened roads can be used by all hunters and allow for vehicular traffic. Due to the nature of these roads, the use of four-wheel drive is recommended. Disabled hunter access roads are also available. Brochures are available with more details concerning the disabled hunter accessible roads and their locations.

Hunter Safety Classes, required for the purchase of a license, are taught periodically through the Department of Natural Resources. These classes are usually offered in the county at one of the local State Parks.

4. Trapping

Trapping is permitted both on land and in the water. A permit can be issued for trapping on Potomac-Garrett State Forest at the Regional DNR Wildlife Office in Flintstone. Trappers are required to obtain a certificate of trapper education from the Department of Natural Resources. Trapper education courses are held statewide. Refer to the current Hunting & Trapping Guide for complete regulations. A valid hunting license is required when applying for a trapping permit.

5. Fishing

Anglers with a Freshwater Fishing License have the opportunity to catch multiple species of fish in the Potomac River including smallmouth bass, rock bass and several trout species. As part of the DNR trout management program, early spring through fall stocking provides excellent fishing. A variety of opportunities for wild brook trout and stocked brown and rainbow trout exist in other designated areas, including Lostland Run and Laurel Run. When fishing, be prepared to negotiate strong currents, large boulders and fallen trees in the water. Fishing is also available at the nearby Jennings Randolph Lake, which is downstream on the Potomac River. A boat ramp is located on the Maryland side accessible from Mt. Zion Road off MD Route 135. For regulations, creel limits and special management areas consult the Maryland Freshwater Sportfishing Guide or contact the Western Maryland Fisheries Office at (301) 334-8218.

6. Bird Watching

Birders can see a wide variety of avian species, with six eBird hotspots found throughout the Forest as noted by the Maryland Ornithological Society (http://ebird.org/hotspots). Ruffed grouse, Blackburian warblers, Canada warblers, cerulean warblers and rose-breasted grosbeak are examples of choice birds that can be seen which only breed in the far western part of the state (Schwarz, 2022).

7. Winter Recreation

Cross-country skiers and snowshoers of all abilities can enjoy a winter wonderland across Potomac-Garrett State Forest. The red and blue trails on the South Snaggy Complex are recommended for a backcountry snowshoe experience. Snowshoers must be careful to walk beside and not on cross-country tracks as it disrupts them.

8. Geocaching

Currently, 14 goecaches are located throughout Potomac-Garrett State Forest for those interested in testing their navigational and tracking skills. All geocaches must be reviewed and approved by the staff before being placed anywhere in the forest. Applications and general rules for geocache placement are available at the state forest headquarters. The list of geocaches can be found online at: www.geocaching.com by searching "Find Caches Near Me" and entering zip code 21550.

9. Maps

Brochures and maps are available at the Potomac-Garrett State Forest Headquarters Office located at 1431 Potomac Camp Road, Oakland, Maryland 21550.

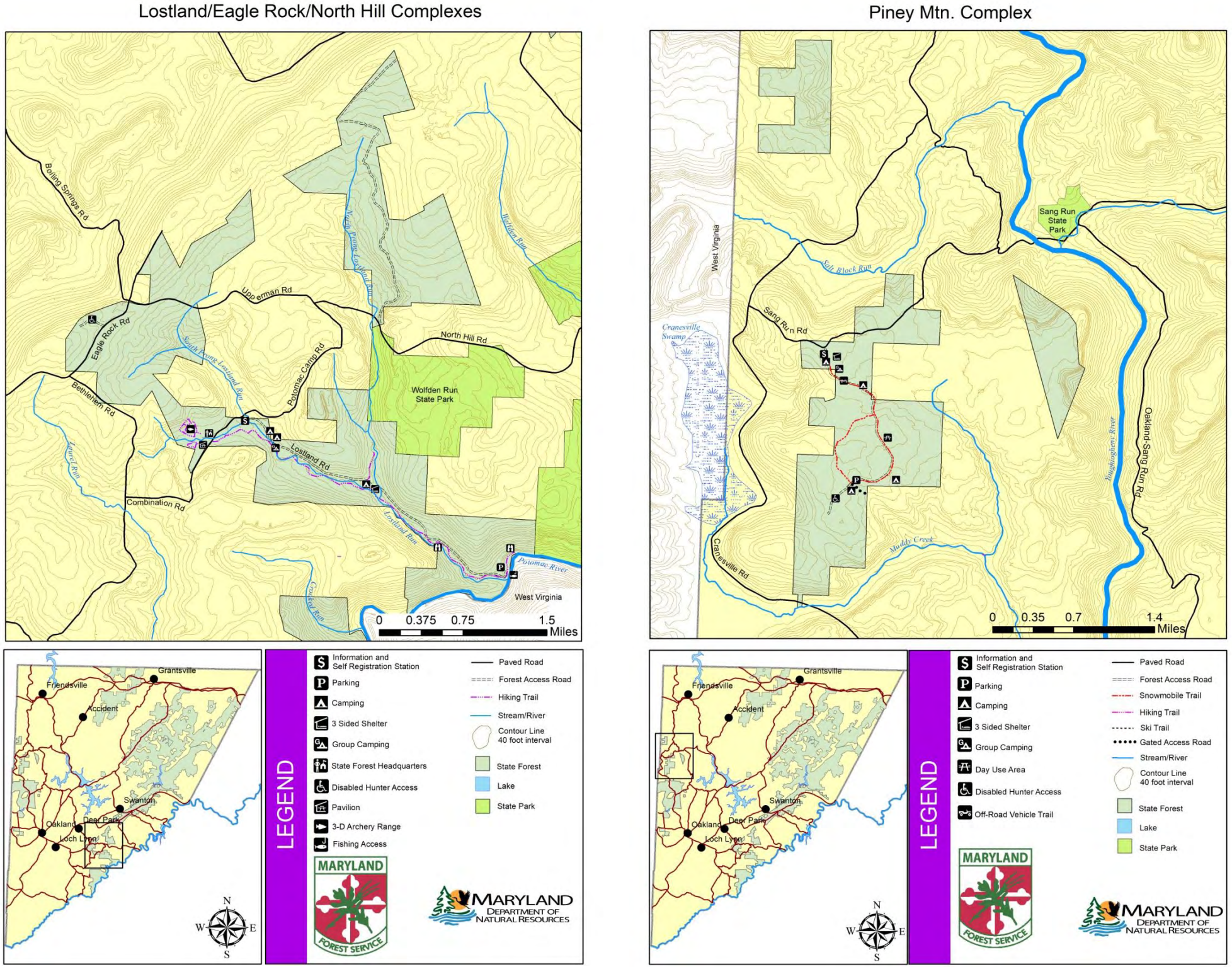
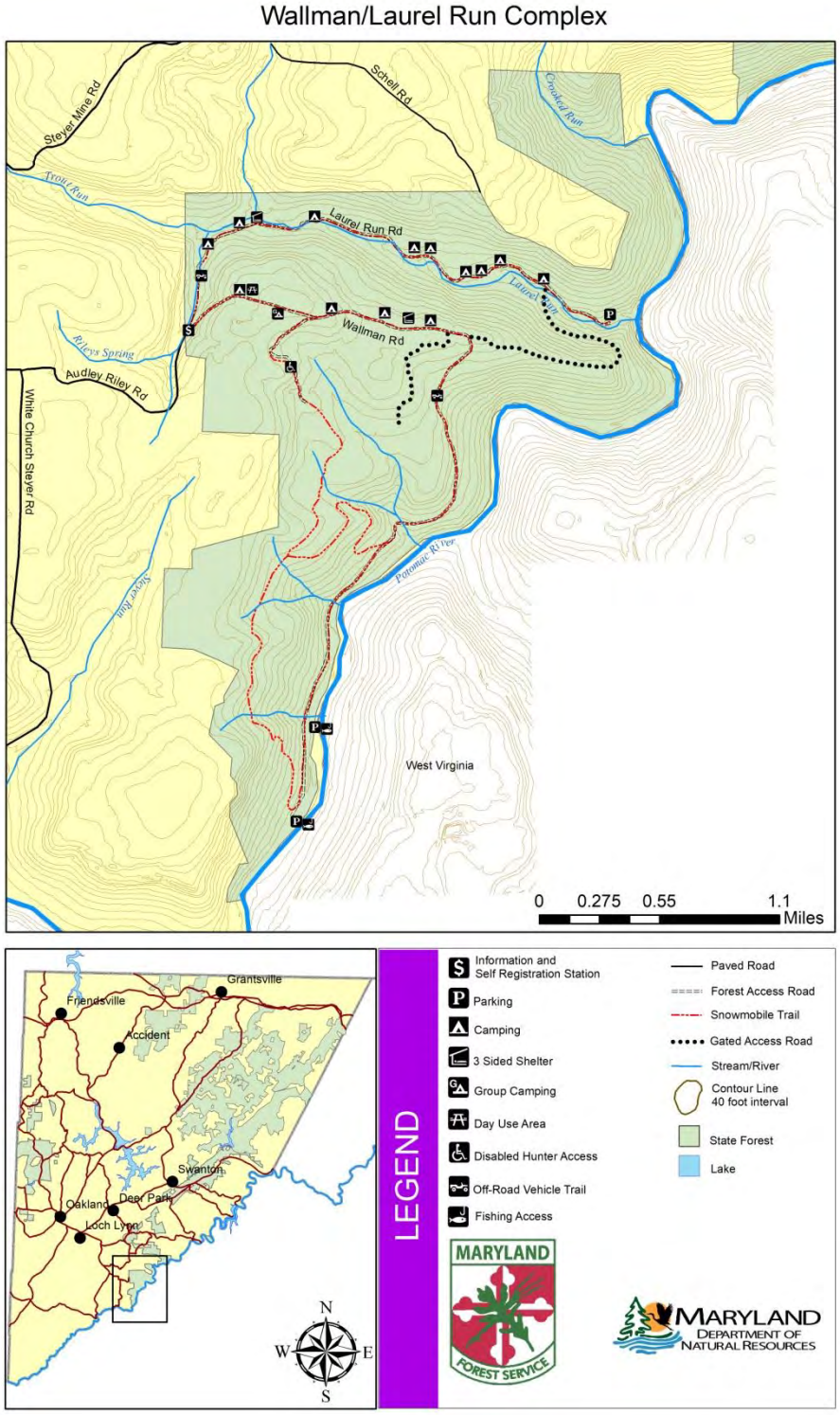


Figure 3. Recreational opportunities on Potomac-Garrett State Forest



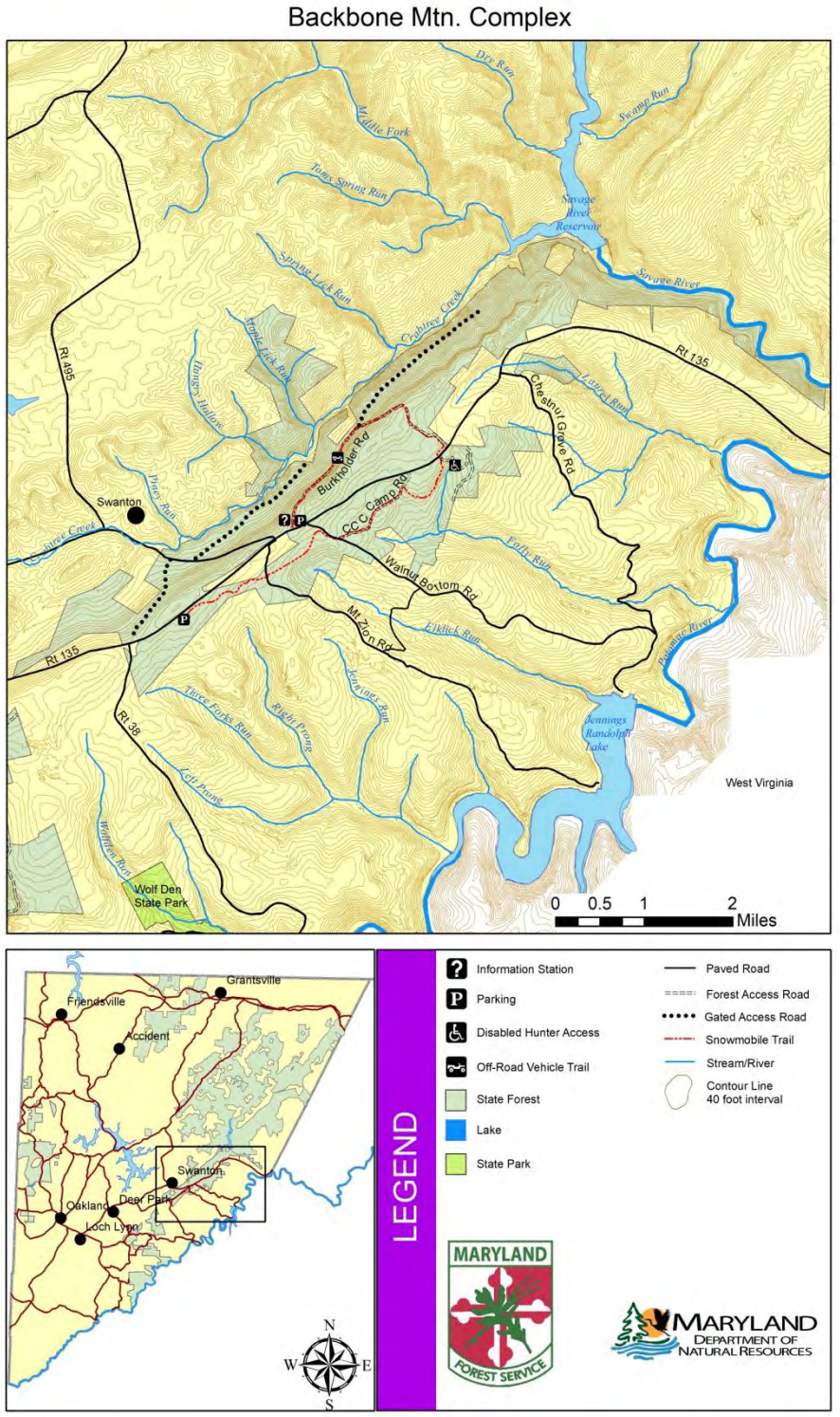


Figure 4. Recreational opportunities on Potomac-Garrett State Forest (cont)

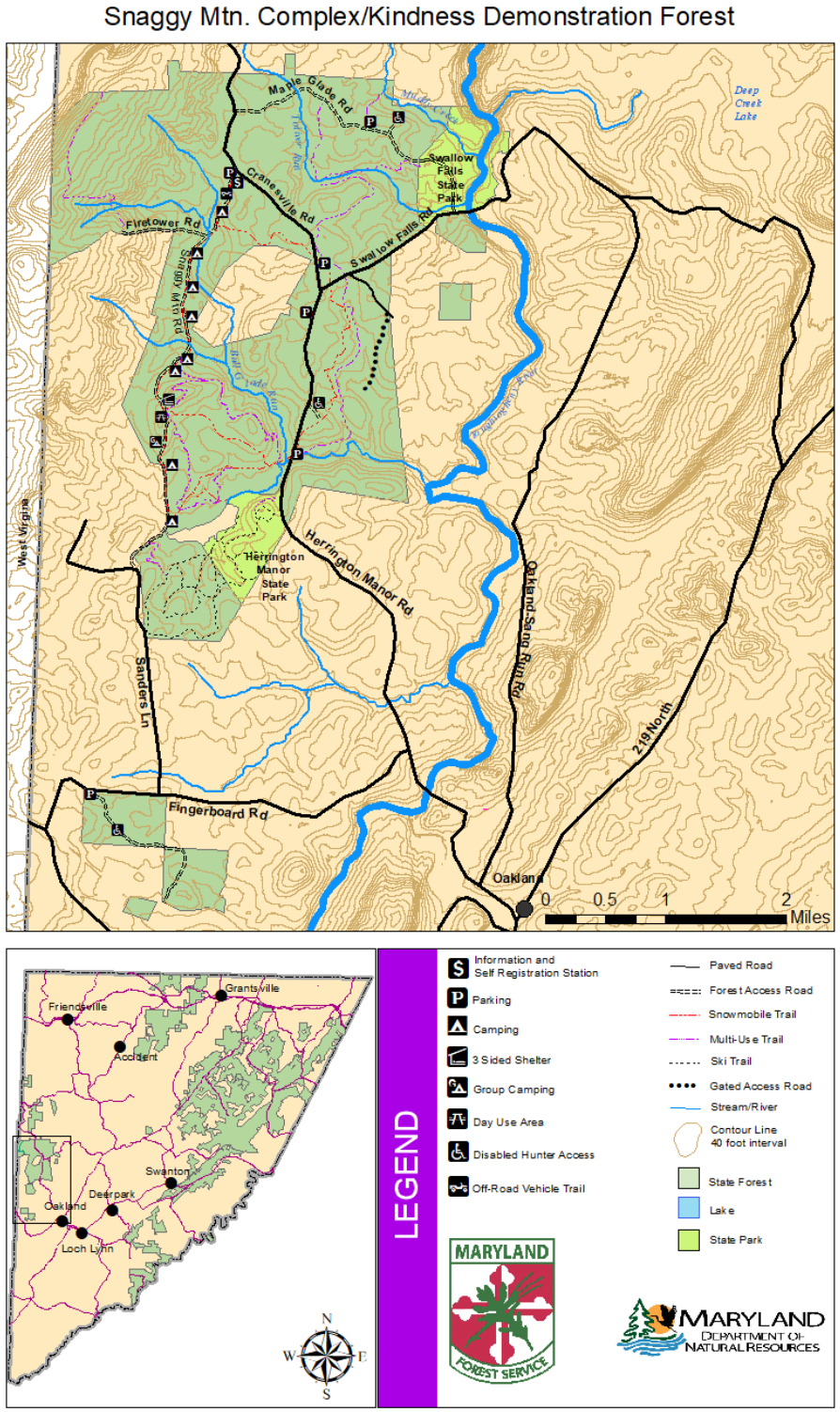


Figure 5. Recreational opportunities on Potomac-Garrett State Forest (continued)

B. Recreation Proposals

I. In the 2018 Legislative Session, SB 606 was passed, which established an Off-Highway Recreational Vehicle Fund that uses the excise titling tax on OHV purchases for the purpose of funding maintenance and construction of ORV trails on DNR owned lands. The Department receives monthly deposits that are split between the Forest Service and Park Service and the Comptroller is required to distribute 50% each year thereafter. The newly appointed position of the Western Region Trails Planner from the office of Forest Resource Planning now handles all appropriation of funds provided by the OHV excise tax fund, excluding requests for equipment, which is handled by each state forest as needs arise.

Funding requests for projects to be implemented on Potomac-Garrett State Forest include:

II. National Recreational Trail Grant Requests

Potomac-Garrett State Forest has submitted 2 National Recreation Trails Grant Request to fund enhancements to recreation trails on the forests. The Piney Mountain project was delayed due to an alignment change to the original scope of work to avoid a wetland area as well as the administration of the project being shifted from a third-party contractor to the Potomac-Garrett State Forest staff to expedite its implementation. Funding for the Snaggy Mountain Snowmobile Trail Rehabilitation Project was initially insufficient and further monies were required to secure the contractor services with assistance from Western Maryland Resource Conservation and Development.

1. Piney Mountain Snowmobile/ORV Trail Rehabilitation Project (RT 20-06) - $160,000.00 ($120,000 requested grant funds + $40,000.00 matching funds)

This project is an amendment to the RT20-06 grant (originally the Snaggy Mountain Snowmobile Rehabilitation Project) and will include maintenance on 1.75 miles of the Piney Mountain ORV/snowmobile trail, restoration and improvements to the trail bed surface and all associated drainage features to include grading and reshaping crown of the trail bed, opening/creating ditches and water diversions on 0.86 miles of snowmobile only trail, installing two (2) gates to curb illegal ORV activity and improvements to trailside amenities for six (6) primitive camp sites and one group site.

2. 5 ½ - Mile Trail Rehabilitation - (RT 20-14) $ TBD. The original funding request was drastically insufficient to adequately rehabilitate the trail to sustainable standards. New cost estimates are being compiled to determine proper funding

This project will replace 7 bridges, install 1 new bridge and rehabilitate degraded sections of the trail.

3. Western Region Non-motorized Trail Maintenance Grant - $192,704.99 (RT 23-16) ($140,000 requested grant funds + $38,704.99 matching funds + $14,000 management cost)

A trail maintenance specific grant has been awarded to the Maryland Forest Service through the Recreation Trail Program. These funds, administered by the Maryland Department of Transportation State Highways Administration, will be used to deploy a programmatic approach to non-motorized trail maintenance in the Western Region State Forests (Green Ridge, Savage River, Potomac Garrett).

The trail maintenance tasks will be accomplished by a 6-8 person AmeriCorps certified saw crew and/or a trail crew. We anticipate logging 1,280 – 1,600 labor hours in each State Forest and a total of 4,480 labor hours within the Western Region over the one-year term of this grant. No new trails will be constructed as part of this project. All of the work will be conducted on existing trails and on land owned and managed by the Maryland Department of Natural Resources.

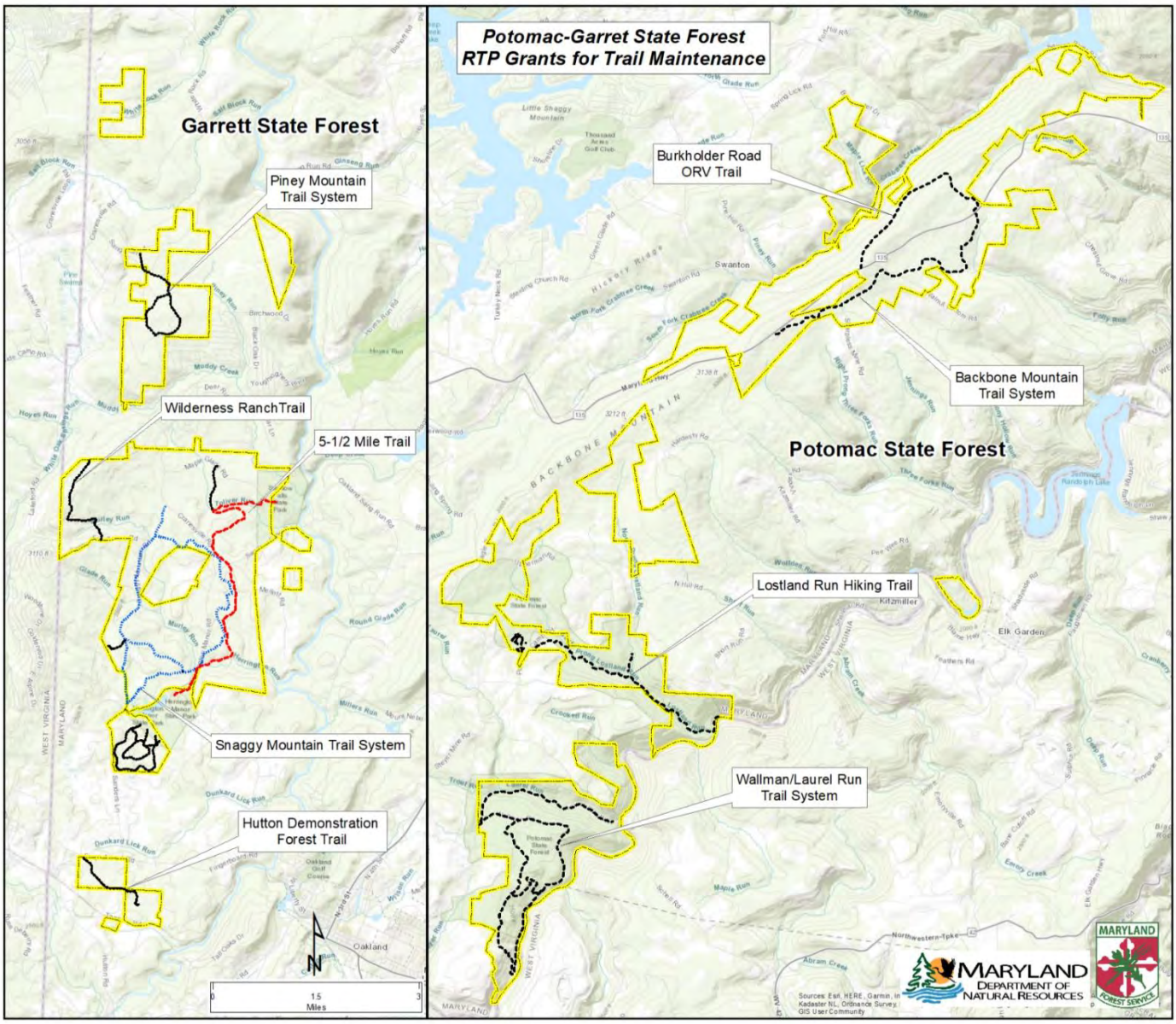


Figure 6. Potomac-Garrett State Forest Rec Trail Grant Maintenance

III. Disabled Hunter Hunting Opportunity Enhancement Project

This project involved building an elevated shooting platform and access ramp on the southern end of the maintained clover field in the Hutton Demonstration Forest, providing disabled hunters greater opportunities to successfully harvest game animals on the state forest. The project was funded through the state forest budget and all work was completed by state forest personnel. The 10 x 10 shelter was completed on August 25, 2023, prior to the opening of white-tailed deer archery season. Several hunters have taken advantage of the new amenity, but there have been no confirmed reports of a successful outing as of yet. This structure is the first of its kind on state forest lands and plans for similar structures are being developed for the remainder of the disabled hunter access roads throughout the forest.

Figure 7. Hutton/Kindness Demonstration Forest Disabled Hunter Enhanced Hunting Opportunity Project construction sequence.

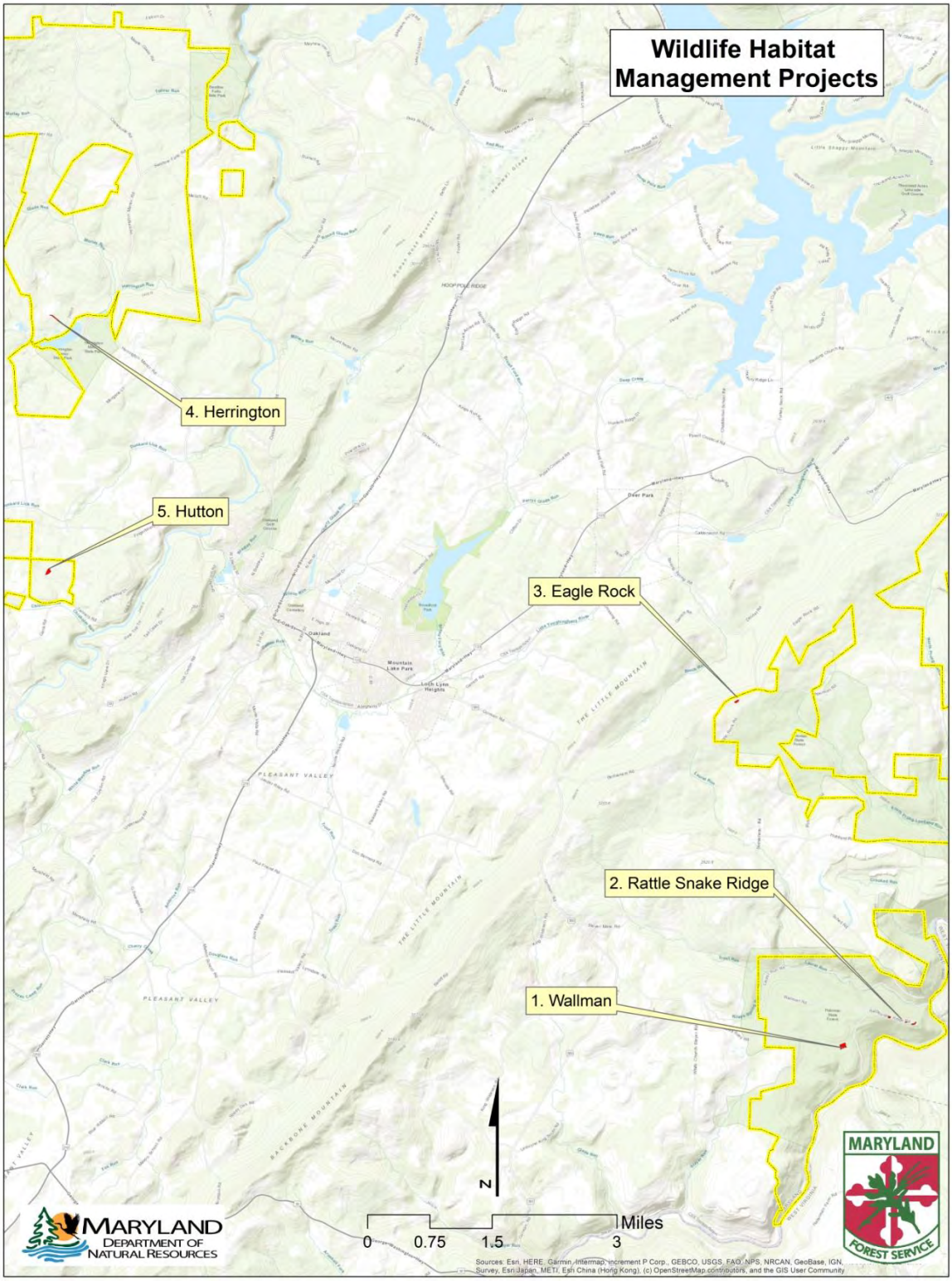
VII. Wildlife Habitat Management Projects

A. General Wildlife Habitat Maintenance

Approximately 7.6 acres of wildlife specific projects have been implemented throughout the state forest. These projects are located in the Wallman, Rattle Snake Ridge, Eagle Rock, Herrington Manor and Hutton areas. General practices include liming and fertilizing as well as planting of cover and grain crops, where appropriate. Plantings focused on overseeding with clover (See Wildlife Habitat Management Projects map and summary, p. 23).

With the recent designation of the monarch butterfly (*Danaus plexippus*) as an endangered species due to declining populations, efforts will be made to promote and preserve areas of various milkweeds (*Asclepias spp.*), which serves as the main food source for monarch caterpillars. All efforts will be made to retain milkweed populations along forest access roads during mowing season.

Figure 8. Potomac-Garrett State Forest Wildlife Habitat Projects. Clockwise: Monarch caterpillars on milkweed along Wallman Road, adult monarch on clover flower.



Area	*Species Planted*	*Acres*	*Fertilizer*
1. Wallman	*Clover mix*	*2.6*	*1200 lbs 10-20-20*
2. Rattle Snake Ridge	*Clover mix*	*1.1*	*N/A*
3. Eagle Rock	*Clover mix*	*.70*	*300 lbs 10-20-20*
4. Herrington	*Clover mix*	*1.4*	*4000 lbs lime*
5. Hutton	*Clover mix*	*1.2*	*500 lbs 10-20-20* *4000 lbs lime*

Figure 9. Potomac-Garrett State Forest Wildlife Habitat Management Projects

VIII. Ecosystem Restoration / Protection Projects

A. Non-Native Invasive Species (NNIS) Control

Across the State, a biological invasion of non-native and invasive plants is spreading into fields, forests, wetlands and waterways. Referred to in a variety of ways including exotic, non-native, alien or non-indigenous, invasive plants impact native plant and animal communities by displacing native vegetation and disrupting habitats as they become established and spread over time. Early Detection and Rapid Response (EDRR) to control the spread of problematic species is important for the conservation of native flora and fauna. Control efforts often require considerable resources including labor, time and money.

As in many cases, the introduction of these widespread and invasive plants cannot be prevented. It is important to evaluate and plan control efforts in order that such efforts contribute meaningfully to the success of forest conservation plans. EDRR efforts targeting NNIS discovered during the forest wide inventory have been successful in identifying and controlling a number of NNIS populations.

The State Forest staff has treated and/or is monitoring 40 plant colonies or sites including: 18 tree-of-heaven sites, 12 Japanese knotweed sites, 1 mile-a-minute weed site, 2 Japanese barberry sites, 1 Oriental bittersweet site, 1 wavyleaf basket grass site, 1 Chinese silver grass site, 2 Chinese wisteria sites, 1 wavyleaf basket grass site and 2 Japanese spirea sites (See corresponding map for locations). Three species of most concern are:

1. Tree-of-Heaven (*Ailanthus altissima*) Individual stems of the exotic invasive tree-of-heaven have been identified across large areas of the forest. Control measures including both mechanical and chemical have been implemented to remove this species from the limited areas in which it is present. These plant colonies are now part of our long-term monitoring program, with follow-up treatments planned as necessary in the interest of preventing these species from establishing themselves in the otherwise natural forest communities in which they were found.

2. Japanese knotweed (*Fallopia japonica*). Several areas of Potomac-Garrett State Forest have become infested with the invasive plant Japanese knotweed. Twelve treatment areas have been delineated and will be treated and monitored to determine the most effective course of action for suppressing and ultimately eradicating the plant from these areas of the forest. As more effective treatment methods become available for large areas, this area will be reevaluated in regard to implementing a control plan.

Treatments in all areas of the forest involve a two-step process that includes both mechanical and chemical means of control. First, the knotweed is cut and allowed to grow back for 8 weeks, reaching only 2 to 4 feet in height. Second, the new growth is treated with a 2% solution of glyphosate as the active ingredient. Treatment of these areas has been repeated on a yearly basis and will continue until the plant has been eradicated from the target areas.

3. Mile-a-Minute Weed (*Persicaria perfoliata*). Several patches of mile-a-minute weed, another aggressive non-native invasive, have been discovered throughout the forest. Monitoring of the areas will continue, and the sites will be treated as necessary and where feasible to eradicate this plant from the site and prevent it from spreading into the adjacent forest.

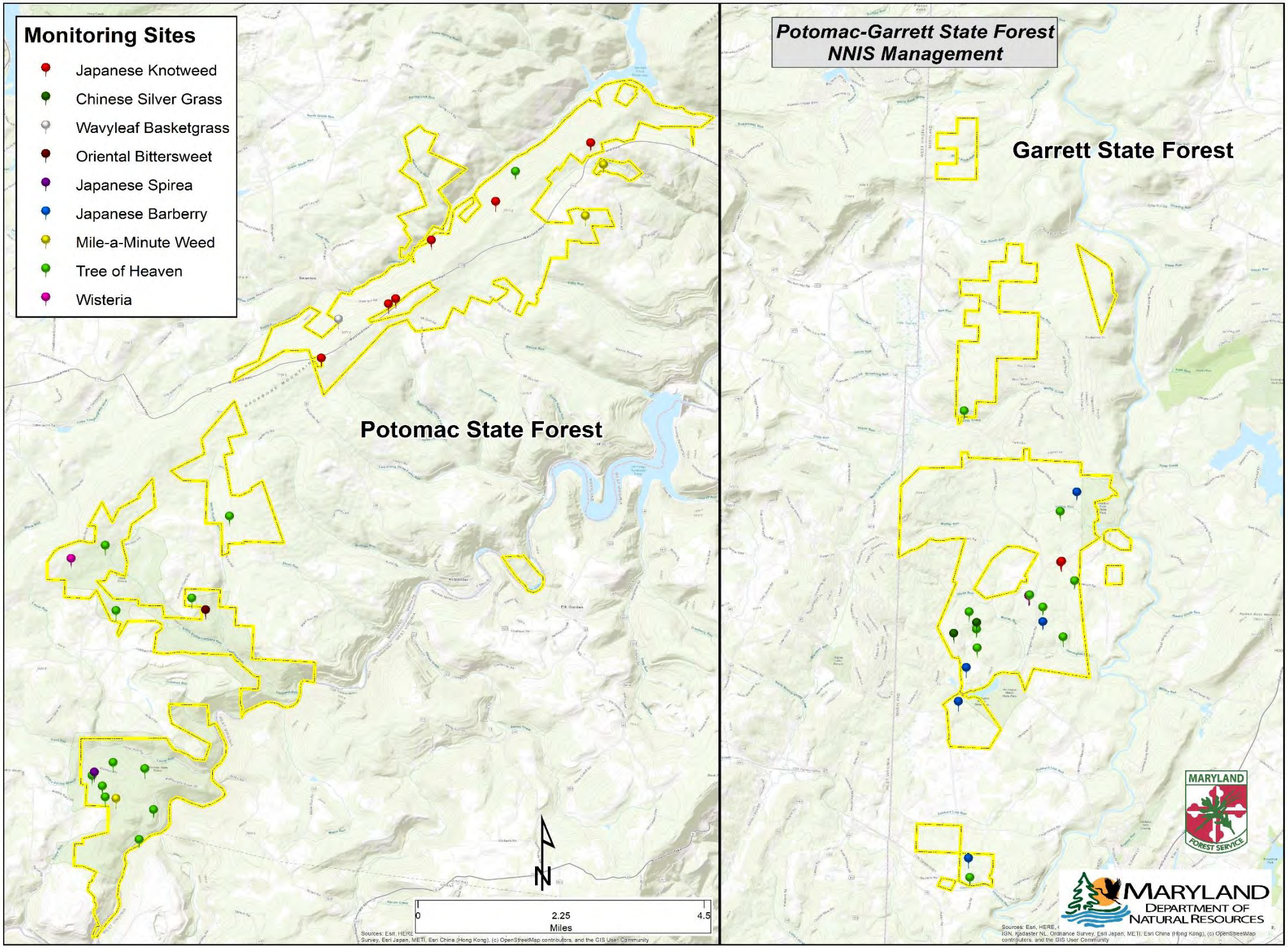


Figure 10. Potomac-Garrett State Forest NNIS Monitoring Sites.

IX. Monitoring and Research Projects

A. Monitoring

1. Silvicultural Activities

All silvicultural operations taking place on Potomac-Garrett State Forest will be monitored on a weekly basis and more frequently when adverse weather conditions arise to ensure that all Best Management Practices are being followed. Regeneration harvests will be monitored five and ten years after harvest. Non-native invasive species will be monitored yearly and herbicide treatment regimens will be implemented as necessary to eradicate these species from the forest ecosystem. Management documents outlining specific treatments and monitoring schedules have been drafted for the individual species.

B. Research Projects *(Full write-ups of each project are available at the State Forest Office)*

1. *Emerald Ash Borer Biological Control Monitoring. University of Maryland, College Park (Gruner, 2021). Project to extend through April 2024.*

Project Description:
The purpose of this document is to seek permissions for research efforts to reduce emerald ash borer densities in state owned lands and urban forests using sustainable methods. Emerald ash borer (*Coleoptera: Buprestidae: Agrilus planipennis* Fairmare) has killed millions of ash trees in urban and natural forests resulting in over $25 billion in loss, in addition to the ecological and environmental impacts resulting from EAB. Our project will assess the efficacy of biological control agents on populations of emerald ash borer in several state and federally managed parks in Maryland.
This project will help identify the impacts of EAB on ash health and survival at several stages of infestation as well as assess the efficacy of introduced parasitic wasps (four species of parasitic *Hymenoptera*).

This request would extend the project through April of 2024. It would include several sampling periods throughout the year depending on the specific objective. A portion of sites were used as a release site for biological control in the years between 2009 and 2013. Parasitoid releases were conducted by a former UMD PhD student, Dave Jennings, who maintained detailed records of the numbers and specific localities for release. Other sites have been monitored for establishment of biological control from 2016-present. Biological control will also be released at new sites by Heather Disque and Craig Kuhn (MDA) to phase out older, less productive sites currently being monitored.

To assess efficacy of the biological control agents, we will 1) assess ash health and survival, 2) assess the establishment of parasitoids and their impact on EAB population and ash survival, 3) monitor for adult EAB densities, 4) begin periodic releases of biological control agents at newly created sites.

To achieve this, we propose to 1) perform ash health surveys (crown condition, dbh, signs of infestation) and transect surveys, 2) debark four (4) infested ash trees (~10cm DBH) and ten (10)

ash saplings (<5cm DBH), deploy yellow sticky cards to monitor for adult parasitoid activity, and deploy "sentinel logs" or bolts of ash wood with EAB larvae inserted within to detect parasitism events at set locations, and finally deploying "sentinel eggs" or EAB eggs inside mesh netting to detect active egg parasitoids, 3) install Lindgren funnel traps, and 4) release biological control agents at each site.

Ash health surveys and transect surveys will occur during summer months while vegetation is visible. Transect surveys will be randomly assigned in lengths of over 100m branching out from the initial release site. Assessment of the establishment, density, and impact of hymenopteran parasitoids on EAB requires felling of ash trees during the winter or early spring. The bark of ash trees is then stripped with draw knives to reveal larvae, prepupae, and their larval parasitoids. The fate of each EAB larvae is then determined (i.e. parasitized, diseased, alive). Sentinel eggs and logs will be deployed to measure parasitoid dispersal at several locations at each site; these sentinel logs and eggs do not allow EAB to escape and infest trees at the site. In addition, yellow sticky cards will be hung from infested ash trees and collected on a weekly basis to detect adult parasitoids in the environment. To monitor for adult EAB populations, several Lindgren funnel traps will be installed in tree canopies and checked periodically during summer months. Parasitoid releases will be coordinated via Heather Disque (MDA) and tracked via the national EAB biological control database, MapBiocontrol.

General Site Conditions:
Site conditions will vary site by site, for each tree, and throughout the study period. Sites in southern Maryland generally consist of swampland close to highways or residential areas. Sites in western Maryland consist of mountainous terrain accessed via local roads. During these sampling periods the sites will be accessed from the nearest paved area on foot. Most trees are reached by vehicles to the closest paved area, followed by access by foot on trails. Visitation and any destructive sampling (i.e., debarking) are coordinated in consultation with park management.

Project Considerations:
This project is in coordination with MDA (Heather Disque/Craig Kuhn), USDA: ARS (Dr. Jian Duan), and the University of Maryland (Dr. Gruner). Most surveys are time sensitive because of insect phenology and life cycle. This project will require destructive sampling of four (4) ash trees and ten (10) ash saplings, in consultation with the managers of each State Forest and State Park.

2. *Statewide Wood Turtle Population Assessment and Management. Maryland Wildlife Service and Natural Heritage Program in partnership with the Susquehannock Wildlife Society and the Mid-Atlantic Center for Herpetology and Conservation. Project #2021DNR326. (Smith, 2021). This is a continuation of the original project that was started in 2021.*

Project Description:
1) Conduct standardized visual encounter surveys in streams and along stream banks and use mark-recapture techniques to estimate population (DNA will be collected from a sample of turtles in priority populations and turtles will be pit-tagged in an effort to aid in law enforcement

efforts related to confiscations from illegal collecting activities and refine regional genetic unit assignments). eDNA will be sampled from streams at 30 sites statewide.
2) Identify nesting habitat and, if needed, conduct management to enhance nesting opportunities (this will mostly involve invasive vegetation management but could also include installing predator excluders and/or nesting substrate manipulation).

3) Work with willing Land Unit Managers to establish BMPs for field mowing and roadway management in order to reduce roadkill.
Surveys will be conducted in a variety of small to large streams and rivers across DNR land units in Western and Central Maryland. Management will occur primarily along stream banks and adjacent upland areas.

The MPS has completed the review of the above referenced project. This project has been reviewed by the Maryland Department of Natural Resources (DNR) and a team of multi-disciplined resource experts, and may proceed with the following conditions:

1) Coordination Required:
All work shall be coordinated with the DNR Land Unit Managers. The names and contact information of the Land Unit Managers are attached. No waste should be left behind onsite following work and best care is always to be practiced to avoid the spread of potential pests, diseases, and invasive species. If applicable, any flagging associated with this project shall be removed when work ends. Please take any and all precautionary measures to ensure the protection of sensitive species and habitats, both flora and fauna, where applicable, and minimize impacts to visitors, where appropriate. All applicable federal, state, and local laws must be followed and permits acquired, where required. Copies shall be provided to the Land Unit Managers, where applicable. Please share the findings with us.

2) Project Parameters:
Standardized population surveys require 3 surveys per season (spring and/or fall) for a maximum of 6 surveys. Each survey is of a 1 km. stream reach, attempting to complete the 1 km. survey in 1-hour of active searching. Turtles will be measured, marked, and released back at point-of-capture immediately. eDNA will be collected at the beginning of each survey at the 30 sites chosen statewide – 3 water samples per survey. Staff from SWS (primarily Scott McDaniel and Brian Durkin) and from MACHAC (Lori Erb) will be conducting most of the Central Region surveys while DNR-NHP staff will be focused on the Western Region surveys. SWS and MACHAC will have DNR issued Scientific Collection Permits. Individual DNR land unit staff will be offered the opportunity to participate in surveys and report wood turtle sightings.

3) DNR-Fisheries Requirements:
Fisheries supports approval of this project with the following conditions:
a. Field staff conducting the surveys should take precautions to avoid disturbances to spawning trout and trout redds. In-stream activities should be conducted with as few staff as possible and should be specific to turtle habitat.
b. Appropriate decontamination protocols should be practiced to prevent the spread of nuisance species and pathogens.

4) Special Conditions for Woodmont NRMA:
Parts of Woodmont NRMA have limited access through a lease agreement with the Woodmont Chapter of the Izaak Walton League, Inc. These areas will be unavailable October - March.

3. *Emerald Ash Borer (EAB) Management. Maryland Department of Agriculture, Pest Management. Project #2024DNR033. (Hackett, 2023).*

Project Description:
The Maryland Department of Agriculture, Forest Pest Management Program (MDA FPM) conducts extensive yearly detection and monitoring surveys for damaging forest pests across the state of Maryland. MDA FPM also conducts treatments for some of these pests including spongy moth, hemlock woolly adelgid, and emerald ash borer. In addition to pesticide treatments, MDA FPM participates in biocontrol projects aimed at controlling forest pests such as the hemlock woolly adelgid and the emerald ash borer.

This project aims to continue to survey, treat, and sample identified priority Ash trees threatened by Emerald Ash Borer (EAB). Several methods of treatment will be used, with the primary method being trunk treatment with injections of emamectin benzoate by MDA FPM staff and/or trained Maryland Conservation Crew members who are overseen by Certified Pesticide Applicators from the Maryland Department of Agriculture. Other methods of treatment include the release of USDA approved biological control agents (*Tetrachicus planipennisi*, *Spathius galinae*, *Oobius agrili*, and *Spathius agrili*).

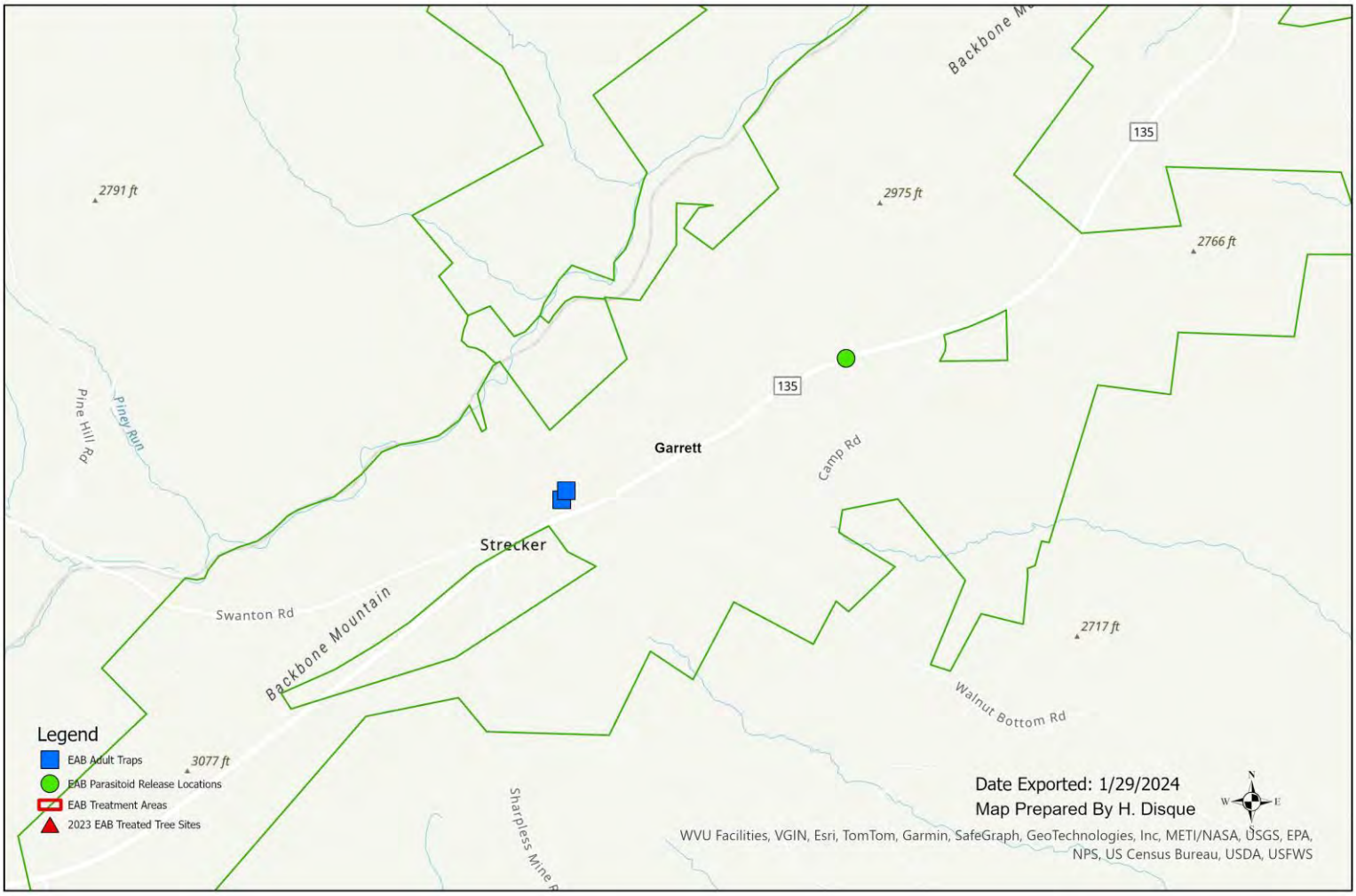
Other activities related to this effort include visual surveys, passive trapping, and destructive sampling as necessary to determine and confirm the presence of EAB and biological control agents in DNR land units. Sentinel traps are used to determine parasitoid presence and are not a form of treatment, but data from these traps is the bedrock of an effective statewide integrated pest management program. All sites will be accessed by foot from the nearest vehicular surface and ongoing tracking will occur in future years to determine continued treatments.

In general, access to vast tracts of state-owned properties allows MDA FPM to both cast a wider net when searching for this damaging pest species, and to focus on high-risk, high value invasion areas (such as state parks with large campgrounds). Rapid access to these properties improves the response time of MDA FPM to a burgeoning invasion, and early detection allows FPM and MPS land managers to perform more targeted, more effective responses to rising or invading pest populations.

General Site Conditions:
MDA FPM conducts surveys and treatments across the state of Maryland's many diverse ecosystems and habitat types. Treatments for EAB will be at high priority sites such as state parks, as well as other wild land areas to preserve a seedbank for rare ash species, possibly on state forest lands. The 25 DNR lands involved include Potomac State Forest; Big Run State Park; Casselman River Bridge State Park; South Mountain State Park; Washington Monument State Park; Greenbrier State Park; Gambrill State Park; Cunningham Falls State Park; Seneca Creek State Park; Patapsco Valley State Park; Gunpowder Falls State Park; North Point State Park; Susquehanna State Park; Elk Neck State Park; Fair Hill Natural Resource Management Area;

Tuckahoe State Park Complex; Sandy Point State Park; Merkle Natural Resource Management Area-Wildlife Sanctuary; Martinak State Park; Janes Island State Park; Pocomoke River State Forest; Idyllwild Wildlife Management Area; Nanticoke Wildlife Management Area; Chesapeake Forest Lands; Old Bohemia Wildlife Management Area; Millington Wildlife Management Area. Project Considerations: This project is part of an interagency agreement between the Maryland Department of Agriculture Forest Pest Management section and the Maryland Park Service and Maryland Forest Service. An MIUA was first signed in 2016 and the project has continued to this day.

Maryland Department of Agriculture
Potomac State Forest Emerald Ash Borer Activities
Forest Pest Management Section



4. *Hemlock Woolly Adelgid Treatment and Suppression Plan. Maryland Department of Agriculture, Forest Pest Management. Project #2024DNR042. (Hackett, 2023).*

Project Description:
The purpose of this large-scale project, spanning multiple land units owned and managed by DNR, is to slow or control the damage to Maryland's eastern hemlock forests predominantly by an invasive insect called the hemlock woolly adelgid (*Adelges tsugae*). Treatment options are described in the 2024 Maryland Hemlock Conservation Plan. This review would constitute approval for the next three years from 2024 to 2027, whereby MDA Forest Pest Management will respond quickly when new infestations are found, or new treatment options are appropriate.

General Site Conditions:
Sites include the following DNR Land Units: Big Run SP; Cunningham Falls SP; Deep Creek Lake HCF; Deep Creek Lake SP; Fair Hill NRMA; Fort Frederick SP; Garrett SF; Green Ridge SF; Gunpowder Falls SP; Herrington Manor SP; Monocacy NRMA; New Germany SP; Patapsco Valley SP; Patuxent River SP; Potomac SF; Rocks SP; Rocky Gap SP; Savage River SF; Seneca Creek SP; Sideling Hill WMA; South Mountain SP; Swallow Falls SP; Youghiogheny NEA; Wye Island NRMA. Counties include the following: Allegany; Baltimore; Carroll, Cecil; Frederick; Garrett; Harford; Howard; Montgomery; Queen Anne's; Talbot; Washington.

Project Considerations:
This project is part of an interagency agreement between the Maryland Department of Agriculture Forest Pest Management section and the Maryland Department of Natural Resources. The Hemlock Woolly Adelgid Treatments and Suppression Plan was first developed in 2004 in coordination between the Maryland Department of Agriculture Forest Pest Management section, the Maryland Park Service, Maryland Forest Service, Maryland Fisheries Service, Maryland Wildlife and Heritage Service and the US Forest Service. It was revised in 2010 and 2015, whereby the project was reviewed statewide with no objections and approved by DNR and MDA.

This Minimal Impact Use Agreement (MIUA) is for all affected DNR Land Units which includes the following the DNR lands: Big Run SP; Cunningham Falls SP; Deep Creek Lake SP; Fair Hill NRMA; Fort Frederick SP; Green Ridge SF; Gunpowder Falls SP; New Germany SP; Patuxent River SP; Potomac SF; Rocks SP; Rocky Gap SP; Savage River SF; Sideling Hill WMA; South Mountain SP; Swallow Falls SP; and Wye Island NRMA. A new MIUA for all affected land units would be required following this internal review for 2028 and beyond.

X. Silvicultural Proposals

COMPARTMENT 25 – Stand 26 **FY-25**
(PG-25-S-1)

Description/Resource Impact Assessment

Location: This silvicultural proposal is located off Wallman Road approximately 1.4 miles east of the intersection with Laurel Run Road.

Forest Community Type and Condition: This site contains a large Allegheny hardwood pole stand that is approximately 47 years old, with an average diameter of 10.8 inches. The overstory consists of black cherry (55%), red maple (28%) and northern red oak (10%). The stand is overstocked with a relative density of 95% and an average basal area of 145 ft^2/acre.

Interfering Elements: Given the overstocked conditions typical in a young pole stand, the understory is relatively open, with little herbaceous interference present. Competition amongst the poles is the main growth limiting factor within the stand.

Historic Conditions: This two-acre stand is the result of a conifer clear cut harvest that was conducted in the late 1970's, allowing native hardwood species to repopulate the site.

Rare, Threatened and Endangered Species: No rare, threatened, or endangered species have been identified on the site that would be impacted by the silvicultural prescription.

Habitats and Species of Management Concern: No habitats or species of management concern will be affected by the silvicultural prescription recommended for this stand.

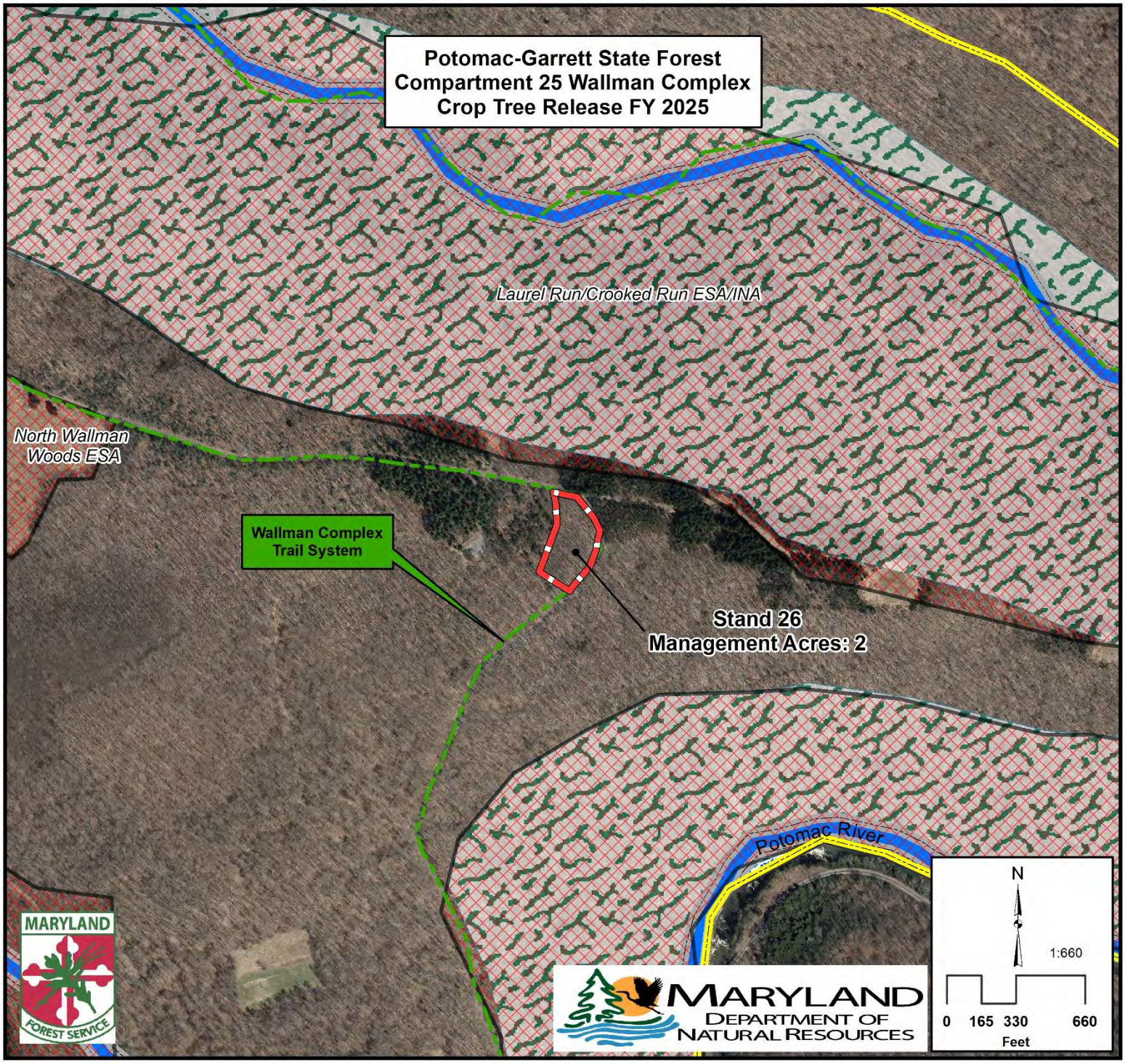
Water Resources: This stands drain south into the Potomac River drainage system. The proposed silvicultural treatments will be outside of all stream buffer areas. No heavy equipment will be permitted within the protective riparian buffers of any streams or associated wetlands per the requirements set forth in the State Forests Sustainable Forest Management Plan.

Soil Resources: Underlying soil type is mapped as Gilpin channery silt loam, 0 to 10 percent slopes (GnB2). These soils are moderately deep and well drained. Equipment limitations range from slight to moderate with increasing slopes. The site has excellent productivity for woodland management, with a site index of 75-85 for upland oaks. The productivity of the site will be protected by minimizing the haul roads and skid trails as per the Department's Best Management Practices and rutting guidelines.

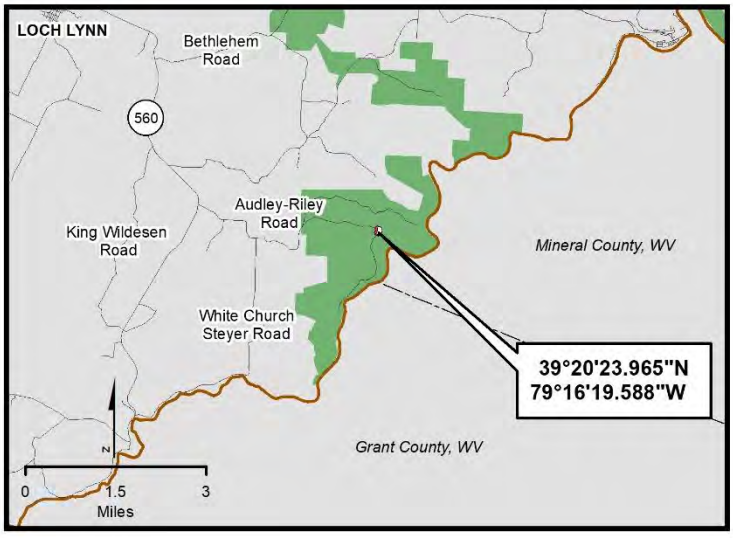
Recreational Resources: The management unit is adjacent to the Wallman Road, which serves as access throughout the Wallman Complex, as well as a designated ORV Trail. All silvicultural work in this stand will be conducted by state forest personnel and no felled material will be removed from the site, minimizing any disruptions on the roadway. Timing of management activities will fall outside of established hunting seasons and all efforts will be made to reduce any disruptions to recreational activities.

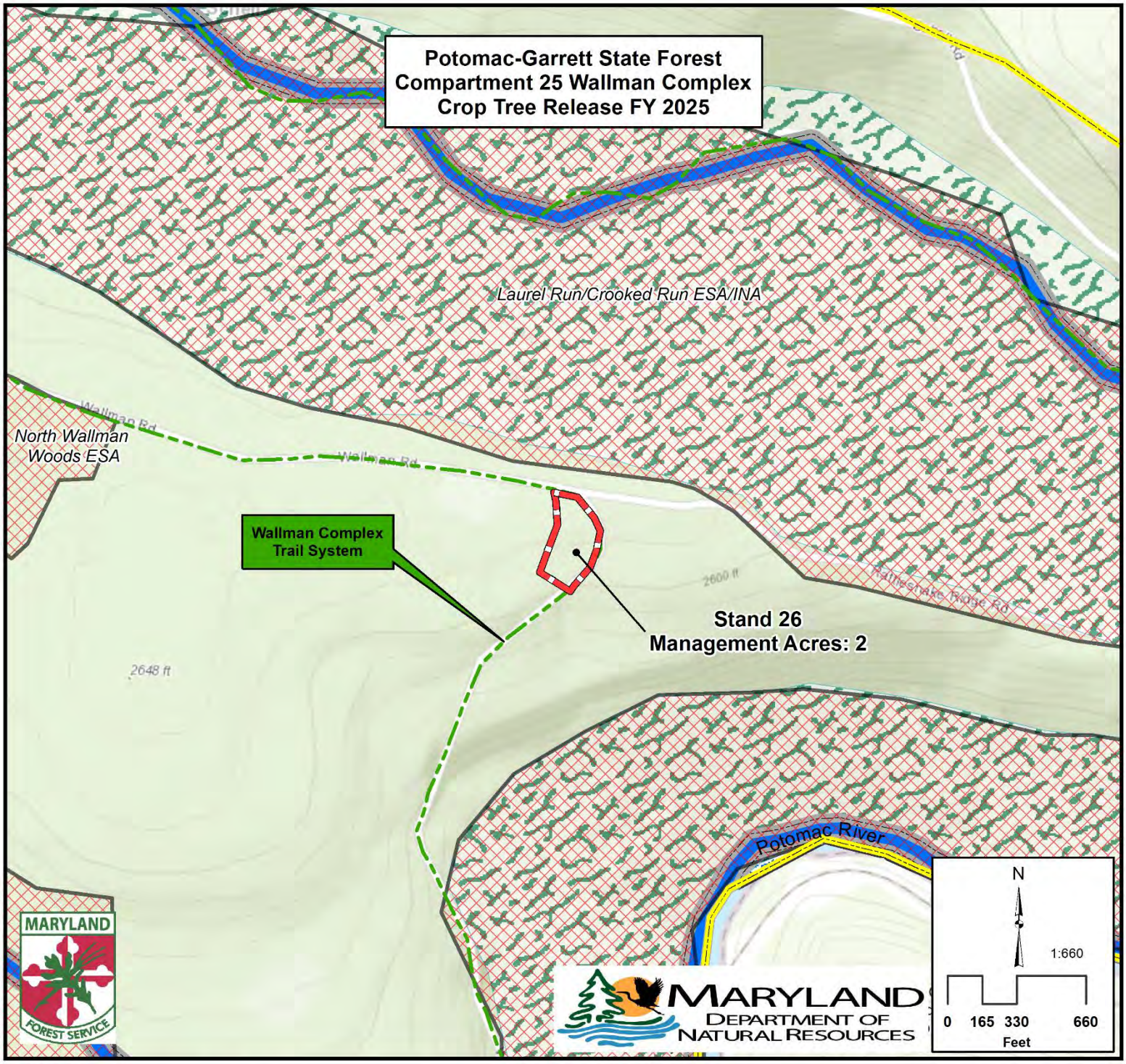
Management and Silvicultural Recommendations

The proposed treatment of this stand is to conduct a non-commercial timber stand improvement practice in the form of a crop tree release. Approximately 15 dominant and/or codominant trees/acre will be selected as future crop trees, and crown competition will be removed from all sides. Emphasis will be given to oak species and other mast producers found in the stand. With the composition of the stand, most of the crop trees will be black cherry. All cut trees will remain on site to decay back into soil and tops will be used to construct brush piles to provide wildlife habitat throughout the stand. This practice will expedite the development of the crop trees by stimulating growth and vigor. Given the relatively small size of this project, all work will be completed by state forest personnel.

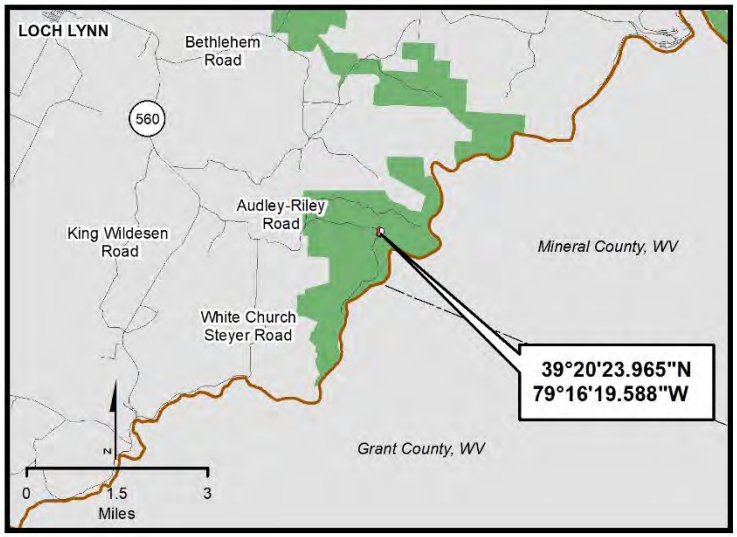


- Ecologically Significant Area
- Irreplaceable Natural Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland with 50' Buffer
- Wildlands
- Streams and 50' Buffers





- Ecologically Significant Area
- Irreplaceable Natural Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland with 50' Buffer
- Wildlands
- Streams and 50' Buffers



COMPARTMENTS 45 / 46– Stands 2 / 10 **FY-25**
(PG-25-S-2)

Description/Resource Impact Assessment

Location: This 31-acre silvicultural proposal is in the Piney Mountain Complex located on the west side of Piney Mountain Road approximately 0.8 miles south of the intersection with Sang Run Road.

Forest Community Type and Condition: This management unit is composed of a small sawtimber red maple/mixed oak stand (23 acres) and a large poletimber transition stand (8 acres). The composition of the stands is similar, consisting of red maple (50%), northern red oak (42%) and chestnut oak (3%). The average relative density of the stands of 88% with an average basal area of 123 ft^2 /acre and an average merchantable diameter of 12.0".

Interfering Elements: Overall interfering understory competition was found on 100% of the stand. Tall woody interference occupies approximately 73% of the site, dominated by black birch and striped maple. Low woody interference is found on 13% of the site. No Non-Native Invasive Species were recorded within the management unit.

Historic Conditions: These stands were thinned in 2000 and foliar herbicide applications to control undesirable understory vegetation were conducted in 2018. Neither evidence of fire nor any signs of significant insect infestations were observed during the inventory of the stand.

Rare, Threatened and Endangered Species: No rare, threatened, or endangered species have been identified on the site that would be impacted by the silvicultural prescription.

Habitats and Species of Management Concern: No habitats or species of management concern will be affected by the silvicultural prescription recommended for this stand.

Water Resources: This management unit drains east into Piney Run, within the Youghiogheny River Watershed. The proposed silvicultural treatments will be outside of all HCVF and stream buffer areas. No heavy equipment will be permitted within the protective riparian buffers of any streams or associated wetlands per the requirements set forth in the State Forest Sustainable Forest Management Plan.

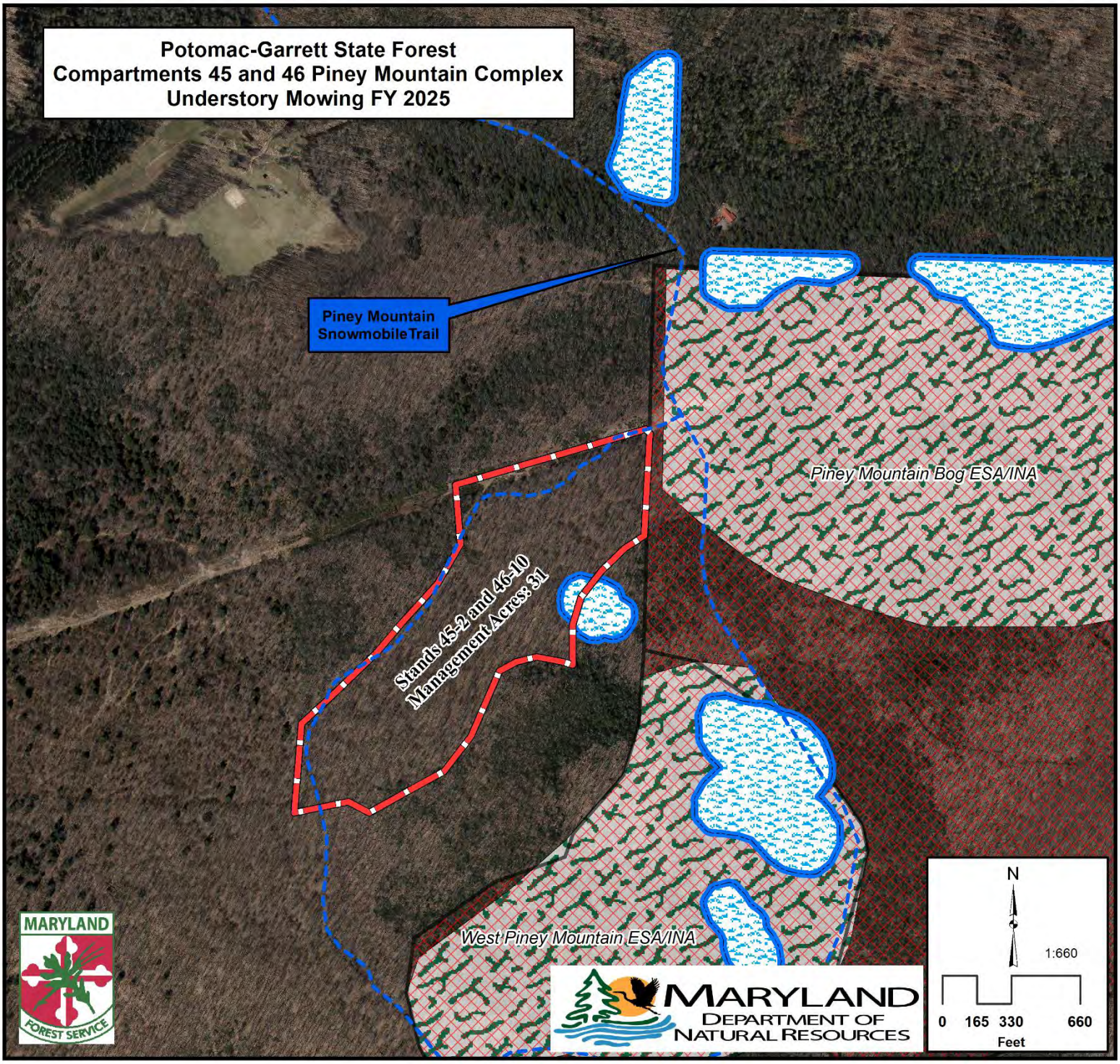
Soil Resources: Underlying soil type is mapped as Dekalb and Leetonia very sandy loams, 0 to 15% slopes (DIC). These soils are moderately deep and well drained. Equipment limitations range from slight to moderate with increasing slopes. The site has fair productivity for woodland management, with a site index of 55-65 for upland oaks. The productivity of the site will be protected by minimizing the haul roads and skid trails as per the Department's Best Management Practices and rutting guidelines.

Recreational Resources: The Piney Mountain Snowmobile Trail passes through the proposal in two areas and recreational opportunities may be disrupted for the duration of the mowing activities and access to the site may be limited depending on the timing of the operations. Hunting is the primary recreational pursuit occurring within the proposed harvest area. Timing of

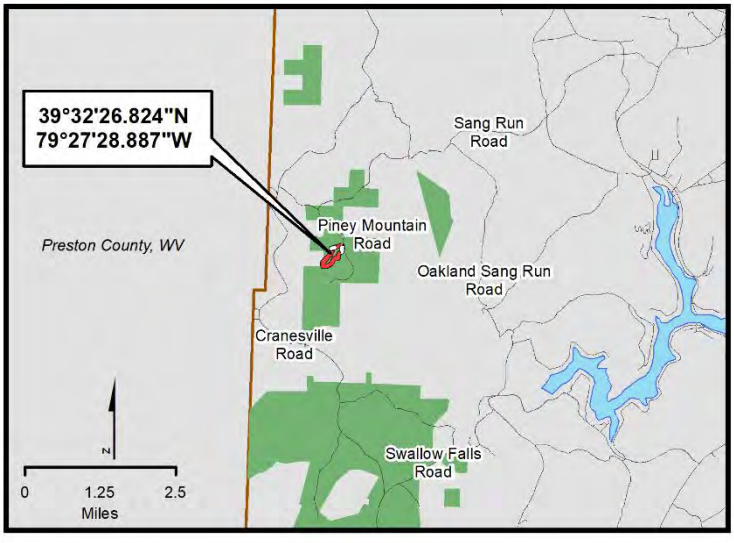
management activities will fall outside of established hunting seasons and all efforts will be made to reduce any disruptions to recreational activities.

Management and Silvicultural Recommendations

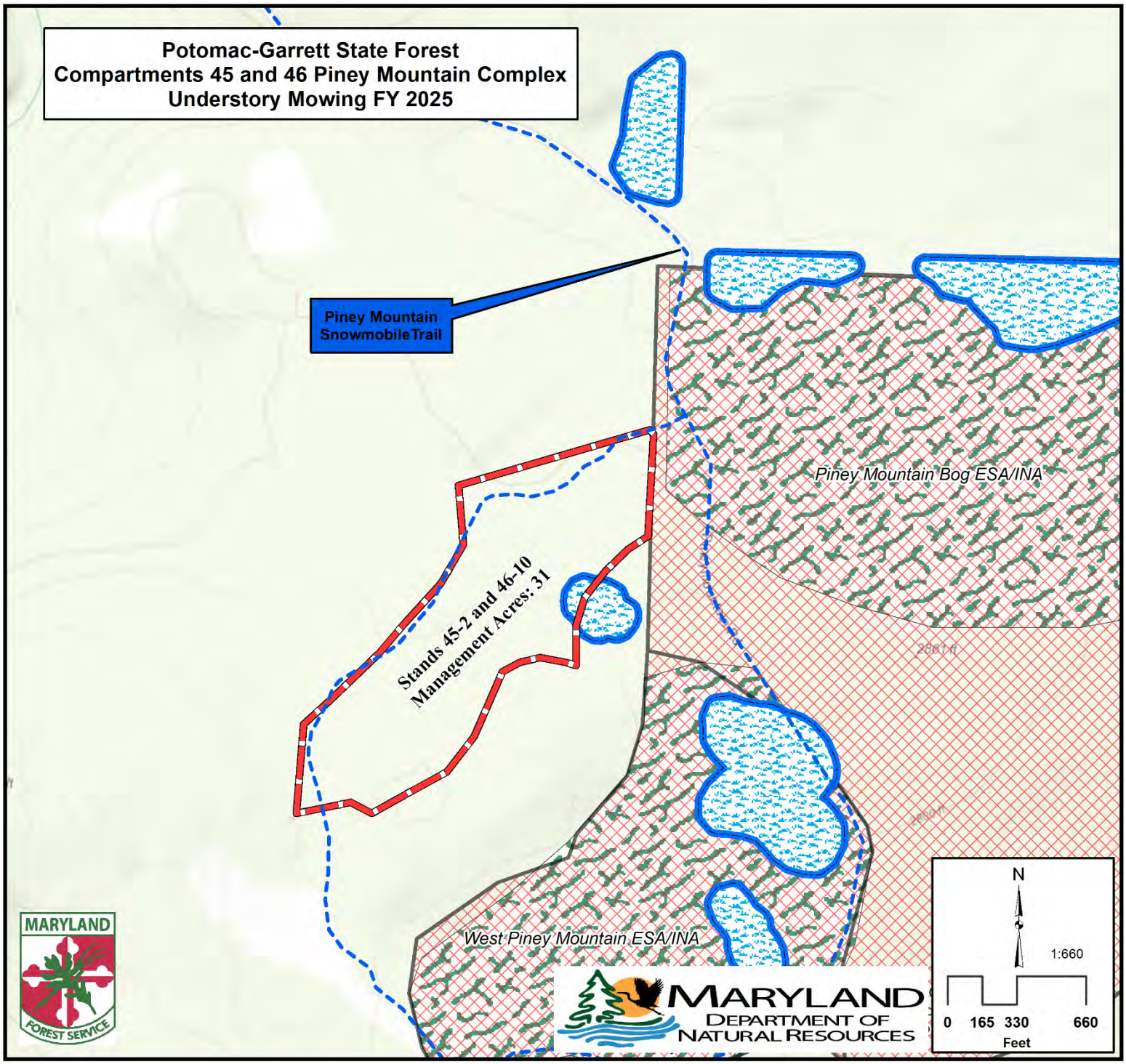
A thinning harvest was conducted on both tracts in 2000, resulting in a dense cohort of undesirable tall woody vegetation, predominantly comprised of black birch poles and saplings, that has overtaken the understory and mid-canopy, occupying over 73% of the stands as tall woody interference. Efforts to control this influx of the birch component were implemented in 2018 via foliar herbicide applications. The treatment was successful in controlling low interfering vegetation, but any stems >15' were unaffected. This clearly failed to facilitate the establishment of acceptable desirable regeneration, so as an alternative to utilizing any further herbicide applications, the interfering vegetation will be mowed with a rotary cutter/mulcher and the site will be monitored for regeneration establishment efficacy using this technique. Once adequate regeneration has been established, a final harvest will be conducted on the site.



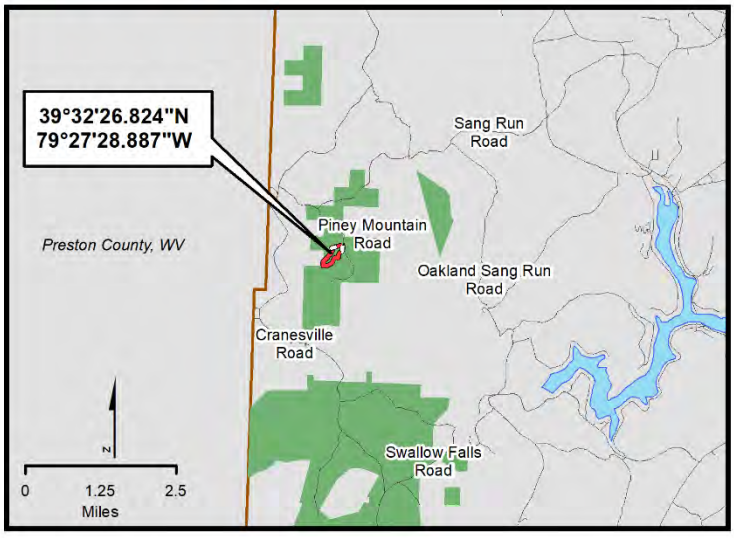
- Ecologically Significant Area
- Irreplaceable Natural Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland with 50' Buffer
- Wildlands
- Streams and 50' Buffers



Potomac-Garrett State Forest
Compartments 45 and 46 Piney Mountain Complex
Understory Mowing FY 2025



- Ecologically Significant Area
- Irreplaceable Natural Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland with 50' Buffer
- Wildlands
- Streams and 50' Buffers



XI. Operational Management and Budget Summary

A. Introduction
B. Funding Sources
C. Operational Cost

Operational Management

A. Introduction

This section of the plan is designed to cover the annual cost and revenues associated with the operational management of Potomac-Garrett State Forest. It is the Department's intent that all revenues generated from the forest will be used to pay for the management and operation of the forest. Successful marketing in selling a mix of species and grades of wood products that the market most demands has contributed to substantial revenue generation over the years. The numbers expressed in this section are only estimates and averages of annual expenses and revenues. These numbers will fluctuate each year based on management prescriptions, economic conditions and public use of the forest.

The following information is a breakdown of Revenues and Operational costs associated with Potomac-Garrett State Forest. These figures are only estimates that are based on projected revenues and operational expenses. Yearly changes in timber markets and weather conditions can severely affect revenues. Operational expenses will vary from year to year and the numbers below are based on the budget request submitted for FY-2023. Currently, budget trends remain unchanged, meaning that the appropriation that was available in FY-2024 will be similar for FY-2025.

B. PGSF Funding Sources

State Forests in Maryland are funded from several sources. The first source is the revenue generated by the forests. These funds are deposited in the Department of Natural Resources Forest or Park Reserve Fund and must be appropriated by the General Assembly through the annual budgeting process before being spent. The state forest budget is prepared approximately one year before the beginning of the fiscal year in which it will be spent. The budget then goes through the legislative approval/review process along with all other state operating budgets. Once adopted, the budget goes into effect July 1st, the first day of the fiscal year. Revenue generated by the state forest is designated special fund revenue. There may be special funds provided from the Department of Natural Resources Forest or Park Reserve Fund that are not generated by this forest or there may be a lesser amount of special funds shown in the budget than was generated on this specific forest.

Another source of funding for the state forest is Recreational Trail Grants. These grants are competitive and are generally limited to $80,000 per year per grant. The source of this funding is the Federal Department of Transportation administered through the Maryland Department of Transportation, State Highway Administration. These funds are designated as reimbursable funds and are applied to various trail related projects as detailed in specific grant requests. Potomac-

Garrett State Forest has secured one Recreational Trail Grant in the amount of $160,000.00 for the rehabilitation of the Piney Mountain Snowmobile/ORV Trail, which is ongoing.

With the passage of SB 606 in the 2018 Legislative Session, which established an Excise Titling Tax on OHV purchases for the purpose of funding maintenance and construction of ORV Trails on DNR lands, the Department has been receiving monthly deposits of approximately $40K in funding which must be used for this specific purpose. These funds will be split evenly between the Forest Service and Park Service, amounting to approximately $20K per month, or $240K (*projected*) for the current fiscal year.

C. Operational Cost: Estimated Annual Expenses - *$459,961.00*

Operational expenses are those costs paid directly out of the Potomac-Garrett State Forest operational budget. The Forest Manager prepares a proposed operational budget for the forest based on instructions provided approximately one year in advance of the fiscal year. The FY-2024 budget proposal was prepared in August of 2022.

▪ *Classified Salaries, Wages and Benefits: $311,666.00*
This cost is associated with Special Funds which are state tax revenues provided annually. These funds are used to pay the salaries of the Maryland classified employees responsible for the management, operation and maintenance of the State Forest.

▪ *Contractual Staffing: $74,030.00*
This cost is associated with contractual staffing associated with operations of the state forest. Contractual personnel are responsible for conducting work outlined in the Annual Work Plan, managing the daily activities on the forest, including boundary line work, maintenance of trails, forest roads, maintaining primitive campsites, overlooks, wildlife habitat areas and implementing all maintenance, recreational, silvicultural and ecosystem restoration projects.

▪ *Land Operation Costs: $74,265.00*
This includes expenses for office and field equipment, vehicles, gates, gravel, signs, boundary paint, roadwork contracts and construction, trash removal from illegal dumping, boundary line work & surveying, tree planting, site preparation, control of invasive species, non-commercial thinning and other forest management practices. These costs vary greatly from year to year based on the activities identified in the Annual Work Plan.

D. Summary

This is the general breakdown on Revenues and Operational Costs associated with the Potomac-Garrett State Forest. As described, these figures will vary from year to year. A more detailed picture on revenues and operational cost will be reviewed quarterly as the actual picture develops within implementation of the Annual Work Plan and as operating budgets are approved.

XII. Appendices

Appendix 1: Potomac-Garrett State Forest 10-Year Timber Harvest Summary Table

Fiscal Year	*Planned Harvest*	*Bd. Ft. Vol. Harvested*	*Gross value*
2014	**300,000 BD FT**	**298,221**	**$26,834.50**
2015	**552,000 BD FT**	**492,401**	**$161,910.00**
2016	**634,000 BD FT**	**542,534**	**$72,689.77**
2017	**533,000 BD FT**	**520,937**	**$275,126.44**
2018	**544,000 BD FT**	**456,517**	**$225,796.59**
2019	**488,000 BD FT**	**458,052**	**$248,487.50**
2020	**400,000 BD FT**	**539,126**	**$179,842.36**
2021	**520,000 BD FT**	**248,609**	**$113,450.00**
2022	**520,000 BD FT**	**1,043,111**	**$381,620.00**
2023	**520,000 BD FT**	**570,428**	**$269,680.00**

Appendix 2: 2023 Forest Stewardship Council Audit Action Plan

Maryland Department of Natural Resources Forest Service
2023 Audit Summary

Date of Field Evaluation: June 14, 2023
Locations: Potomac-Garrett, Savage River and Green Ridge State Forests
Fourth Surveillance Audit

SFI Lead Auditor: Tucker Watts
FSC Lead Auditor: Evan Poirson

Forest Stewardship Council Overview of Audit Findings:

The FSC Program of the Maryland DNR Forest Service of Annapolis, Maryland was found to be in conformance with the standard. NSF determined that there were no (0) non-conformances. No opportunities for improvement were identified.

Appendix 3: 2023 Sustainable Forestry Initiative Audit Action Plan

Maryland Department of Natural Resources Forest Service
2023 Audit Summary

Date of Field Evaluation: June 14, 2023
Locations: Potomac-Garrett, Savage River and Green Ridge State Forests
Fourth Surveillance Audit

SFI Lead Auditor: Tucker Watts
FSC Lead Auditor: Evan Poirson

Sustainable Forestry Initiative Overview of Audit Findings:

The SFI Program of the Maryland DNR Forest Service of Annapolis, Maryland was found to be in conformance with the standard. NSF determined that there were no (0) non-conformances. No opportunities for improvement were identified.

XII. Literature Cited

Gruner, Daniel. 2021. *FY 2021 Farm Bill Emerald Ash Borer Biological Control Monitoring*. Research Proposal. University of Maryland Department of Entomology, College Park.

Hackett, Jessica. 2023. *Emerald Ash Borer (EAB) Management*. Research Proposal. Maryland Department of Agriculture Forest Pest Management, Annapolis, MD.

Hackett, Jessica. 2023. *Hemlock Woolly Adelgid Treatment and Suppression Plan*. Research Proposal. Maryland Department of Agriculture Forest Pest Management, Annapolis, MD.

Schwarz, Kurt. 2022. Comments on 2023 Draft Work Plans for Maryland's Four State Forests. Maryland Ornithological Society, Columbia, MD.

Smith, Scott. 2021. *Statewide Wood Turtle Population Assessment and Management*. Research Proposal. Maryland Department of Natural Resources Wildlife and Heritage Service.