POTOMAC-GARRETT STATE FOREST
ANNUAL WORK PLAN

FISCAL YEAR 2027

Prepared: _____ _____
(Forest Manager) Date

Reviewed: _____ _____
(Regional Forester) Date

Approved: _____ _____
(Environmental Specialist) Date

Potomac-Garrett State Forest
FY-27
Annual Work Plan

18,792 Total Acres
18,265 Certified Acres

Potomac-Garrett State Forest
FY-27 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 forest 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 18,792 acres of this State Forest, of which 18,265 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-27 Annual Work Plan for Potomac-Garrett State Forest was formulated in 2025. 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 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-27. 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 2025 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-27. 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 beyond the initial 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 have proven effective and will be expanded into adjacent stands to further control these unwanted species.

The recently discovered infestation of wisteria vine in Compartment 34 has been treated with both foliar and systemic herbicides, which have limited the spread of the invasive species, but still have not eradicated it from the site. Follow up monitoring and treatments will be administered until the plant is eliminated.

2. Eight Silvicultural projects including:

Two hardwood regeneration harvests on 21 acres, one 6-acre understory removal, one 7-acre white pine release, one 38-acre hardwood shelterwood harvest, a 3-acre mowing of interfering understory vegetation, a 5-acre early successional habitat creation and enhancement project and a 5.6-acre oak savanna establishment project.

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-27 Annual Work Plan outlines 4 non-commercial silvicultural projects and four commercial silvicultural projects covering 86 acres. The silvicultural work laid out in this work plan is focused on initiating seedling development, retaining established regeneration, particularly mixed oak species, timber stand improvement and early successional habitat maintenance/enhancement. 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-27 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. The proposed harvests will produce an estimated harvest of approximately 315,000 board feet of sawtimber accounting for an estimated $90,000 worth of raw wood products entering local markets.

III. General Location Map for FY-27 Land Management Project Proposals

Approximately 86 Acres

Map Key

1. Compartments 23 and 25	Multiple Stands: 80-acre Wildlife Habitat Enhancement Project (PG-27-S-01 through PG-27-S-07)
2. Compartment 32 Stand 25	6-acre Oak Savanna Habitat Establishment (PG-27-S-08)

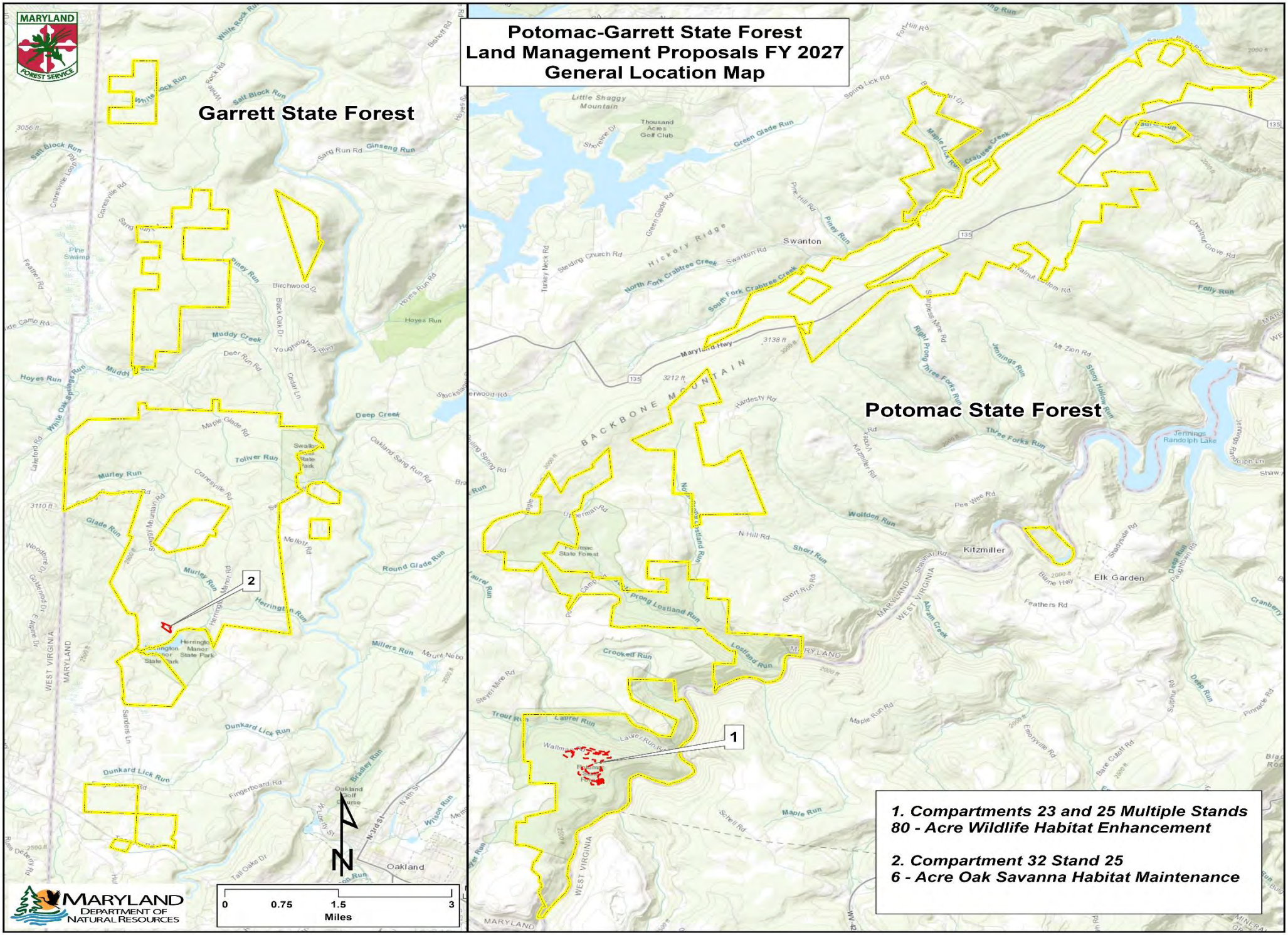


Figure 1. General location map for FY-27 land management proposals.

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 HCVF there are located a broad range of Ecologically Significant Areas (ESA) and the newly designated Irreplaceable Natural Areas (INA). 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 2025 Silvicultural Audit (See Appendix 2 and Appendix 3 for a summary of audit findings).

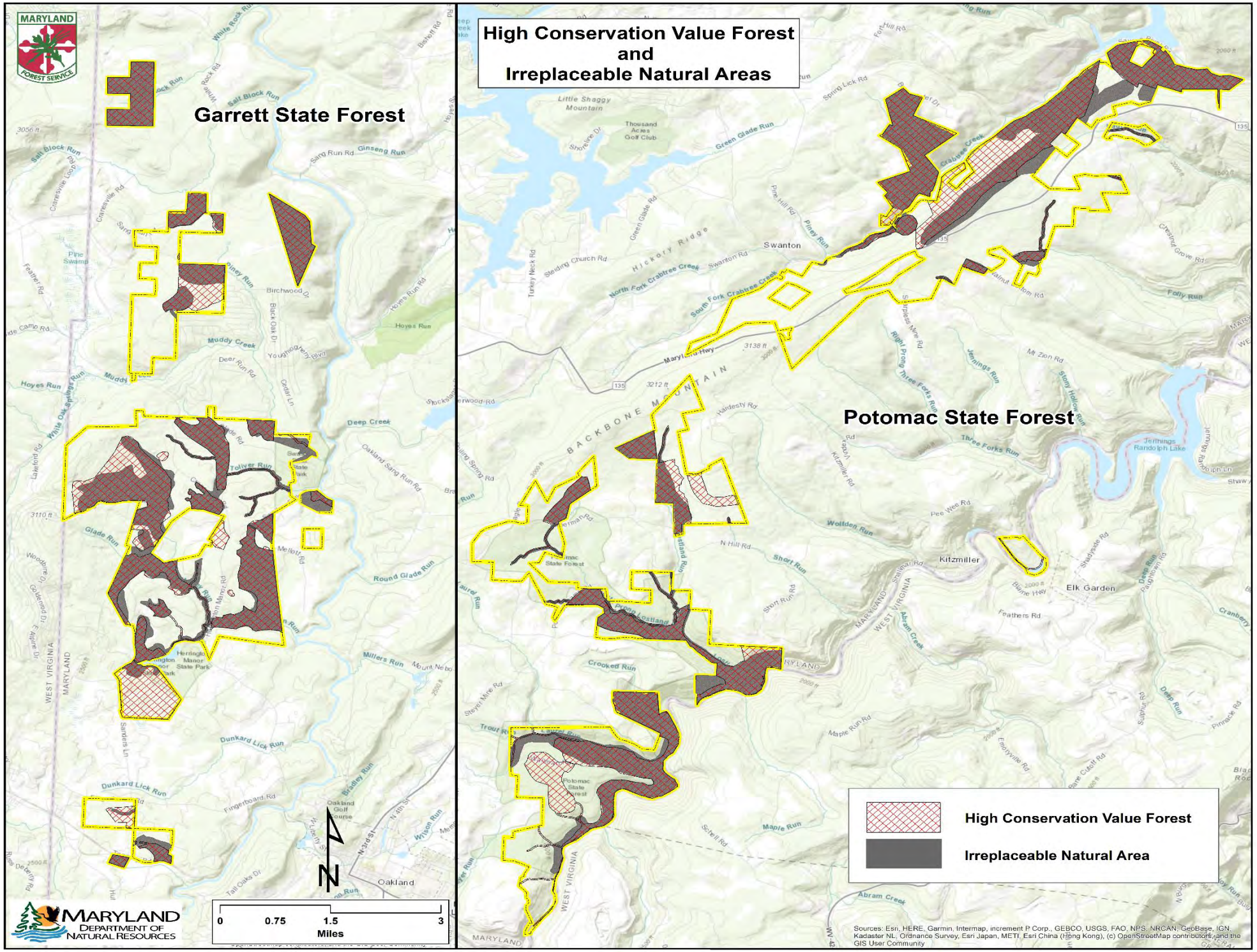


Figure 2. Designated High Conservation Value Forest and Irreplaceable Natural Areas

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-27 maintenance staff will concentrate on the rehabilitation of Laurel Run Road, which was closed to the public for nearly five years due to a section of the roadbed collapsing from being undermined by water. The affected area has been repaired, and the road is once again

open to vehicular traffic. All galvanized metal culvert pipes will be replaced with upsized HDPE culvert pipes, and the entirety of the road will be graded and resurfaced. Pull-offs and additional parking areas will be constructed as needed. This project 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 and ORV Excise Tax funds 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 135 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 $10.00 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.

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 February 3. 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, 12 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.

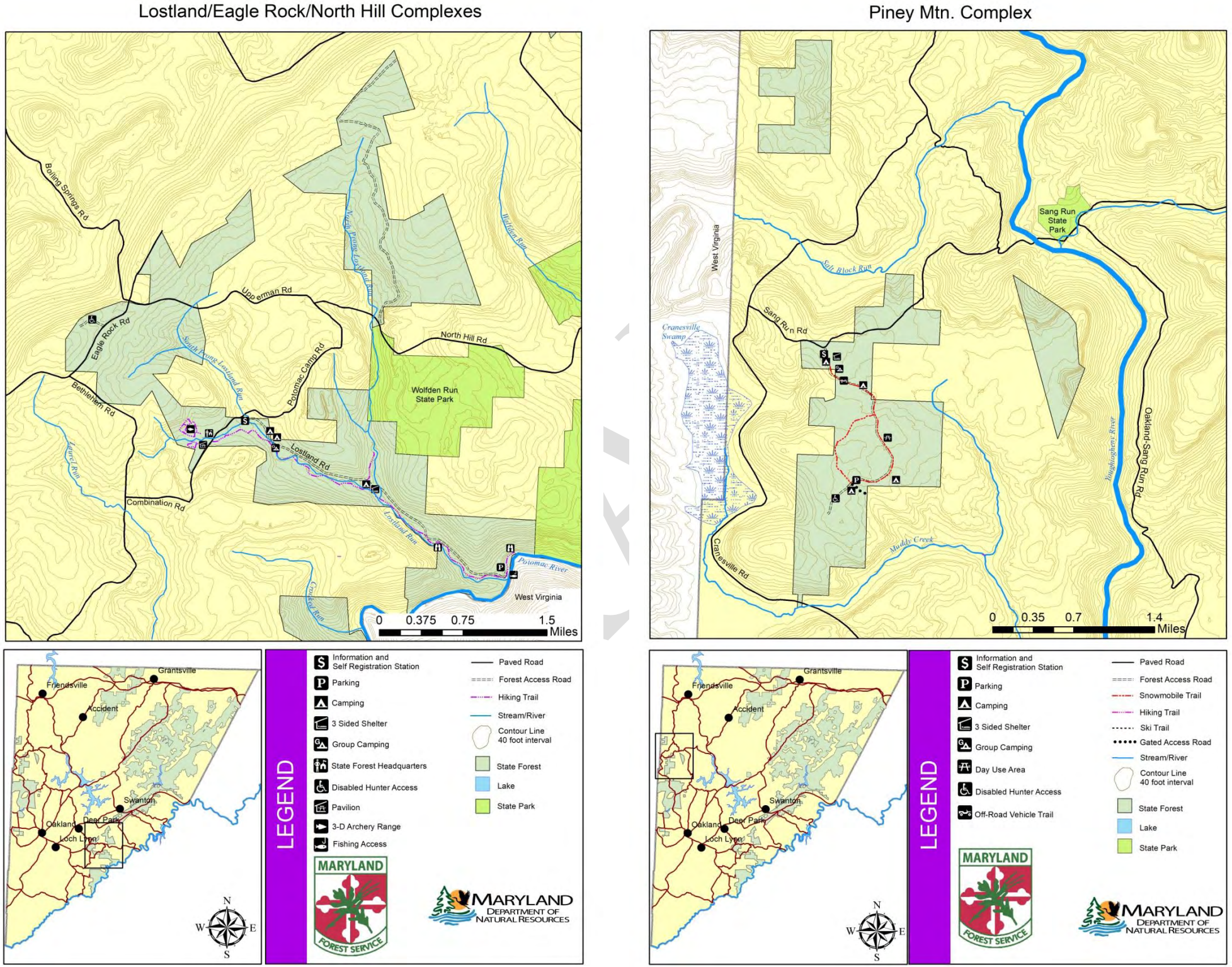


Figure 3. Recreational opportunities on Potomac-Garrett State Forest

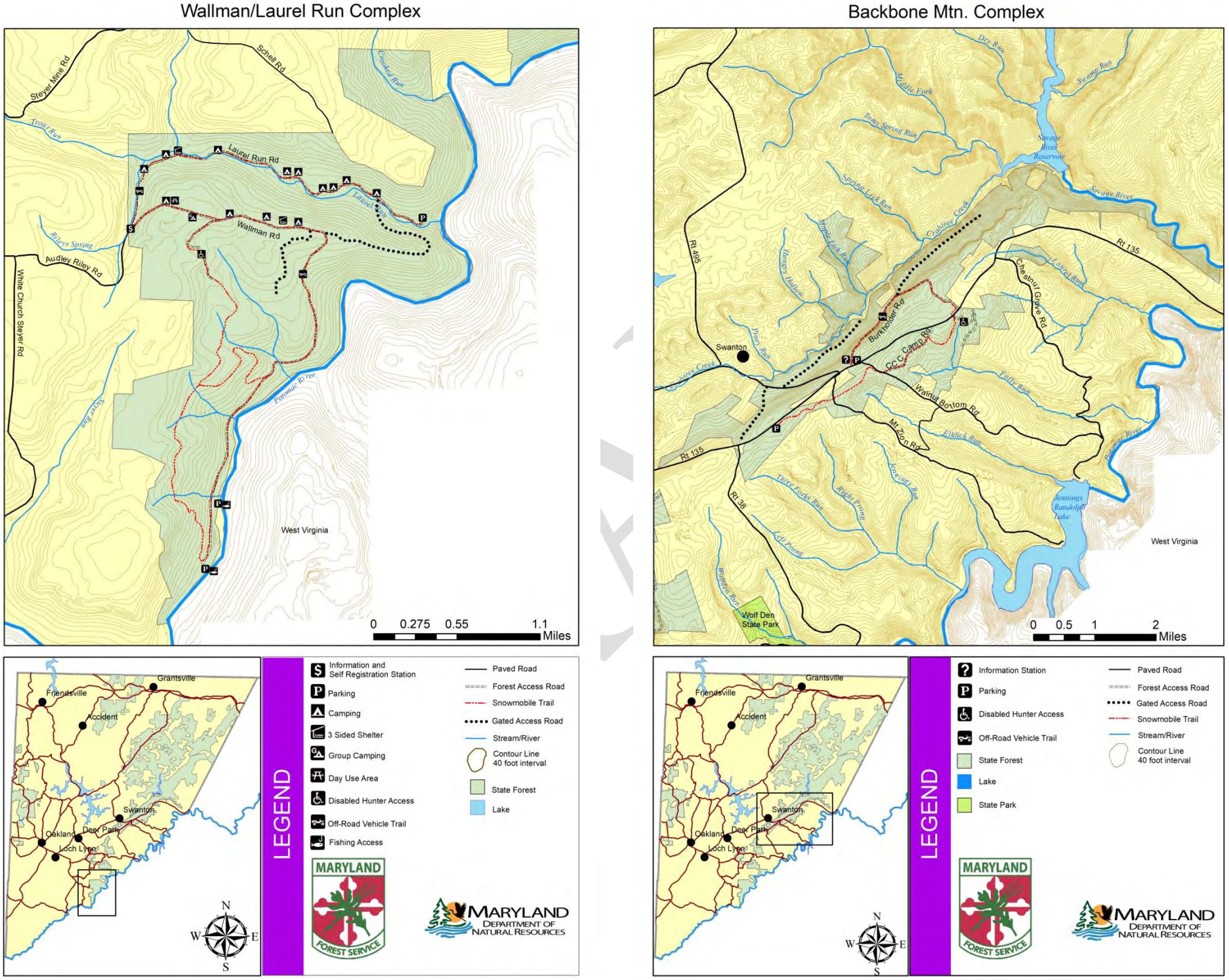


Figure 4. Recreational opportunities on Potomac-Garrett State Forest (cont)

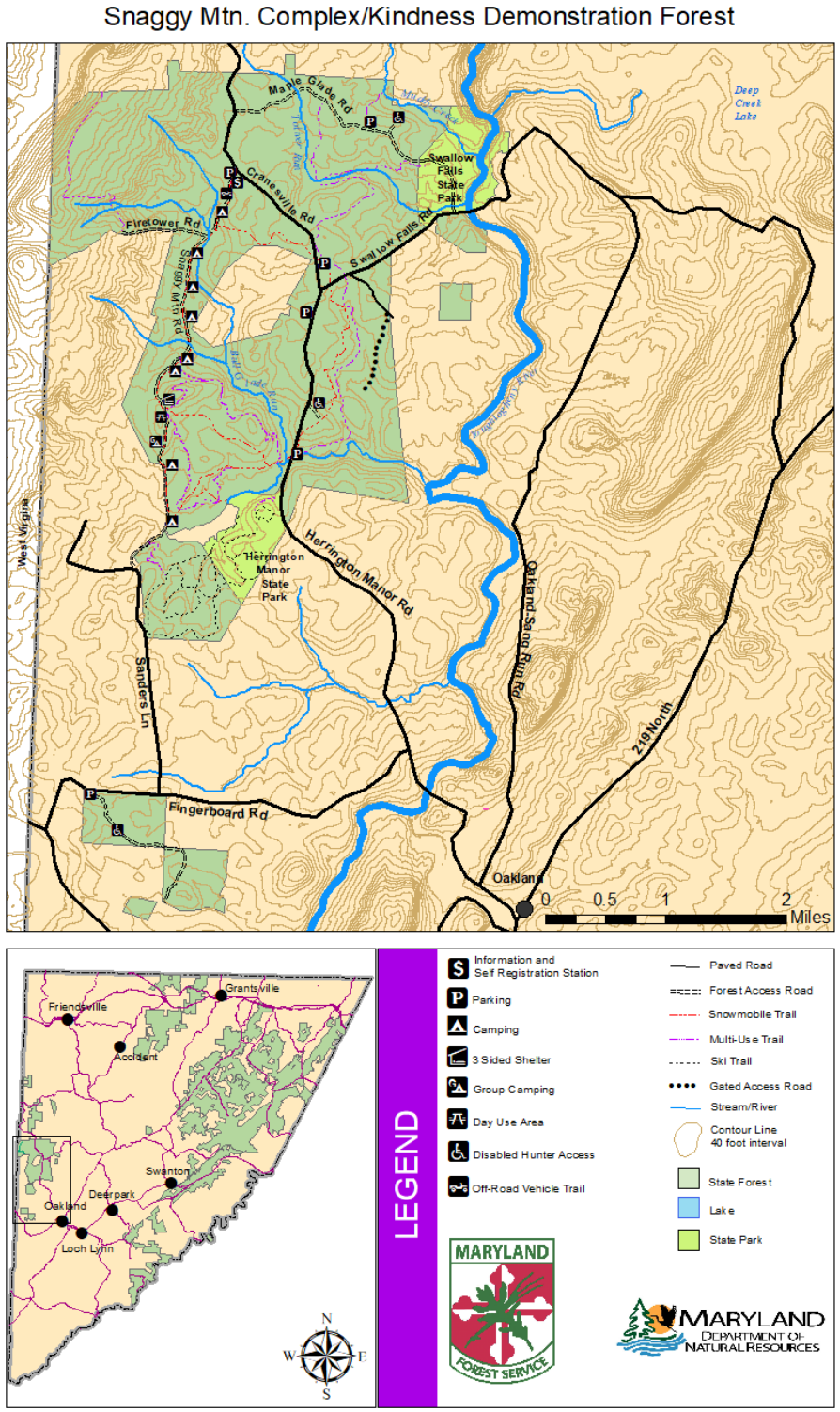


Figure 5. Recreational opportunities on Potomac-Garrett State Forest (continued)

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

1. 5 ½ Mile Trail Surface Rehabilitation and Toliver Bridge Replacement
   (Grant Number and Total Funding Amount TBD)

The bulk of the project will involve restoration and improvements to the trail surface and all associated drainage features. This project will also focus on replacing the dilapidated Toliver Bridge, which has been closed to foot traffic, and moving it to a new location outside of the Toliver Run floodplain. Sections of the existing Toliver Trail and 5 ½ Mile Trail will be rerouted to accommodate the new bridge location.

Figure 6. Toliver Bridge (closed)

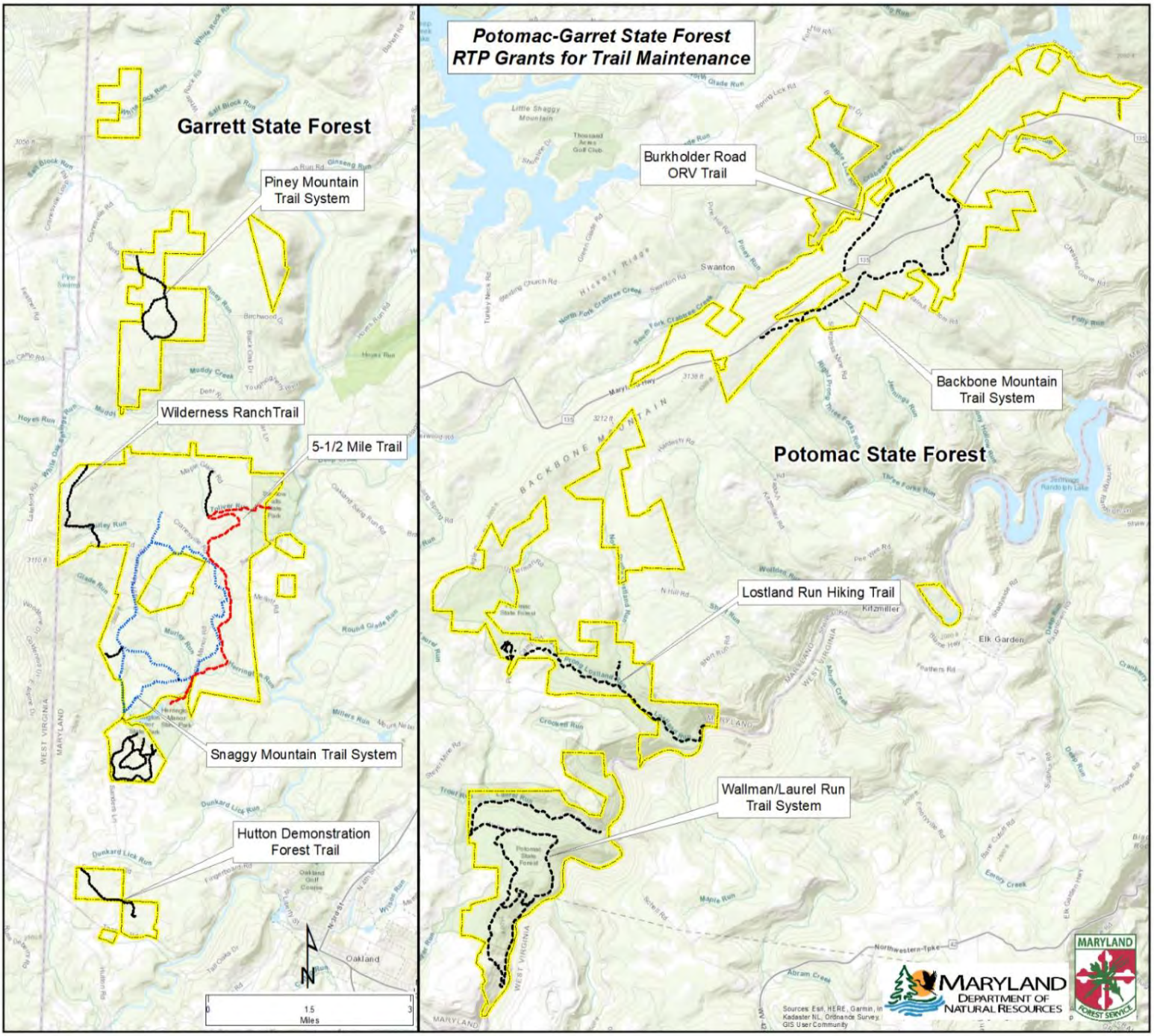


Figure 7. Potomac-Garrett State Forest Rec Trail Grant Maintenance

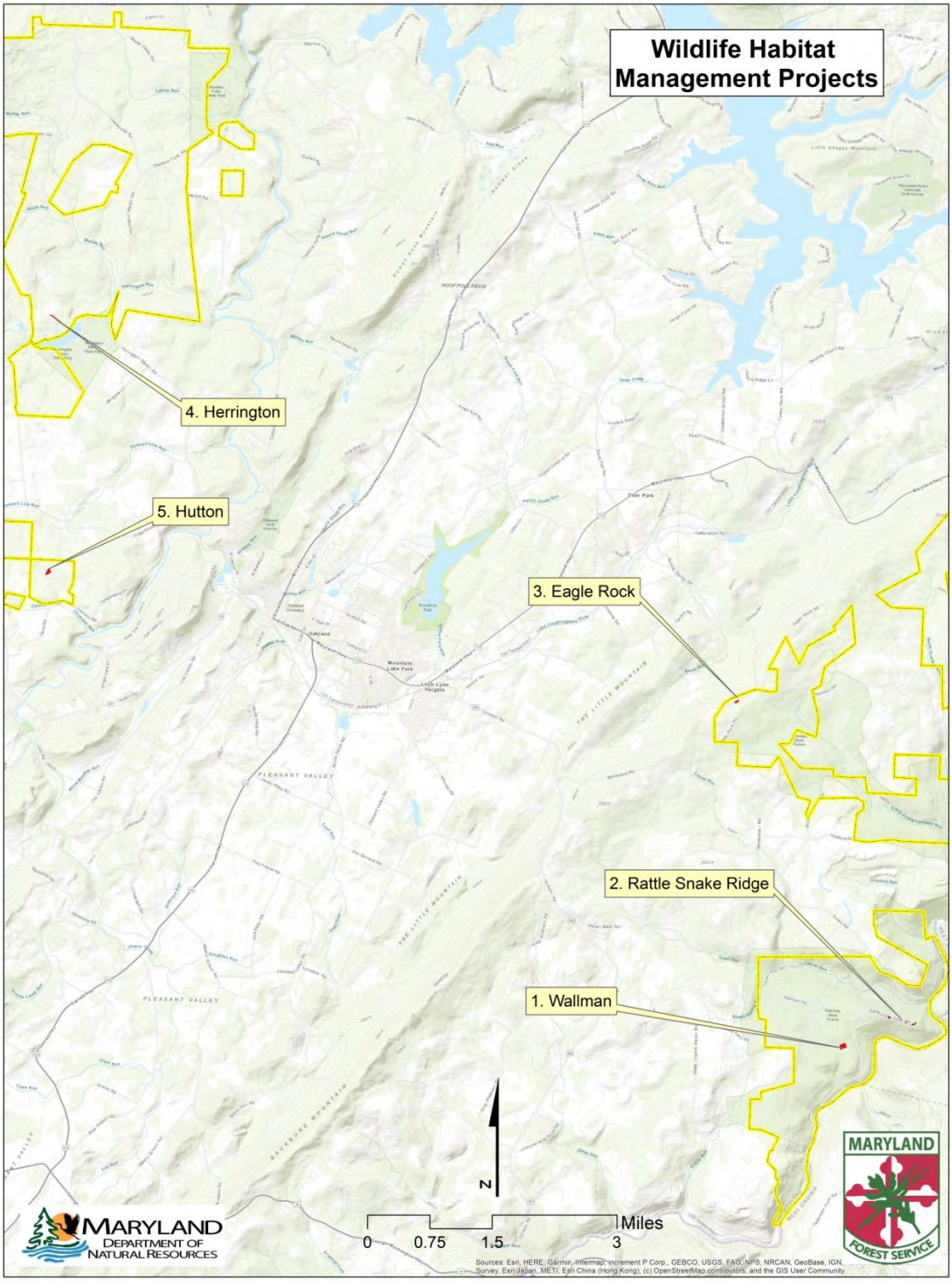
VII. Wildlife Habitat Management Projects

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. 21).

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 Maintenance Projects. Clockwise: Adult Monarch at the Kindness Demonstration Forest; Adult Monarch on clover flower; caterpillar feeding along Piney Mountain Road.



Area	*Species Planted*	*Acres*	*Fertilizer*
1. Wallman	*Clover mix*	*2.6*	*1200 lbs 10-20-20*
2. Rattle Snake Ridge	*None, mowed periodically*	*1.1*	*N/A*
3. Eagle Rock	*Clover mix*	*.70*	*300 lbs 10-20-20*
4. South Snaggy	*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 / Establishment / 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.

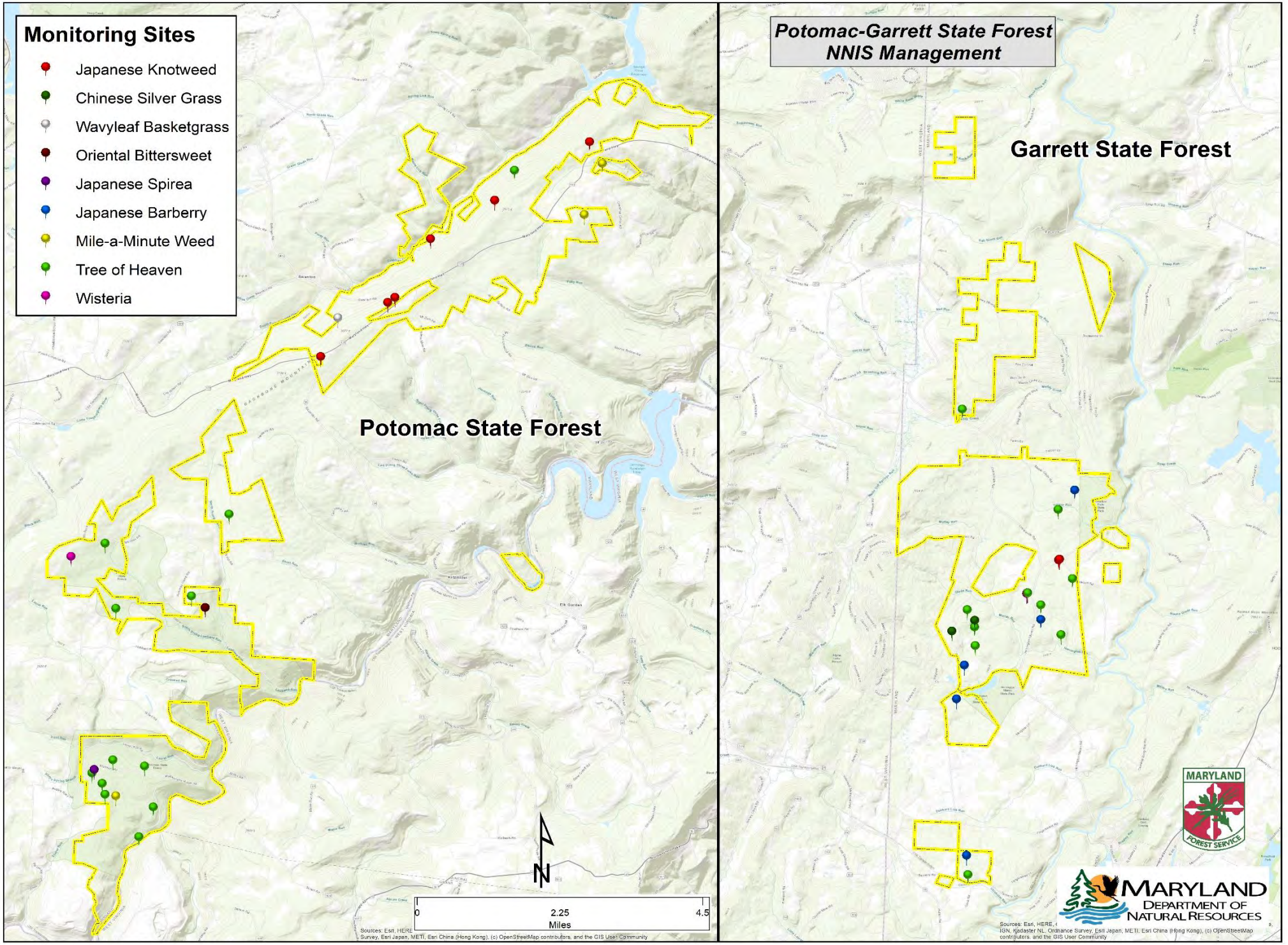
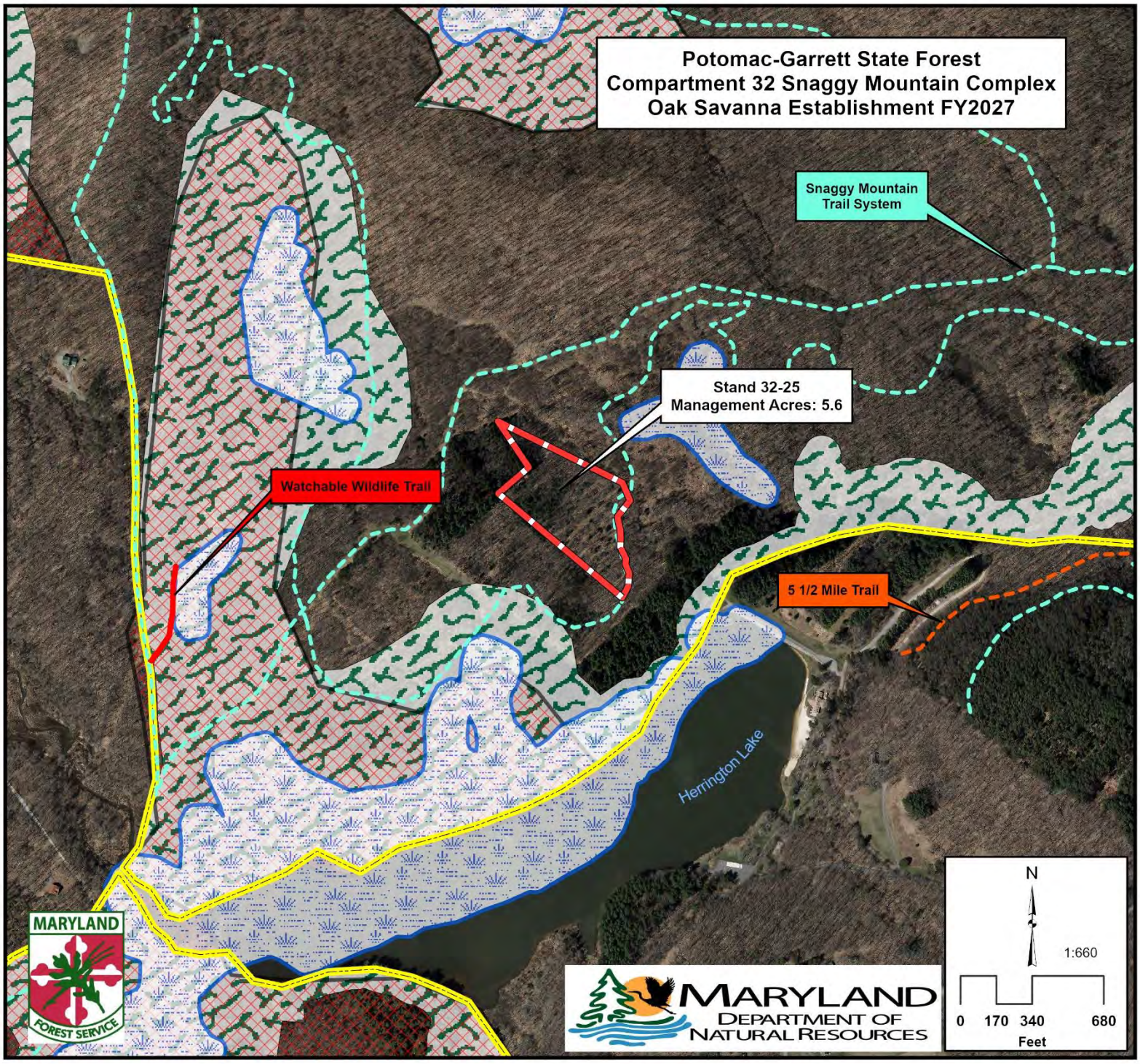


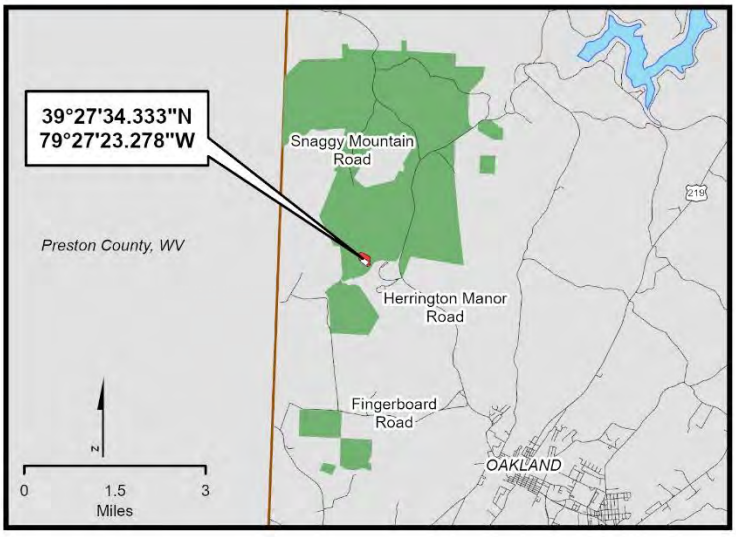
Figure 10. Potomac-Garrett State Forest NNIS Monitoring Sites.

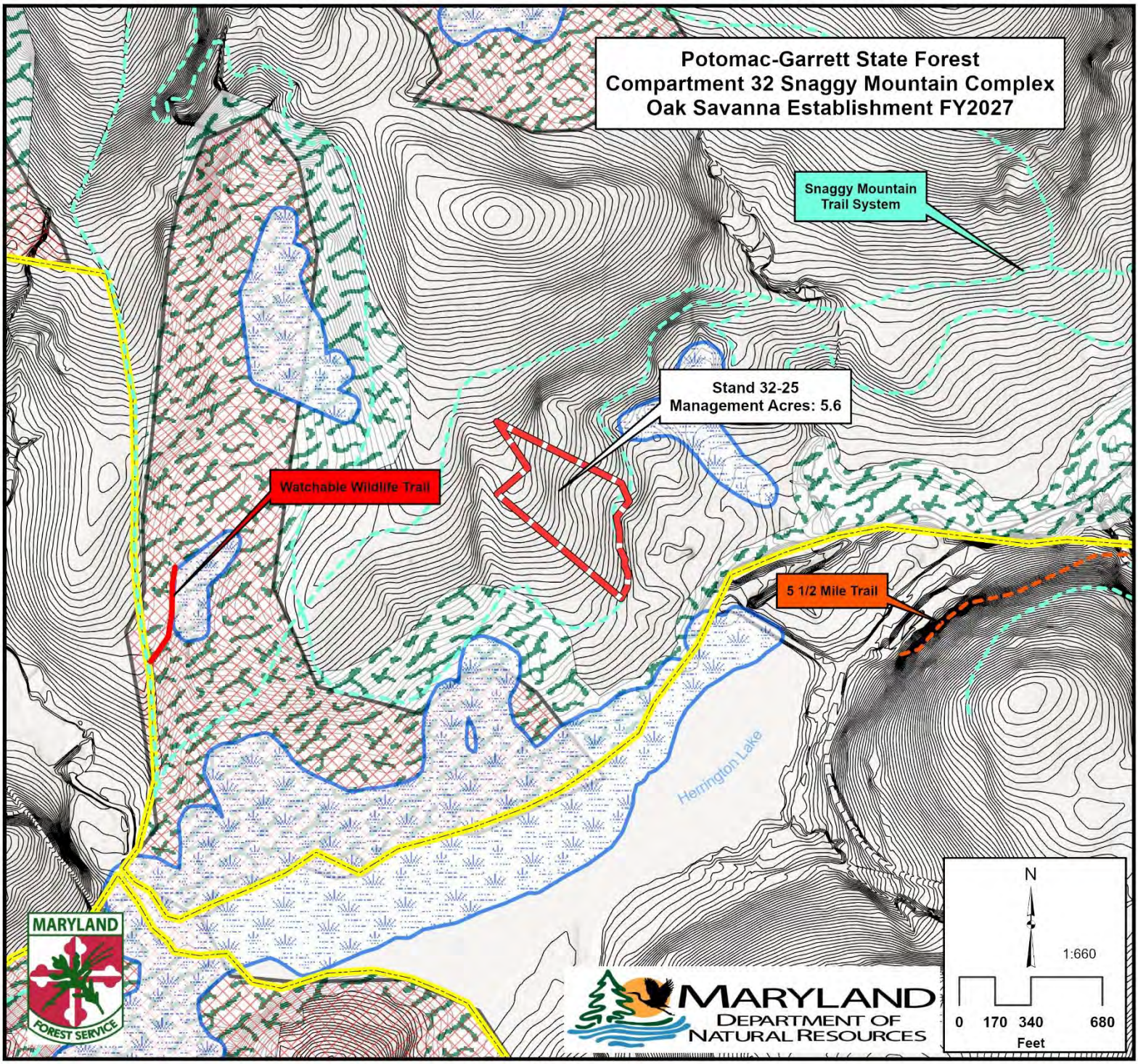
B. Compartment 32 Stand 25 6-acre Oak Savanna Habitat Establishment/Maintenance

This proposal is in the southern part of the Snaggy Mountain Complex in the Garrett State Forest northwest of Herrington Manor State Park. The site consists of a large poletimber stand dominated by black cherry (76%) with small components of white oak (18%) and red maple (4%) with an average diameter of 8.4 inches. Due to the wide spacing of stems, the stand has an average basal area of 62 ft²/acre and a relative density of 42%. Although the stand does meet all the criteria to be considered a true savanna, the semi-open canopy of the stand has permitted a diversity of grasses, flowering plants and shrubs to persist in the understory. To maintain this habitat, a timber stand improvement/crop tree release will be implemented focusing on oak and hickory species and reducing the black cherry component that has infiltrated the openings. Given the small size of the proposal, prescribed fire may be introduced to the site to help sustain species composition. All work will be completed by Potomac-Garrett State Forest staff.



- 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
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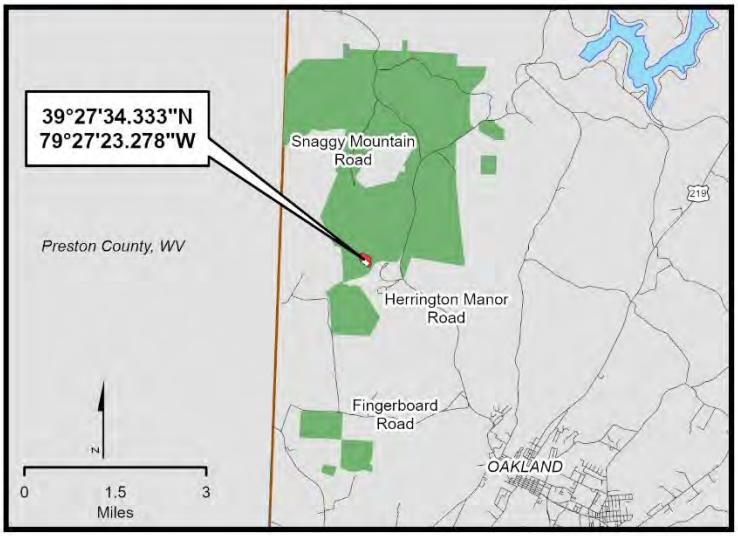
- Wetland with 50' Buffer
- Wildlands
- Streams and 50' Buffers



C. 2025 Spongy Moth Suppression Project – Multiple Land Units. Maryland Department of Agriculture (Kuhn, 2025). Project Number: 2025DNR149.

Project Description:
In summary, the Maryland Department of Agriculture (MDA) conducted an aerial Spongy Moth suppression program throughout State Parks and State Forests in Western Maryland. Oak forests with high spongy moth populations are currently experiencing defoliation and mortality. All spray blocks have gone through review with the U.S. Fish and Wildlife Service (USFWS), the Maryland Historical Trust (MHT), Maryland Department of the Environment (MDE), and the Maryland Department of Natural Resources Wildlife and Heritage Service (DNR-WHS). Property owners and land managers will be notified in advance of treatment.

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. Black Bear Hair Snare – Multiple Land Units. University of Maryland Department of Environmental Sciences and Technology (Mullinax, 2025). Project Number: 2025DNR173.

Project Description:
In summary, the Applied Spatial Wildlife Ecology Lab at the University of Maryland, in cooperation with the Maryland Department of Natural Resources, Wildlife and Heritage Service (DNR-WHS) will conduct a four year study on Maryland's black bear population. The study aims to estimate black bear population densities and spatial movements across Maryland's known and unknown bear range. Barbed wire hair snares will be baited with scent lure, and black bear hair will catch on barbed wire when bears pass through. Field teams will collect the hair and DNA will be extracted and genotyped. Hair snares will be set up in Garrett and Allegany counties during the summer of 2025. A sign will be placed on a tree or post near the hair snare indicating the equipment is part of the University of Maryland Black Bear Project. If cameras are placed at the site, vegetation will be cleared with gardening tools to reduce any obstructions to photographing wild animals that could come across the site. Once the sampling is completed, all equipment and materials will be removed. Hair snares will be placed at Dan's Mountain WMA, Deep Creek Lake NRMA, Deep Creek Lake SP, Sang Run SP, Swallow Falls SP, Wolf Den Run SP, Youghiogheny Wild River NEA, Potomac-Garrett SF, and Savage River SF.

2. Bat Surveys on State Land in Western Maryland. Maryland Natural Heritage Program (Zagorski, 2025). Project Number: 2025DNR089.

Project Description:

Surveys are needed for federal and state-listed bats in areas where data gaps in occurrence exist in Maryland. We will be conducting acoustic surveys for bats using bat detectors with microphones capable of detecting the echolocation calls of bats which can be analyzed to species or to species groups later in the office. At a subset of sites, camera traps will also be deployed to document potential bat habitat use. These surveys will be done by NHP staff. Bat detectors will be in place for a period of two weeks at potential summer habitat locations to meet U.S. Fish and Wildlife Service protocols to determine presence/probable absence and for several months at hibernacula. The photo shows a typical bat detector setup that was done on Assateague Island National Seashore and will be used for this project.

General Site Conditions: The detectors will be set up in areas likely to be used by bat conservation targets and with the approval of the land manager. Appropriate research locations will be coordinated with each land unit manager following the approval of this project.

3. Western Region Woodrat Surveys. Maryland Natural Heritage Program (Zagorski, 2025). Project Number: 2025DNR090.

Project Description:
Surveys are needed to update records of the State Endangered Allegheny woodrat. We will be conducting camera trapping surveys for woodrats at historic sites and potential additional habitat throughout their range in Maryland. Cameras will be deployed March-November, weather permitting. Cameras will be deployed on trees 1-2 m from suet baits for ~1 week per site and spaced a minimum of 50 m apart. Appropriate site locations will be coordinated with each land unit manager following the approval of this project.
At sites with confirmed presences, we will be live trapping or deploying hair snares to collect genetic and/or demographic information. These surveys will be done by NHP staff. Cameras will be in place for a period of 1 week. The photo shows a typical camera setup that was deployed in Pennsylvania and will be emulated for this project.

General Site Conditions**:** The cameras and traps will be set up in areas likely to be used by woodrats (i.e. cliffs, talus slopes, scree, rock outcrops).

Project Considerations: Live trapping will follow a modified version of the protocol created by the Pennsylvania Game Commission:

Maryland Allegheny Woodrat Trapping Protocol*

Equipment
1. Tomahawk 201 folding live trap – modified to prevent woodrat tail damage.

Bait
1. Peanut butter and apples.

Timing
1. Trapping conducted from July 15 through October 15.
2. Trap only when nighttime lows >55º F.

Procedure
1. Set 5 to 40 traps depending on site size – thoroughly covering area. Place traps deep within rock crevices adjacent to food caches or latrines, protected from rain.
2. Trap number and placement to be consistent between years at each site.
3. Set traps for 2 consecutive nights. Remove or close traps in the vicinity of captured lactating females and juveniles (<140g body weight) on second night to prevent stress.
4. When daytime temperatures exceed 85º F, traps will be opened two hours before sunrise and remain closed for the duration of the day following morning trap check.
5. Process captured animals quickly and release starting at sunrise and complete by noon at latest.
6. All animals caught will be sexed, weighed, reproductive condition noted, and given a permanent ear tattoo. Tattoo equipment and woodrat ear to be sterilized with 90% isopropyl alcohol for each individual.
7. In trap and release behavior will be critically analyzed looking for signs of raccoon roundworm (*Baylisascaris procyonis*) infection. Woodrats exhibiting abnormal behavior will be taken into captivity for further observation.

*Conforms to: **Allegheny Woodrat Survey Protocol –** Developed by Pennsylvania Game Commission and distributed to Woodrat Recovery Team. Most states use this standard protocol or with slight deviations.

4. Salamander Scientific Collection on Maryland DNR Managed Properties. George Washington University (Seldes, 2025). Project Number: 2025DNR240.

Project Description:
This project consists of the scientific collection of no more than 40 total Plethodontid Salamanders from state managed properties as part of a study of the evolutionary ecology of these species. The collections will involve the location, capture, and euthanizing of target species of salamanders. This will entail locating appropriate microhabitat during the collecting visit. Depending on the species, these areas are either moist upland environments such as hardwood forests, or smaller order streams. Once appropriate habitats have been located, searching for specimens will entail flipping natural cover objects such as rocks and logs. After, any found salamanders have been captured by hand and the cover object will be replaced to its original state. Salamanders will then be removed from the location and euthanized according to GW IACUC A2025-135 protocol. At each of the above listed land units, no more than 3 individuals of each species (12 individuals maximum) will be collected from any one managed property.

General Site Conditions: Depending on the species, areas of search will be either moist upland environments such as hardwood forests, or smaller order streams. Once appropriate habitats have been located, searching for specimens will entail flipping natural cover objects such as rocks and logs. These areas are difficult to assess prior to visiting the site, thus specific locations within the management areas cannot be further specified.

Project Considerations: We have included the recently authorized Scientific Collection permit from WHS for the State of Maryland regarding the collection and euthanizing of 4 species of Plethodontid salamanders.

5. Maryland Biological Stream Survey – Additional Random Site Sampling. Maryland Department of Natural Resources – Resource Assessment (Mathews, 2025). Project Number: 2025DNR092.

Project Description:
The Maryland Biological Stream Survey (MBSS) conducts stream surveys each year to monitor stream health across the state. A portion of our sampling for this year include sites associated with random site monitoring. These sites are selected randomly across the state each year. Sampling methods primarily include D-net kick surveys for invertebrates, water quality sampling and temperature logger deployment in the spring (March-April), electrofishing surveys in the summer (June-September) and temperature logger retrieval in the fall (September-October). Each visit usually takes between one and four hours, though longer visits may be required particularly during the summer sampling event. All sampling occurs within a 75-meter stream reach. Disturbance in and around the sampling reach is minimal and electrofishing is monitored to minimize mortality.

Maps are attached to show the approximate location of each site's midpoint on state land. Also attached is a table of each site, with midpoint coordinates and the state land it is associated with. This site list includes all remaining potential 2025 MBSS sites on DNR land. Most, if not all, of

these sites may not ultimately be sampled pending priority status and permissions of other potential sites.

General Site Conditions: Site characteristics vary between sites across Maryland. As these sites lie on state property, often in state parks or forests, they are generally more forested with normally robust riparian areas. Sites extend from mountainous environments of western Maryland to streams in the low-gradient coastal plain on the eastern shore. Sites must be wadable to be sampled and usually include 1st-5th order streams. Accessing the stream, riparian buffer, and floodplain would be frequent to conduct sampling, but there is no heavy equipment involved, and overall disturbance should be minimal.

Project Considerations: MBSS is in the process of obtaining a regional letter of authorization from MDE to allow for the deployment of temperature loggers in and around streams either on rebar or trees. Temperature loggers will not be deployed without this regional letter.

6. Long-term Monitoring of Wild Bird Populations and Their Parasites. Delaware Museum of Nature and Science (Halley, 2025). Project Number: 2025DNR202.

Project Description:
The Delaware Museum of Nature & Science (DMNH; formerly Delaware Museum of Natural History), founded in 1957, is a critical repository for biological specimens used for biodiversity monitoring and scientific research. Since 2022, we have been active in Pennsylvania and Delaware, vouchering data-rich specimens of birds and their parasites (external and internal) to achieve multiple interrelated goals. Our work is conducted under USFWS Permit Number MBPER0036206 (see attached), which has recently been amended to include Maryland. Here, we are requesting permission to initiate a low-density collecting and salvage effort in Maryland. The DMNH Bird Department is conducting several ongoing projects that rely on broadly sampling communities of avian hosts and their parasites with lethal methods. Parasites influence their hosts' ecology, evolution, and behavior. By studying variation in life history characteristics of parasites, including life cycles, dispersal ability, feeding ecology, abundance, and host specificity, scientists can test a variety of hypotheses about the (macro- and micro-) evolutionary and ecological dynamics of host-parasite relationships. The same specimens that support this research also shed light on all aspects of bird biology, including biogeographical variation, phylogenetic relationships, and the evolution of migration, to name a few.
In accordance with our Federal permit, we request permission to enact a general collecting strategy that primarily targets common bird species, to achieve two interrelated goals: (1) to characterize variation in metazoan and haematozoan parasite communities and their avian hosts, for evolutionary and ecological research; and (2) to create an evenly-sampled specimen resource that will enable natural resource managers and conservationists to diagnose longitudinal (decade-scale) trends in wildlife populations. This includes changes in parasite infection rates and/or genetic diversity and their chemical environments (e.g., introduction of new pollutants). Here, we outline several broad categories of projects that benefit from the proposed general collecting of associated avian and parasite specimens.

Ectoparasite infections (e.g., chewing lice) in eastern North American birds and their variability across time and space.

Our collecting activities directly support ongoing research on the coevolutionary history of birds and their ectoparasites, in collaboration with scientific colleagues at the Academy of Natural Sciences of Drexel University, Philadelphia (ANSP), University of Delaware, Newark (UD), Delaware State University, Dover (DSU), and the Delaware Department of Fish & Wildlife (DFW). This work includes broad sampling of ticks (Ixodida), wingless parasitic lice (Phthiraptera), louse flies (Hippoboscidae), and various internal parasites (e.g., helminths), which spend some or all their life cycle on or in the avian host. Individual birds can carry multiple genera of parasites, which exhibit marked differences in life history characteristics including effective population sizes, dispersal ability, host specialization, and feeding habits, which can affect parasite population structure, host specificity, and thus cophylogenetic history (Marshall, 1981). These characteristics make birds and their parasites ideal for a variety of micro- and macroevolutionary studies.

Blood-borne parasite infections (e.g., malarial parasites) in eastern North American birds and their variability across time and space

Dr. Vincenzo Ellis (UD) and his students are using molecular markers to identify and classify blood borne parasite infections in our permitted voucher specimens. Our collecting activities directly support evolutionary research that aims to characterize latitudinal and ecological gradients in host specificity and diversity. Host specificity is a measure of the number of hosts that a given parasite is capable of infecting. Some parasites can infect many host species, whereas others only infect a single host species. Therefore, to understand patterns of host specificity, it is necessary to broadly sample both regional avian communities and their parasite communities. Our collaborative research aims to characterize patterns of host specificity in Haemosporidian parasites, which infect the blood of living birds, especially three genera of blood-borne parasites that are responsible for malaria and related diseases: *Plasmodium*, *Haemoproteus*, and *Leucocytozoon*. Our collaborations seek to characterize the diversity, infection intensity, and host specificity of these parasites, among avian communities across broad geographic areas, using a suite of traditional and modern methods including microscopy, qPCR, nested PCR, and Illumina Amplicon Sequencing.

Evolutionary history, natural history, and migratory patterns of birds in eastern North America

Our collecting activities support multiple ongoing studies that aim to advance scientific knowledge of the evolutionary systematics and behavior of various groups of birds. We have active projects focused on thrushes (Turdidae, genus *Catharus*), sparrows (Passerellidae, genus *Melospiza*), and vireos (Vireonidae, genus *Vireo*), to name a few. Our work involves phylogenetic analysis of genome-wide DNA sequences derived from fresh tissues, morphometric analysis, stable isotope analysis, and studies of internal anatomy. These studies test hypotheses about evolutionary history and the mechanisms that drive biogeographic patterns in birds and their parasites and reveal new information about ecological relationships and adaptive morphology.

Regional impacts via long-term monitoring of biodiversity and the chemical environment

Museum collections are a critical resource that enables long-term monitoring of wildlife species and the chemical environments they inhabit. Our collecting activities seek to broadly sample birds and their parasites across many decades. We focus primarily on collecting specimens

during the breeding and non-breeding seasons, when the organisms are relying on local habitats to survive and reproduce. We believe that responsibly building the DMNH collection, with general collecting across taxonomic groups, is a necessary strategy for realizing long-term conservation goals, to provide a baseline of data for future conservationists. Formerly, the DMNH egg collection was used to identify and diagnose the long-term effects of DDT contamination on wild bird populations. A conservation success story that would not have been possible had it not been for sustained general collecting efforts across multiple decades. Salvaged materials (e.g., migratory birds that hit windows) are also valuable, but for several reasons are insufficient for preserving the data necessary to detect long-term trends in local ecosystems.

Broader impacts for the international research community

All specimens collected during our proposed activities will be deposited in the DMNH scientific collections, where they will be made available to other researchers in perpetuity. New specimens added to the DMNH collection are prepared using modern methods (see below) and data associated with each specimen are disseminated through public portals such as Vertnet (http://vertnet.org/) and ParaSite (ParaSite.fieldmuseum.org). These specimens are also available on request for destructive sampling (e.g., muscle tissue for DNA sequencing or contaminant screening; feathers for stable isotope analysis; study skins for plumage color analysis; etc.) and a wide array of research applications.

METHODS

Avian specimen collection

Because of the taxonomic breadth of our proposed collecting activities, we cannot predict when, where, or what species will be vouchered into our collection over the next permit cycle. Therefore, to whatever extent possible, we request that Maryland DNR approve the take limits and terms of our USFWS permit. Because we intentionally spread out our collecting efforts geographically, to minimize (nullify) the effect of our activities on local populations, we are requesting permission to operate statewide in Wildlife Management Areas, Natural Resource Management Areas, Natural Environment Areas, and State Forests.

The research we support requires dead and preserved museum specimens. As such, lethal methods must be used and there are no nonlethal methods that would work in our situation. We do not intend to hold live birds for release back into the wild. We employ two methods of lethal collection: rapid cardiac compression and firearms (shotgun). When we use mist nets to capture live birds, any individuals that will not be collected will be immediately released from the net. A few netted birds will be physically collected as voucher specimens and we employ rapid cardiac compression as the euthanasia method. Nets are checked every 15-20 minutes, run during daylight hours, in suitable weather conditions. Our collecting numbers are so low that we anticipate no impact on breeding species. In general, we avoid collecting species of conservation concern or with small local populations, but if we do it will be in very low numbers and spread out geographically to minimize impact on population structure. In all such cases we will strictly adhere to the guidelines outlined in our USFWS and state permits, and file reports to Federal and state agencies on an annual basis.

Many layers of data will be collected for each bird, including taxonomic identity (to subspecies level), weight, sex, molt pattern, fat levels, soft part colors, stomach contents, age (as determined via plumage, skull pneumatization, and the presence or absence of a “bursa”), and collecting

locality (obtained via GPS). We take a suite of measurements from each bird, before the specimen is prepared, including wingspan, wing length, Kipp's distance (i.e., the distance between the longest secondary and primary feathers on the wing), tail length, and tarsometatarsus length. We are also recording the mass of the heart and each eye, with an extremely sensitive and accurate scale (0.0001 g accuracy). We sample and preserve frozen muscle, liver, and heart tissues for use by researchers studying population genetics, phylogenetics, phylogeography, and conservation biology. Data derived from these specimens are also used to further our knowledge about avian distributions, annual cycles, diet, pesticide contamination, stable isotope variation, general physiology, and molt, among other topics. All specimens are permanently vouchered, catalogued, and databased in the DMNH collection for use by the scientific community.

Parasite specimen collection

We follow parasite sampling protocols outlined in Lutz et al. (2017), which characterize the prevalence (number of hosts infected), intensity (parasite load), and diversity of haematozoan parasites, ectoparasites (e.g., feather chewing lice, hipposboscid flies, ticks, and mites), and endoparasites (e.g., nematodes, cestodes, and acanthocephalans). These methods ensure that specimens from each of these parasite groups (and their avian hosts) can be used for both morphological and molecular analyses. Fresh blood is drawn via brachial venipuncture, stored in lysis buffer, and frozen for long term storage. Blood droplets are also smeared on microscope slides in the field and immediately fixed with pure Methanol. Lice are collected from freshly-dead bird specimens using the ethyl acetate fumigation and ruffling method (Clayton & Drown, 2001). Each bird specimen is immediately placed in a plastic bag after collection and frozen until dissection. Parasites are stored in 95% ethanol and frozen, to permit extraction of total genomic DNA from individuals.

Summary

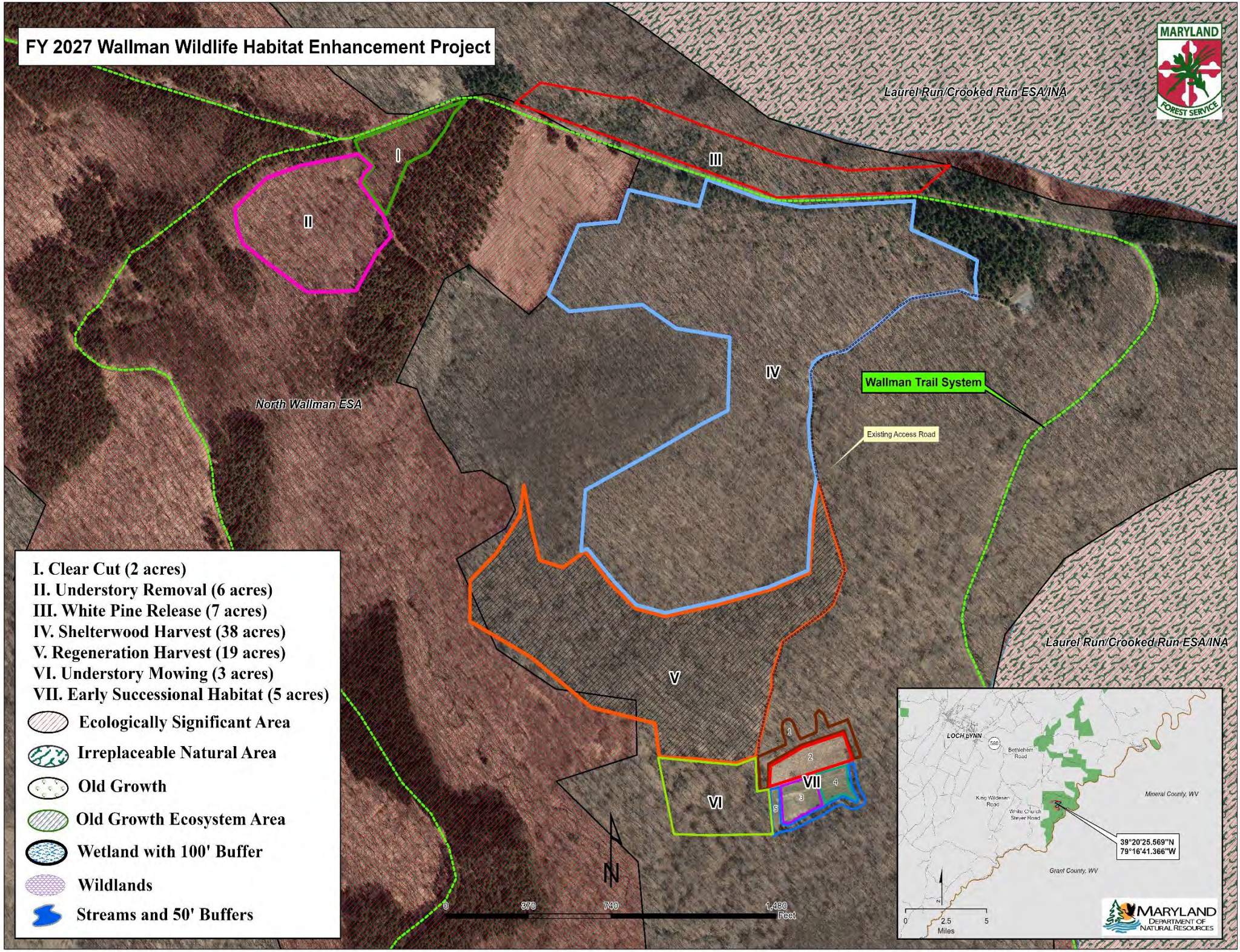
The DMNH Bird Department wishes to expand its active collecting program to Maryland, as outlined in USFWS Permit Number MBPER0036206, to achieve interrelated goals that support evolutionary and ecological research, and long-term biodiversity and environmental monitoring. These projects rely on broadly sampled general collections of avian hosts, which have been carefully sampled for their communities of ecto- and endoparasites. We are committed to making all specimens collected as part of our work (both host and parasite) available to the international research community and regional conservation officials.

X. Silvicultural Proposals

Compartments 23 and 25 Multiple Stands - 80-acre Wildlife Habitat Enhancement Project

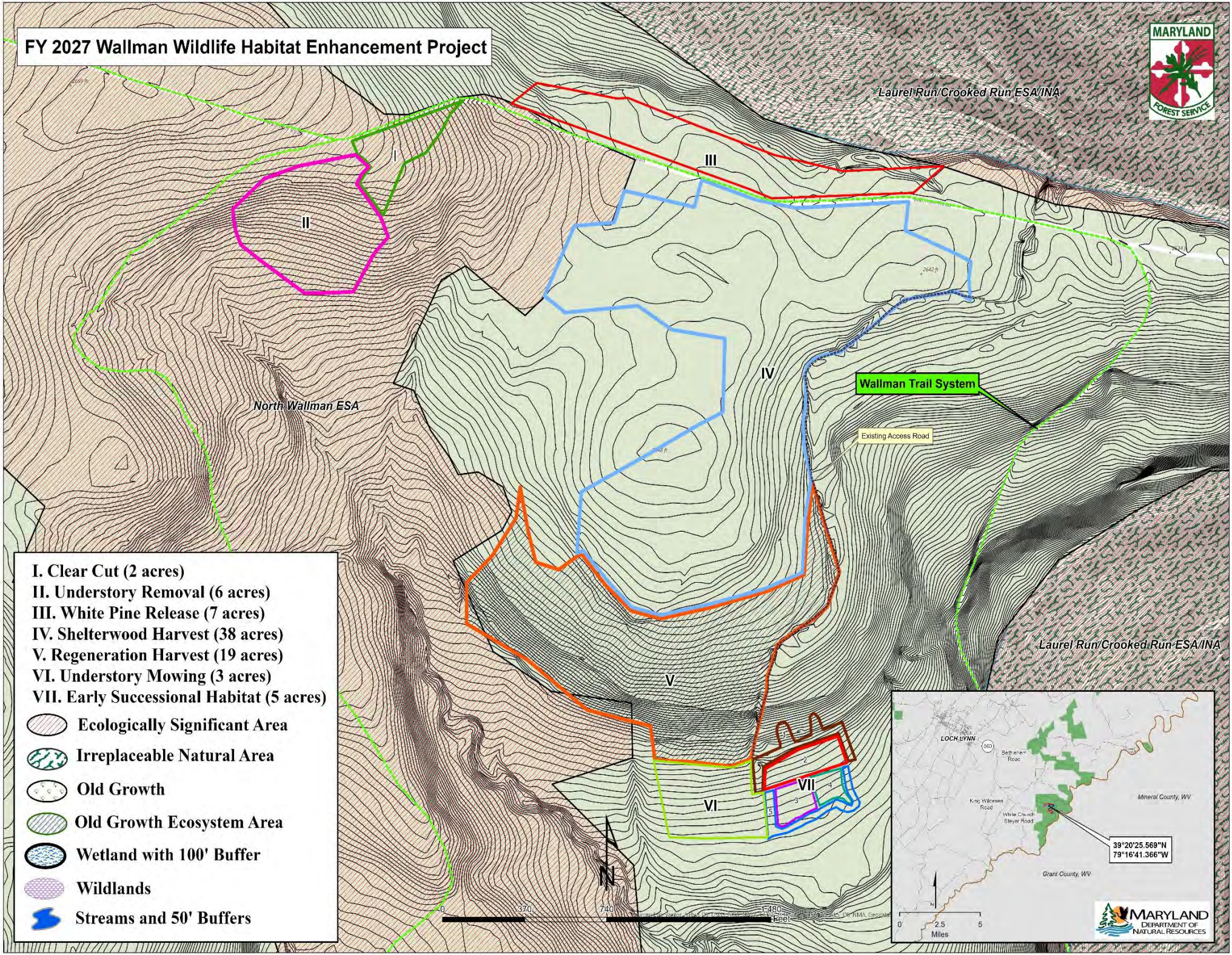
This multi-stand project in the Laurel Run/Wallman Complex of Potomac State Forest will incorporate a multitude of silvicultural techniques to create a wildlife habitat mosaic ranging from early successional habitat creation/maintenance to a shelterwood harvest of mature sawtimber.

FY 2027 Wallman Wildlife Habitat Enhancement Project



I. Clear Cut (2 acres)
II. Understory Removal (6 acres)
III. White Pine Release (7 acres)
IV. Shelterwood Harvest (38 acres)
V. Regeneration Harvest (19 acres)
VI. Understory Mowing (3 acres)
VII. Early Successional Habitat (5 acres)

- Ecologically Significant Area
- Irreplaceable Natural Area
- Old Growth
- Old Growth Ecosystem Area
- Wetland with 100' Buffer
- Wildlands
- Streams and 50' Buffers


FY 2027 Wallman Wildlife Habitat Enhancement Project
MARYLAND FOREST SERVICE
Laurel Run/Crooked Run ESA/INA
North Wallman ESA
Wallman Trail System
Existing Access Road
I
II
III
IV
V
VI
VII
I. Clear Cut (2 acres)
II. Understory Removal (6 acres)
III. White Pine Release (7 acres)
IV. Shelterwood Harvest (38 acres)
V. Regeneration Harvest (19 acres)
VI. Understory Mowing (3 acres)
VII. Early Successional Habitat (5 acres)
Ecologically significant Area
Irreplaceable Natural Area
Old Growth
Old Growth Ecosystem Area
Wetland with 100' Buffer
Wildlands
Streams and 50' Buffers
0
370
740
1,480
Feet
LOCH LYNN
Bethlehem Road
King Wilcesen Road
White Church Steyer Road
Mineral County, WV
Grant County, WV
39°20'25.569"N
79°16'41.366"W
0
2.5
5
Miles
MARYLAND DEPARTMENT OF NATURAL RESOURCES

I & II. COMPARTMENT 25 - Stands 18/19 HCVF **FY-27**
(PG-27-S-01, PG-27-S-02)

Description/Resource Impact Assessment

Location: The 2-acre and 6-acre harvest proposals are located on the south side of the intersection of Wallman Road and Loop Road in the Wallman/Laurel Run Complex.

Forest Community Type and Condition: Unit I is a 2-acre small sawtimber stand dominated by black cherry (67%) interspersed with red maple (20%) a small component of northern red oak (7%) that naturally colonized the area after the failure of a mixed conifer plantation. The average relative density of the site is 65% with an average basal area of 113 ft^2/acre and an average merchantable diameter of 11 inches. Unit II consists of medium sawtimber with an average basal area of 94 ft^2/acre and an average merchantable diameter of 16.4 inches. The overstory consists of white oak (32%), red maple (21%) and hickory (19%). A thinning was conducted in 1998, and the stand remains understocked with a relative density of 42%.

Interfering Elements: Minimal interfering vegetation was found within Unit I, and no Non-Native Invasive Species were recorded within the management unit. The understory and mid-canopy of Unit II are dominated by tall woody interference, covering 75% of the site. Field evaluation of the sites estimated deer browse impact to be moderate. Over browsing can facilitate failure of desirable seedling establishment and in extreme cases a shift in species composition dominated by undesirable tree species. Monitoring deer browsing impacts will coincide with regeneration surveys to determine if additional measures need to be implemented to reduce deer herbivory and maintain the established regeneration on the site.

Historic Conditions: Neither evidence of fire nor any signs of significant insect infestations were observed during the inventory of the stands. A thinning harvest was conducted in Stand II in 1998.

Rare, Threatened and Endangered Species: This area has a history of containing critical habitat for a State Endangered avian species that was first discovered in 2001 and last recorded as using the area in 2006. In cooperation with Wildlife and Heritage personnel, preferred tree species and canopy structures were identified in the adjacent hardwood and conifer stands and subsequent thinnings were conducted in accordance with the accepted best management practices for the raptor.

Habitats and Species of Management Concern: This harvest proposal is located within the North Wallman Woods ESA. The 228-acre ESA is home to a state endangered bird and state threatened plant species. Heritage staff will be consulted on the layout of the project to ensure that appropriate measures are implemented to protect the unique qualities of these sites.

Water Resources: These management units drain southeast into an unnamed tributary of the Potomac River, within the Potomac 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: The underlying soil type for both stands 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: No developed recreational resources are located within these stands; however, the stands border the Wallman Road ORV Trail and recreational opportunities may be disrupted for the duration of the harvest 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 areas.

Management and Silvicultural Recommendations

Due to the pervasive presence of black knot in the black cherry population, only 33% of Stand I is considered acceptable growing stock. The silvicultural recommendation for the stand is a clearcut, with retention focused on mast producing species. The understory and mid-canopy of Stand II are dominated by tall woody interference, covering 75% of the site. An understory removal will be implemented on undesirable interfering stems up to 10 inches DBH to facilitate the establishment of desirable regeneration.

Ideally, the harvests will be carried out by Appalachian Crossroads as In-Kind firewood harvests. If Appalachian Crossroads is unable to take on the project, Potomac-Garrett State Forest staff will implement the prescription.

III. COMPARTMENT 23– Stand 2 **FY-27**
(PG-27-S-03)

Description/Resource Impact Assessment

Location: This 7-acre harvest proposal is located on the north side of Wallman Road, approximately 1.0 mile east of the intersection with Laurel Run Road in the Wallman/Laurel Run Complex.

Forest Community Type and Condition: Covering 7 acres, this stand has the unique feature of a white pine dominated understory with a hardwood overstory consisting of northern red oak (31%), white oak (29%) and red maple (20%). The stand is slightly overstocked with a relative density of 74% and an average basal area of 113 ft^2/acre.

Interfering Elements: Overall interfering understory competition is minimal within the stand. White pine regeneration is relatively dense, limiting competition from non-desirable species. No Non-Native Invasive Species were recorded within the management unit.

Historic Conditions: This stand was thinned in 2000. 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: The management unit is located within the Laurel Run/Crooked Run ESA. This ESA has a variety of habitats which support several rare and uncommon flora and fauna. There is also a stand of old growth forest, rugged rock outcrops, and splendid scenery along the Potomac River. Eight species of uncommon or rare plants have been documented within the site.

The rare animals within the site include three species of butterflies, one reptile, one breeding bird, and three mammals. One butterfly is State listed as Endangered, another is listed as Threatened, and the other is proposed to be listed as Threatened. The bird is a rare breeder in Maryland. The reptile is a sensitive species which has unique threats to its continued existence. The three mammals documented from this ESA are all State listed. One is listed as Endangered, one is Threatened, and one is listed as In Need of Conservation. As with some of the rare plants in this ESA, the sites for at least four of the rare animals represent some of the most important sites for that species in the State. Also, the habitat for the sensitive reptile is unique in Maryland.

Water Resources: The management unit drains north into Laurel Run, within the Potomac 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: The harvest site is underlain with soil designated as Dekalb and Gilpin very stony silt loams, 0 to 15 percent slopes (DgC). These soils are moderately deep and well drained.

Equipment limitations are slight to moderate. The site has good productivity for woodland management, with a site index of 65-75 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: No developed recreational resources are located within this stand. Hunting is the primary recreational pursuit occurring in this area. Recreational opportunities may be disrupted for the duration of the harvest activities and access to the site may be limited or restricted depending on the timing of the mowing project.

Management and Silvicultural Recommendations

The emphasis of this silvicultural project is to release the white pine and create a mixed hardwood conifer stand. Approximately 40% of the hardwood overstory will be removed, providing sufficient growing space for the white pine while limiting the susceptibility of the trees to insect infestation, particularly from white pine weevil. Removals will consist primarily of unacceptable growing stock.

IV. COMPARTMENT 25 – Stand 23 **FY-27**
(PG-27-S-04)

Description/Resource Impact Assessment

Location: This 38-acre harvest proposal is located 100' south of Wallman Road, approximately 1.0 miles east of the intersection with Laurel Run Road in the Wallman/Laurel Run Complex.

Forest Community Type and Condition: Management Unit IV is comprised of red maple (37%), northern red oak (19%), scarlet oak (17%) and white oak (15%) with an average basal area of 118 ft^2/acre. Nearly half of the stand (57.5 ft^2/acre, 49%) is considered unacceptable growing stock. The stand is slightly overstocked at 72% relative density with an average merchantable diameter of 15.9 inches.

Interfering Elements: Tall and low woody interference is found across 52% and 26% of the stand respectively, and grass and ferns do not pose a significant impediment to regeneration. Desirable saplings are found throughout the stand. No Non-Native Invasive Species were recorded within the management unit.

In addition to interfering vegetation, the presence of white-tailed deer can have a negative influence on the regeneration success of the stand. Over browsing can facilitate failure of desirable seedling establishment and in extreme cases a shift in species composition dominated by undesirable tree species. Field evaluation of the site estimated deer browse impact to be moderate. Monitoring of deer browsing impacts will coincide with future regeneration surveys to determine if additional measures need to be implemented to reduce deer herbivory and increase the likelihood of regeneration establishment on the site.

Historic Conditions: The eastern portion of this stand was thinned in 1991. 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: This stand is located within the Laurel Run/Crooked Run ESA. The ESA has a variety of habitats which support several rare and uncommon flora and fauna. There is also a stand of old growth forest, rugged rock outcrops, and splendid scenery along the Potomac River. Eight species of uncommon or rare plants have been documented within the site.

The rare animals within the site include three species of butterflies, one reptile, one breeding bird, and three mammals. One butterfly is State listed as Endangered, another is listed as Threatened, and the other is proposed to be listed as Threatened. The bird is a rare breeder in Maryland. The reptile is a sensitive species which has unique threats to its continued existence. The three mammals documented from this ESA are all State listed. One is listed as Endangered, one is Threatened, and one is listed as In Need of Conservation. As with some of the rare plants

in this ESA, the sites for at least four of the rare animals represent some of the most important sites for that species in the State. Also, the habitat for the sensitive reptile is unique in Maryland.

Water Resources: This management unit drains southeast into the Potomac River, within the Potomac 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: The harvest site is underlain with soils designated as Dekalb and Gilpin very stony loams, 15 to 25 percent slopes (DgD). This soil is moderately deep and well drained. Equipment limitations are slight to moderate and erosion hazard is moderate on steeper slopes. The site has good productivity for woodland management, with a site index of 65-75 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 stand abuts the Wallman Road ORV Trail to the north and a primitive campsite is found within the northwestern section. A minimum 100' buffer will be placed around the perimeter of campsite. In the remainder of the stand, hunting is the primary recreational pursuit occurring in this area. Recreational opportunities may be disrupted for the duration of the harvest activities and access to the site may be limited or restricted depending on the timing of the mowing project.

Management and Silvicultural Recommendations

To protect the acceptable regeneration that is present while providing ample light for optimum growth, a shelterwood harvest will be conducted, leaving 50 – 60 ft^2/acre of basal area and requiring high tops and slash to be left on site to provide for the advancement and establishment of acceptable regeneration and to protect the cohort from herbivory. Retention will focus on dominant/codominant trees selected for mast production and seed sources. The seed cut will be followed by a final harvest in five to ten years, depending on the advancement of adequate desirable competitive regeneration.

V. COMPARTMENT 25 – Stand 24 **FY-27**
(PG-27-S-05)

Description/Resource Impact Assessment

Location: This harvest proposal is located south of Wallman Road, approximately 1.0 miles east of the intersection with Laurel Run Road and adjoins the southern end of Stand IV in the Wallman/Laurel Run Complex.

Forest Community Type and Condition: This large sawtimber Allegheny hardwood stand covers approximately 19 acres, consisting of red maple (40%), black cherry (23%), sugar maple (10%) and scarlet oak (10%). The average basal area is 103 ft²/acre, but only 44 ft²/acre considered acceptable growing stock. The stand is understocked at 60% relative density with an average merchantable diameter of 17.1 inches.

Interfering Elements: No Non-Native Invasive Species were recorded within the management unit. In addition to interfering vegetation, the presence of white-tailed deer can have a negative influence on the regeneration success of the stand. Over browsing can facilitate failure of desirable seedling establishment and in extreme cases a shift in species composition dominated by undesirable tree species. Field evaluation of the site estimated deer browse impact to be moderate. Monitoring of deer browsing impacts will coincide with future regeneration surveys to determine if additional measures need to be implemented to reduce deer herbivory and increase the likelihood of regeneration establishment on the site.

Historic Conditions: Harvest records indicate that no silvicultural management has occurred within the stand while under state ownership. 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: This harvest proposal borders the North Wallman Woods ESA to the west. The 228-acre ESA is home to a state endangered bird and state threatened plant species. The rare animals within the site include three species of butterflies, one reptile, one breeding bird, and three mammals. One butterfly is State listed as Endangered, another is listed as Threatened, and the other is proposed to be listed as Threatened. The bird is a rare breeder in Maryland. The reptile is a sensitive species which has unique threats to its continued existence. The three mammals documented from this ESA are all State listed. One is listed as Endangered, one is Threatened, and one is listed as In Need of Conservation. As with some of the rare plants in this ESA, the sites for at least four of the rare animals represent some of the most important sites for that species in the State. Also, the habitat for the sensitive reptile is unique in Maryland. No harvest activity will occur within the ESA.

Water Resources: This management unit drains south into an unnamed tributary of the Potomac River, within the Potomac 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: The harvest site is underlain with soil designated as Dekalb and Gilpin very stony silt loams, 0 to 15 percent slopes (DgC). These soils are moderately deep and well drained. Equipment limitations are slight to moderate. The site has good productivity for woodland management, with a site index of 65-75 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: No developed recreational resources are located within this stand. Hunting is the primary recreational pursuit occurring in this area. Recreational opportunities may be disrupted for the duration of the harvest activities and access to the site may be limited or restricted depending on the timing of the mowing project.

Management and Silvicultural Recommendations

Given the lack of adequate acceptable growing stock, further management of the stand is not warranted, and the stand will be regenerated via a variable retention harvest. All trees greater than two inches DBH will be harvested to contribute desirable coppice toward the overall stocking of the future stand. Retention will focus on four to eight dominant or codominant trees per acre selected for mast/seed production sources or wildlife habitat elements including cavities, den trees and nesting sites. Contract specifications will require high slash to remain on the harvest site to deter deer browsing on developing seedlings and stump sprouts.

VI and VII. COMPARTMENT 25 - Stand 25 **FY-27**
(PG-27-S-06, PG-27-S-07)

Description/Resource Impact Assessment

Location: This early successional habitat proposal is located at the southern end of Unit V in the Wallman/Laurel Run Complex and is accessible via an existing forest road off the Wallman Road ORV Trail.

Forest Community Type and Condition: Unit VI is a 3-acre medium sawtimber Allegheny hardwood stand with an average basal area of 92 ft^2/acre and relative density of 61%. Following a thinning in 2001, a dense cohort of undesirable tall woody vegetation, predominantly comprised of black birch poles and saplings, has overtaken the understory and mid-canopy, occupying over 65% of the stand as tall woody interference.

Unit VII is a 5-acre existing opening that has previously been maintained for early successional habitat. Five distinct areas have been identified with a unique management goal for each.

Interfering Elements: Several NNIS species have been identified within the management units, including Japanese barberry and multiflora rose. Herbicide applications will be administered, where practical, to prevent the spread of these deleterious species into the adjacent forestland.

Historic Conditions: Both units are included as parts of Stand 25, which was thinned in 2001. Neither evidence of fire nor any signs of significant insect infestations were observed during the inventory of the stands.

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: There are no known habitats or species of management concern within Units VI or VII.

Water Resources: These management units drain south into an unnamed tributary of the Potomac River, within the Potomac 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: The dominant soil type of the management units is categorized as Cookport and Ernest very stony silt loams, 0 to 8 percent slopes (CuB). This soil is moderately deep and moderately well drained. Equipment limitations are moderate because the water table is close to the surface during the winter and spring. The site has very good productivity for woodland management, with a site index of 75 - 85 for 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: No developed recreational resources are located within this stand. Hunting is the primary recreational pursuit occurring in this area. Recreational opportunities may be disrupted for the duration of the harvest activities and access to the site may be limited or restricted depending on the timing of the mowing project.

Management and Silvicultural Recommendations

As an alternative to herbicide applications, which have consistently failed to facilitate the establishment of acceptable desirable regeneration, a contractor will be hired to mow the interfering vegetation in Unit VI with a rotary cutter/mulcher. All felled material will be left on site to provide developing regeneration protection from herbivory. 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.

Early successional habitat management will continue in Unit VII according to the following schedule:

1. Edge Cut Every 5 -10 Years; ½ to 1 ½ chains wide.
2. Black locust meadow, warm season grass maintenance.
3. Annual mowing; maintenance/expansion of existing milk weed colony.
4. Clover management area; annual mowing/selective herbicide applications, reseed every 3-5 years.
5. Mow every 2-3 years; control thistle population.

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-2027. Currently, budget trends remain unchanged, meaning that the appropriation that was available in FY-2026 will be similar for FY-2027.

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 provide sufficient funds for large scale projects. 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.

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 - *$470,283.00*

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-2027 budget proposal was prepared in August of 2025.

▪ *Classified Salaries, Wages and Benefits: $342,094.00*
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: $53,921.00*
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: $74,268.00*
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 of 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*
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**
2024	**630,000 BD FT**	**618,176**	**$189,732.00**
2025	**300,000 BD FT**	**171,260**	**$70,602.00**

Appendix 2: 2025 Forest Stewardship Council Audit Action Plan

Maryland Department of Natural Resources Forest Service
2025 Audit Summary

Date of Field Evaluation: April 7-11, 2025
Locations: Potomac-Garrett, Savage River and Green Ridge State Forests
Surveillance Audit

Audit Team: Sarah Bros (Lead Auditor), Raymond Lamberton (Auditor)

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: 2025 Sustainable Forestry Initiative Audit Action Plan

Maryland Department of Natural Resources Forest Service
2025 Audit Summary

Date of Field Evaluation: April 7-11, 2025.
Locations: Potomac-Garrett, Savage River and Green Ridge State Forests
Surveillance Audit

Audit Team: Sarah Bros (Lead Auditor), Raymond Lamberton (Auditor)

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.

Appendix 4: Interdisciplinary Team Review and Comments

Appendix 5: Citizens Advisory Committee Review and Comments

Appendix 6: Public Comments

XII. Literature Cited

Halley, Dr. Matthew R. 2025. *Long-term Monitoring of Wild Bird Populations and Their Parasites.* Project Number:2025DNR202. Delaware Museum of Nature and Science. Wilmington, DE.

Kuhn, Craig. 2025. *Spongy Moth Suppression Project – Multiple State Lands.* Project Number: 2025DNR149. Maryland Department of Agriculture. Annapolis, MD.

Mathews, Gregory. 2025. *Maryland Biological Stream Survey – Additional Random Site Sampling.* Research Proposal, Project Number: 2025DNR092. Maryland Department of Natural Resources – Resource Assessment. Annapolis, MD.

Mullinax, Dr. Jennifer M. 2025. *Black Bear Hair Snare – Multiple Land Units.* Research Proposal, Project Number: 2025DNR173. University of Maryland Department of Environmental Sciences and Technology. College Park, MD.

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

Seldes, Max. 2025. *Salamander Scientific Collection on Maryland DNR Managed Properties.* Research Proposal, Project Number: 2025DNR240. George Washington University. Washington, DC.

Zagorski, Megan. 2025. *Bat Surveys on State Land in Western Maryland. Research Proposal*, Project Number: 2025DNR089. Maryland Natural Heritage Program. Annapolis, MD.

Zagorski, Megan. 2025. *Western Region Woodrat Surveys.* Research Proposal, Project Number: 2025DNR090. Maryland Natural Heritage Program. Annapolis, MD.