

Youghiogheny River Lake Master Plan



Youghiogheny River Lake
Master Plan

The attached Master Plan for Youghiogheny River Lake is in compliance with ER/EP 1130-2-550, Project Operations, Recreation Operations and Maintenance Policies. No further action is required.

Master Plan is approved.



ADAM J. CZEKANSKI
Colonel, Corps of Engineers
Commanding

Executive Summary

A Master Plan is required for each Civil Works Project and all fee-owned lands for which the U.S. Army Corps of Engineers (Corps) has administrative responsibility. It serves as a strategic land-use management document that guides the comprehensive management and development of all recreational, natural, and cultural resources throughout the life of the Project, anticipating what could and should happen at the Corps Project while remaining flexible enough to address changing conditions.

The primary goals of this 2021 revision of the Youghiogheny River Lake (Project) Master Plan, are to prescribe an overall strategic land use management plan, resource objectives, and associated design and management concepts, which: 1) use sound environmental principles to protect and enhance public lands; 2) cultivate volunteers, public-private partnerships, and apply for grants; 3) provide safe and memorable connections as part of multiple destination points; and 4) leverage emerging technology to tell the Corps' story and enhance visitor experiences.

Upon completion of this Master Plan, Operational Management Plans (OMPs) will be executed yearly, reflecting the resource objectives outlined in this Plan. OMPs implement the resource objectives and development needs identified in the Master Plan. The below table reflects the years in which key resource objectives should be implemented.

Resource Objectives for Youghiogheny River Lake

Five Year	Ten Year	Conditions Based Actions**
Regular dam tours are established	Security features are enhanced	Oil, gas, and coal mining are leveraged and mitigated
All fee and flowage boundaries are surveyed and marked	Update Forest, Fish, and Wildlife Management Plan	Endangered species conservation methods
Volunteers are working at the Project in multiple capacities	Updated Cultural Resource Management Plan	Invasive species control methods
Biological and cultural resources are inventoried and documented	Degraded facilities have been identified and divestment options have been considered*	Climate change impacts

*This will require external support (i.e. budgeting decisions through executive assistance).

**Condition Based Actions will be evaluated as new requests or as information becomes available.

This Master Plan lays out future recommendations for the management of both recreation and natural resources at the Project with an emphasis on conserving our resources and responding to community needs.

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1. Project Authorization

The construction of the Project was authorized by the Flood Control Act of 1938. Authorizations subsequent to construction (Table 1-1, full list in Appendix A) provided incidental benefits, including fish and wildlife management and recreational uses of the impoundments and Project lands.

Table 1-1. Project Purposes and Authorities

Operating Purpose	Authority	Citation
Flood Control	Flood Control Act of 1936	PL 74-738
Flood Control	Flood Control Act of 1938	PL 75-761
Water Quality	Flood Control Act of 1938	PL 74-738
	Flood Control Act of 1938	PL 75-761
	Clean Water Act	PL 92-500
Fish and Wildlife	Fish and Wildlife Coordination Act	PL 85-624
Recreation	Flood Control Act of 1944	PL 78-534
Recreation	Water Resources Development Act of 1988	PL 100-676
Water Supply	Flood Control Act of 1936	PL 74-738
	Flood Control Act of 1938	PL 75-761

1.1 Project Purpose

The Project is authorized for flood control along the Youghiogheny, Monongahela, and Ohio River Valleys. Additional operating purposes are listed in Table 1-1 above; however, storage is only allocated for flood control, water quality control, and water supply. A non-federal hydropower facility exists at the Project and reservoir releases are communicated through this facility daily. See Appendix B, Plate 1 for the Watershed map which shows the basins that feed into the reservoir.

1.2 Watershed and Project Description

The Project is situated in Pennsylvania and Maryland, approximately 50 miles from Morgantown, WV, and 75 miles from Pittsburgh, PA. See Appendix B, Plate 2 for Project Overview and Transportation Corridors map. Table 1-2 below refers to target reservoir elevations throughout the year.

Table 1-2. Reservoir Information

Pool	Elevation (ft NAVD88)	Storage (ac-ft)
Minimum	1,343.4	5,070
Winter Conservation	1,418.4	100,400
Summer Conservation	1,438.4	151,800

Full	1,469.4	250,600
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The Project covers of a total of 4,323.18 acres. That acreage includes land held in fee, land subject to flowage and operations easement, and land subject to the federal navigational servitude. Near the dam, the Corps maintains a Project office, ranger office, public restroom, two maintenance buildings and two government dwellings. The Project also operates the Outflow Recreation Area, Mill Run Recreation Area, Somerfield North Recreation Area, and the Spillway Recreation Area.

The Corps leases 2,784.4 acres of Project lands and waters to the Pennsylvania Fish and Boat Commission (PAFBC), Maryland Department of Natural Resources (Maryland DNR), Laurel Highlands Outdoor Center (Yough Lake Campground), Leskinen Enterprises LCC (Yough Lake Marina), and the Town of Friendsville. Appendix B, Plate 3 shows the Boundary map for the Project.

Table 1-3. Outgrant Areas

Grantee	Type	Acres
Pennsylvania Fish and Boat Commission	Recreation/Wildlife	1,879.8
Maryland Department of Natural Resources	Wildlife	829.3
Laurel Highlands Outdoor Center	Recreation	55.4
Leskinen Enterprises LLC	Recreation	10.8
Town of Friendsville	Recreation	9.1

1.3 Listing of Pertinent Project Information

While the Master Plan is focused on management of land and water surface area related to Project purposes, the following information is provided to aid in understanding Project information regarding water storage levels and Project construction (Table 1-4, below).

Table 1-4. Project Information

Project Attribute	Description
Avg. Annual Rainfall	45 in.
Drainage Area	434 sq. miles
Construction Began	1943
Construction Completed	1948
Dam Type	Rolled earth fill with an impervious core
Dam Length	1,610 ft.
Dam Width at the Top	25 ft.
Spillway Width	344.4 ft.

Outlet Works	3 sluices (4.3 ft. x 20 ft.), tunnel (concrete with steel lined sleeve)
Highest Inflow Recorded	27,000 c.f.s. (October 15, 1954)
Highest Outflow Recorded	13,700 c.f.s. (March 5, 1948)
Highest Elevation (NAVD 88)	1,460.30 ft. (April 2, 1993)

1.4 Purpose and Scope of the Master Plan

This Master Plan presents updated land classifications, management objectives, resource plans, and recommendations for the management of Project lands and waters to meet current and future needs. It is a vital tool for the responsible stewardship of Project resources for the benefit of present and future generations, guiding the comprehensive management and development of the natural, cultural, and man-made resources at the Project.

This Master Plan takes into consideration regional and local needs, resource capabilities, suitability, and expressed public interests consistent with authorized Project purposes, pertinent legislation, applicable regulations, national objectives, and other state and regional goals and programs. The Master Plan is distinct from the Operational Management Plan (OMP). Specifically, policies in the Master Plan are guidelines implemented through provisions of the OMP and the Annual Work Plan. A Master Plan is the strategic land use management document that guides the comprehensive management and development of all Project recreational, natural, and cultural resources throughout the life of the Project. OMPs implement the resource objectives and development needs identified in the Master Plan. Annual Work Plans are a description of management tasks and initiatives, complete with labor, material, and cost requirements to be completed for use in the current fiscal year. The Annual Work Plan is synonymous with the current fiscal year plan in the OMP.

1.5 Management Goals

This section sets forth goals and objectives necessary to achieve the vision for the future of the Project. In the context of this Master Plan, goals express the overall desired end state of the cumulative land and recreation management programs, whereas resource objectives specify task-oriented actions necessary to achieve the Master Plan goals. The following goals are the priorities for consideration when determining resource objectives and development activities.

1. Use sound environmental principles to protect and enhance public lands.
2. Cultivate volunteers, public-private partnerships, and apply for grants.
3. Provide safe and memorable connections as part of multiple destination points.
4. Leverage emerging technology to tell the Corps' story and enhance visitor experiences.

Implementation of these goals is dependent upon time, manpower, and budget. These goals will be pursued through the use of a variety of mechanisms such as: volunteer efforts, hired labor, contract labor, permit conditions, remediation, and special lease conditions.

The Corps management activities are guided by Corps-wide Environmental Operating Principles (EOPs) in accordance with ER 200-1-5. The EOPs are as follows:

1. Strive to achieve environmental sustainability. An environment maintained in a healthy, diverse, and sustainable condition is necessary to support life.
2. Recognize the interdependence of life and the physical environment.
3. Proactively consider environmental consequences of Corps programs and act accordingly in all appropriate circumstances.
4. Seek balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another.
5. Continue to accept corporate responsibility and accountability under the law for activities and decisions under our control that impact human health and welfare and the continued viability of natural systems.
6. Seek ways and means to assess and mitigate cumulative impacts to the environment; bring system approaches to the full life cycle of our processes and work.
7. Build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of our work.
8. Respect the views of individuals and groups interested in Corps activities; listen to them actively, and learn from their perspective in the search to find innovative win-win solutions to the nation's problems that also protect and enhance the environment.

1.6 Resource Objectives

Resource Objectives are defined as clearly written statements that both respond to identified issues and specify measurable and attainable activities for resource development and/or management of the lands and waters under Corps jurisdiction. Resource Objectives provided in this section are established to provide high levels of stewardship to managed lands and resources, while simultaneously providing a high level of public service.

Each of the following Resource Objectives has a current and future component (see below, Table 1-5 through Table 1-8). The current component is the near-term focus of the current Master Plan and is the impetus of efforts of this review cycle (i.e. five years). The future component is the long-term focus to be addressed in subsequent reviews (i.e. ten years).

Table 1-5: Goal 1: Use sound environmental principles to protect and enhance public lands¹

Management and Development Activity	Five-year	Ten-year	Desired State
Inventory natural and cultural resources	Biological and cultural resources are inventoried and documented (E)	Operational Geospatial Database for Natural and Cultural Resources developed (E)	Completed and maintained biological/cultural resource inventory and associated management plans
	Operational Management Plan updated, and Annual Work Plans implemented (S&E)	Information within the database is registered with the State Historic Preservation Office (SHPO) (E)	
Identify threats (i.e. erosion, terrestrial & aquatic invasive species)	Implement erosion and pollution (light, noise, air, water) control methods and waste management (E)	Develop an Invasive Species Management Plan (E)	Conservation and enhancement of Project lands and waters
Achieve and maintain desired natural and cultural resource conditions	Specific conservation organizations (federal and state agencies, academia, non-profits) are engaged (S&E)	Working relationships with federal, state, academia, and NGOs have been utilized to achieve these conditions (S&E)	Increased stakeholder buy-in and protection of the resources in and surrounding the Project
	Project staff are sent to applicable trainings to enhance knowledge of natural and cultural resource management (S&E)		
	Available skill sets and equipment across Projects are leveraged (S&E)		
	Annual working meetings with partners are being held (S&E)	Update Forest, Fish, and Wildlife Management Plan to include items such as: best management practices for timber; protection of shoreline buffers for wildlife and water quality; protection of Corps owned and managed riparian habitat; protection of contiguous habitat corridors; protection of viewsheds (S&E)	
	Identify water quality and fish habitat improvement techniques and better manage walleye population (S&E)		
	Establish spawning grounds for fish to include floating islands and suspended fish habitat structures (E)		

¹ S – Sustain
E – Establish

Table 1-6: Goal 2: Cultivate volunteers, public-private partnerships, and apply for grants¹

Management and Development Activity	Five-year	Ten-year	Desired State
Partnering for a shared public land management ethic	Opportunities with community action groups, local recreational clubs, and other Corps resources (such as Friends of Yough, Yough Walleye Association, Confluence Bureau of Tourism, Turkeyfoot Historical Society, Chestnut Ridge Trout Unlimited, Wounded Warriors, Lions Club, local Boy Scout troops, etc.) are initiated (S&E)	Appropriate Partnership Agreements (i.e. Memorandum of Understanding /Memorandum of Agreement) with natural resource management partners are established (E)	Engaged with appropriate resource management partners to manage according to Pittsburgh District’s vision; partners are helping to share the Corps vision for the Project
Establishing the right partnership, at the right place, at the right time	Formalize relationship with Audubon Society and Ducks Unlimited to establish educational and wildlife improvement projects (E)	Seasonal natural resource crews such as the Student Conservation Association (SCA) are coming to the Project to assist with shoreline and wildlife management (E)	Partners, volunteers, and interns are augmenting Project staff responsibilities to further protect and enhance natural and cultural resources
	Partner with universities to utilize Project facilities for biological stations (E)		
	Identify additional opportunities to utilize volunteers at the Project (E)		
	Assist and notify non-profit organizations of grant opportunities (E)	Establish a Volunteer Village (a place for volunteers to live and work) (E)	
	Enhance pollinator plot initiatives regionally with federal (intra-district), state, and local organizations (S&E)		

Table 1-7: Goal 3: Provide safe, memorable connections as part of multiple destination points¹

Management and Development Activity	Five-year	Ten-year	Desired State
Ranger safety	Government cell phones are issued to Project staff (E)	Enhanced security features, such as, but not limited to, video surveillance systems and additional lighting installed throughout the Project (E)	Project staff are working in a safe environment
	Additional self-defense training opportunities at the Project and throughout the District are established (E)		
Visitor safety	Consistent visitor assistance experience (playground inspections, life jacket loaner inspections, water sampling, and regular sanitation and cleaning protocols) assured (S&E)	Regular maintenance program established for facilities and recreation areas (S&E)	Low chances of incidents and quick response times for emergency personnel
	Establish weather alert system in recreational areas. Partner with emergency responders to get alerts for high water levels (E)	Project Site Areas (PSAs) with low use and degraded facilities have been identified and divestment options have been considered if appropriate (S&E)	
	Partner with PAFBC, Maryland DNR, Yough Lake Marina, and/or Coast Guard to conduct boating safety courses and vessel inspections (E)		
	Establish a local partnership with River Sport or Laurel Highlands for paddlecraft safety courses (E)		
	Water safety and hypothermia and wildlife stewardship educational programs and presentations are given at the Project (S&E)		
	Create Americans with Disabilities Act (ADA) accessible boat launch and restrooms at Somerfield North Recreation Area (E)		
	Expand no-wake zone near Yough Lake Marina at Route 40 bridge (E)		
	Emergency responders are practicing emergency safety and rescue relief at the Project on a regular basis (S)		
	Utilize the Federal Highways Transportation Programs to obtain grant money, assist in road repairs, and establish a road maintenance plan (E)		

	Regular Recreation Operational Condition Assessments (OCAs) are established to inventory road and facility conditions (E)		
	Establish law enforcement contracts with local counties during busy recreation season (E)		
Connect with other District reservoirs and locks	Joint ventures and recreational activities with other reservoirs and locks have been explored and are being promoted at the Project (i.e. Lock Fest, Special Recreation Day, National Public Lands Day) (S&E)	Project staff is knowledgeable on operational/general information at other reservoirs and locks; cooperation is improved (S&E)	Public is aware of the Corps recreational facilities at multiple reservoirs and locks
	Project staff is cross trained at other reservoirs and locks throughout the District (S&E)		
Serve as part of multiple destination points	Extend Fisherman’s Trail and add in new multi-use trails (E)	Access points to regional trails have been provided and promoted (e.g. Allegheny Passage) (S&E)	User groups from regional area are coming to the Project
	Serve as leaders in local Convention and Visitor Bureaus (E)		
	Local and regional outdoor recreation organizations have been engaged (S&E)	The Project has been integrated into the Heritage Tourism Program and interpretative signs are established (E)	
Promoting all that the Project has to offer; bringing in an increased number of visitors with varying interests and of varying ages	Year-round recreational opportunities have been promoted (S&E)	The Project is attracting multiple and diverse vendors throughout the region and increasing visitation (S&E)	Visitors are aware and utilizing all of the available resources at the Project and are recreating year-round
	Reach out to schools to initiate Every Kid Outdoors opportunities (S&E)	Increased winter recreational opportunities (e.g. hunting opportunities, migratory bird watching, snow shoeing) (E)	
	Regular dam tours are established (E)		
	Signage regarding different activity areas have been displayed around the Project (e.g. pollinator plots, campgrounds, historic sites, wildlife viewing areas, access points) (S&E)		
	Project staff participate in multiple outreach events (e.g. Pumpkin Festival, Chainsaw Festival, Fishing Tournaments, 4 th of July Boat Parade) (S&E)		

Identify operational needs and maintenance requirements	Add in courtesy dock to Mill Run Recreation Area (E)		
	Add in shower facilities to Mill Run Recreation Area (E)		
	Add in full hookup sites to the Outflow Recreation Area campground to include water, sewage and electric (E)		
	Add in dog park below the dam (E)		
	Re-establish beach area at Somerfield North Recreation Area (E)		
	Add in two fish washing stations at Somerfield North Recreation Area and Outflow Recreation Area (E)		
	Identify and demolish unused dwellings (E)		

Table 1-8: Goal 4: Leverage emerging technology to tell the Corps’ story and enhance visitor experiences¹

Management and Development Activity	Five-year	Ten-year	Desired State
Assess and embrace emerging technology in interpretive services capabilities	Obtaining tablets and other wireless devices to assist with patrols and data collection (E)	Project boundary inventory and monitoring conducted wirelessly (i.e. on smartphones or tablets) (E)	Public interaction with the Project is occurring through technology; Project staff are utilizing technology to better monitor and communicate about the Project and provide data to the public and Project staff
	Have all fee and flowage boundaries surveyed and marked at Project (E)	Utilize Boundary Line/Environmental Stewardship OCA Tool for collection and inventory (E)	
Enhance public outreach	Interpretive curriculum included in every OMP annual update (E)	Signage leading to the Project and within Project boundaries has been increased on highways and state roads, indicating the presence of the Project (S&E)	Visitation is increasing due to greater public awareness of events and opportunities at the Project
	Establish Project check-in application to ensure visitor safety and whereabouts and act as a real time comment card for Corps’ facilities, also to include trail and park maps (E)		
	Repurpose Contact Station at the Outflow Recreation Area as Information Center (E)	Establish a comprehensive Interpretive Plan at the Project to grow and adapt to changing conditions (E)	
	Regional outdoor recreation activities are promoted on social media (S)		
	Sharing success stories with local news outlets in coordination with the Public Affairs Office and internally throughout the District (S&E)		
	Emerging social media technologies are being utilized for promotion and public outreach (Project App/District Instagram Page) (E)		

2. Project Setting and Factors Influencing Management and Development

2.1 Resource Analysis

2.1.1 Fish and Wildlife Resources

The Project's forested habitat, scrub-shrub uplands, wetlands, streams, and river/reservoir support a variety of wildlife species common to Pennsylvania. A few of the more common avian species likely to occur at the Project include osprey (*Pandion haliaetus*), turkey (*Meleagris gallopavo*), red-winged blackbirds (*Agelaius phoeniceus*), robins (*Turdus migratorius*), song sparrows (*Melospiza melodia*), common mergansers (*Mergus merganser*), and mallards (*Anas platyrhynchos*).

Mammal diversity is typically associated with large, intact tracts of forest. Mammal species of the region commonly include white-tailed deer (*Odocoileus virginianus*), red fox (*Vulpes vulpes*), opossum, (*Didelphis virginiana*), raccoon (*Procyon lotor*), gray squirrel (*Sciurus carolinensis*), white-footed mouse (*Peromyscus leucopus*), and short-tailed shrew (*Blarina brevicauda*). Smaller populations of black bear (*Ursus americanus*), bobcat (*Lynx rufus*), and fisher (*Pekania pennanti*) are also present. The hairy-tailed mole (*Parascalops breweri*), smoky shrew (*Sorex fumeus*), and eastern woodrat (*Neotoma floridana*) are rare species that may exist on Project lands.

The Project also provides habitat for a diverse assemblage of fish species including smallmouth/largemouth bass (*Micropterus sp.*), walleye (*Sander vitreus*), yellow perch (*Perca flavescens*), black crappie (*Pomoxis nigromaculatus*), muskellunge (*Esox masquinongy*) catfish (i.e., *Ictalurus punctatus*, *Ameiurus catus*, etc.), common carp (*Cyprinus carpio*), white sucker (*Catostomus commersonii*), golden redhorse (*Moxostoma erythrurum*), northern pike (*Esox lucius*) and other species (USACE-LRP, 1990).

In addition, the Project supports a variety of amphibians and reptiles including a number of different frog, turtle, salamander, and snake species.

2.1.2 Vegetative and Timber Resources

Virtually all of the Project has been timbered and much has been grazed or farmed since European settlement in the eighteenth century. Consequently, forest cover on the Project has been extensively altered and is currently comprised of second and third growth stands, which dominate the Project land cover (see Appendix B, Plate 4 for Vegetative Classification map).

The Project supports the overarching values of forest sustainability with a focus on the following priorities:

- Conserve and manage working forest landscapes for multiple values and uses;
- Protect forests from threats; and
- Enhance public benefits from trees and forests.

2.1.3 Threatened and Endangered Species

Lists of threatened and endangered species are maintained by the U.S. Fish and Wildlife Service. Threatened and endangered species that may exist in the region are listed in Table 2-1 below. No federally threatened and endangered species are known exist at the Project. However, potentially occupied habitat may be present (See Table 2-1, below). Periodic surveys should be conducted through coordination with local conservation groups and academia. Any proposed development would include protective measures and consultations as needed to ensure no listed species are present.

Table 2-1. Threatened and Endangered Species (USFWS, 2021)

Species	Scientific Name	Class	Status	Habitat
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Mammal	Threatened	Cavities or crevices in both live trees and snags (dead trees) during the summer. In the winter these bats hibernate in caves and mines.
Indiana Bat	<i>Myotis sodalis</i>	Mammal	Endangered	Roost under the peeling bark of dead and dying trees during the summer. In the winter these bats hibernate in caves or, occasionally, in abandoned mines.

2.1.4 Invasive Species

Under Executive Order (EO) 13112, Invasive Species (FR: 03 Feb 1999), as amended by EO 13751, Safeguarding the Nation From the Impacts of Invasive Species (FR: 08 Dec 2016), an invasive species is defined as a non-native species whose introduction does, or is likely to cause, economic or environmental harm or harm to human health. Invasive species can be microbes, plants, or animals that are non-native to an ecosystem. Invasive species can outcompete native species by consuming their food, occupying their territory, and altering the ecosystem in ways that harm native species. Invasive species can be accidentally transported or they can be deliberately introduced because they are thought to be helpful in some way. Invasive species cost local, state, and federal agencies billions of dollars annually. The most common invasive terrestrial plant species occurring at the Project are: Japanese honeysuckle (*Lonicera japonica*), Japanese knotweed (*Polygonum cuspidatum*), autumn-olive (*Elaeagnus umbellata*), buckthorns

(*Rhamnus frangula*, *R. cathartica*), purple loosestrife (*Lythrum salicaria*), common reed or phragmites (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), garlic mustard (*Alliaria petiolata*), multiflora rose (*Rosa multiflora*), giant hogweed (*Heracleum mantegazzianum*), and bush honeysuckles (*Lonicera maackii*, *L. tatarica*, *L. morrowii*). The most common invasive insects are: emerald ash borer (EAB) (*Agrilus planipennis*), gypsy moth (*Lymantria dispar*), and the hemlock woolly adelgid (HWA) (*Adelges tsugae*). This information was verified through field surveys from July through August of 2020 and Pennsylvania iMap Invasives (PAiMap, 2021).

Climate change will likely benefit many of the aforementioned non-native species, potentially enhancing their ability to outcompete native organisms. Left unchecked, invasive species have the potential to undermine ecosystem structure and function, resulting in a degraded resource that fails to meet many of the key objectives of the Project.

2.1.5 Ecological Setting

The purpose of ecological land classification is to provide information for research, assessment, monitoring, and management of ecosystem components. The Natural Resource Management mission statement (ER 1130-2-550; Change 5, 30 Jan 2013) directly supports this paradigm.

The Project is located in the Ridge and Valley Region and Central Appalachians of the Ozark, Ouachita-Appalachian Forests. The Ridge and Valley Region stretches from New York down to Alabama. This region has cold winters with a mosaic of woodland, pasture, and cropland. It is relatively low-lying, with ridges, rolling valleys, and low irregular hills. The Central Appalachians spans from Pennsylvania into northern Tennessee. This region is mostly forested and is rugged, with high hills and low mountains, steep, narrow ridges, narrow winding valleys, and deep coves. There is a high density of perennial, moderate and high gradient streams with bedrock and boulder substrates in this region (USEPA, 2021).

2.1.6 Wetlands

According to the National Wetland Inventory (NWI), the Project includes approximately 2,382.3 acres of wetlands. There are 4.5 acres of freshwater emergent wetlands, 35.9 acres of riverine wetlands, 2,302.9 acres of lake wetlands, 3 acres of freshwater pond wetlands, and 36 acres of freshwater forested/shrub wetlands. Wetlands serve important water quality and wildlife habitat functions. Particular conservation interest should be given to these features. Many of these wetlands are either previously disturbed or fall under the Water Surface classification and are not classified as Environmentally Sensitive Areas. See Appendix B, Plate 5 for Wetlands map.

2.1.7 Water Quality

The Pittsburgh District Water Quality Program has sampled water quality conditions at the Project since the 1970s. Data collected includes chemical, physical, and biological constituents

at numerous sampling locations on tributaries, bays, the reservoir, and outflow. Routine water quality monitoring includes:

- Bi-weekly sample collection by Project staff from the outflow;
- Yearly limnology surveys of the reservoir by water quality staff; and
- Monthly intensive limnology surveys once every ten years from the months of March through November to understand decadal/spatial changes in limnological dynamics.

In the past, the Project was moderately degraded by acid mine drainage. The most significant source of acid mine drainage in the basin was the Casselman River, which enters the Youghiogheny River only 1.2 miles downstream of the dam. In recent years there has been significant effort towards abatement of mine drainage in the portion of the basin controlled by the Youghiogheny Dam; the influence of acid mine drainage on the reservoir is presently negligible.

The Project can be characterized as a clear, oligotrophic and a relatively cool impoundment. The Project exhibits summer thermal stratification as a result of the bottom withdrawal of cool water. By late summer, the reservoir is warmed to considerable depth, even though the reservoir is relatively deep (summer mean pool depths range between 54.3 - 121 feet). Due to reservoir stratification, the Project supports both cold and warmer water fisheries. The outflow water temperature has rarely been observed to exceed 20 degrees Celsius. Due to this year-round cold-water, trout growth pens are maintained in the tailwaters. However, recent increases in total dissolved gases (above 105%) from the hydropower plant operations have impacted the tailwater area causing impacts to the trout in growth pens.

The Project is well aerated to considerable depths during the late fall to late spring timeframe. Anaerobic conditions were observed at periods along most of the length of the reservoir during summer stratification near the sediment-water interface. These anaerobic conditions were most persistent in the deep cold strata of water near the dam that is largely below the invert elevation of the intake structure. Otherwise, the bottom withdrawal acts to minimize summer anaerobic conditions by the continuous evacuation of hypolimnetic water.

Project waters are low in hardness, relatively free of municipal and industrial pollution, and have an average alkalinity of about ten parts per million. In general, the water quality is more than adequate for the realization of Project purposes. For more information regarding water quality, the Youghiogheny River Lake Water Control Manual can be found here:
<https://intranet.usace.army.mil/lrd/lrp/Pages/wcm.aspx>

2.1.8 Sedimentation

Three sedimentation surveys have been conducted through October 1998 and a total of 33 ranges have been established to determine the depth and rate of siltation in the reservoir. There are three ranges downstream of the dam, twenty ranges (1-20) from the dam upstream to the U.S. Highway 40 bridge, and the remaining (21-30) about four miles upstream of the bridge. The location of all monuments, ranges, and sediments for the first and second surveys are can be found in the most recent Youghiogheny River Lake Water Control Manual.

The first sedimentation survey was undertaken in October 1949, the second in October 1973, and the third in May through October 1998. The total storage capacity reduction, since the Project began operation to the date of the third survey (about 55 years), was 4,191 acre-feet or 1.65 percent of the gross storage capacity below full pool elevation. This corresponds to a yearly reduction of 76.5 acre-feet or 0.03 percent by volume of the reservoir's total capacity. For more information regarding sedimentation, the Youghiogheny River Lake Water Control Manual can be found here: <https://intranet.usace.army.mil/lrd/lrp/Pages/wcm.aspx>

2.2 Cultural Resources

2.2.1 General Background

Cultural resources include archaeological or historical sites and objects, buildings, structures, and landscapes that are related to the history of past human land use. These activities include but are not limited to activities of Native American peoples as well as early historic European and American settlers, early industrial sites, like gristmills, and more modern engineering structures.

Cultural resources are protected under several federal laws and regulations including: Antiquities Act, National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), Federal Curation Regulations 36 CFR Part 79, Native American Graves Protection and Repatriation Act, and Executive Order 13007--Indian Sacred Sites among others. Furthermore, the Corps has established policies regarding the management of cultural resources under the Corps' jurisdiction. These policies can be found in ER 1130-2-540 (15 Nov 1996) Project Operations Environmental Stewardship Operations and Maintenance Policies; and EP 1130-2-540 (15 Nov 1996) Project Operations Environmental Stewardship and Maintenance Guidance and Procedures. The Corps must comply with all these laws, regulations, and policies when performing any works either funded, regulated, or within Corps fee-land or easements. These laws and regulations provide the Corps with processes for understanding how Corps projects affect cultural resources and how the Corps can avoid, minimize, or mitigate potential effects on these resources.

2.2.2 Previous Investigations

In 1989, following the development of a cultural resources predictive model, the Corps completed a Phase I cultural resources reconnaissance survey of five areas within Project lands.

These five areas were selected in consultation with the Pennsylvania and the Maryland State Historic Preservation Offices based on their potential for future development and/or their high archaeological potential. The five surveyed areas encompassed a total of 43 acres or approximately three percent of the entire Project lands.

The Project is one of rich cultural history. Archaeological research indicates that the areas of Fayette and Somerset Counties have been inhabited since the Paleoindian times (ca. 16,000 BP-10,500 BP). A total of 27 archaeological sites and one historic structure have been identified within Project lands. Three of these archaeological sites have been determined eligible for inclusion in the National Register of Historic Places. The National Register of Historic Places is the official list of the nation's historic places worthy of preservation. The three eligible sites consist of three different prehistoric occupation sites. These sites are eligible under Criterion D due to their research potential.

2.2.3 Cultural Resources Management

According to ER 1130-2-540, the District Commander shall ensure that a Cultural Resources Management Plan (CRMP), where appropriate, is developed for Corps projects. The Youghiogheny River Lake Project does not have a CRMP. However, the Corps continues to follow all cultural resources management laws, regulations, and policies prior to conducting work or allowing others to conduct work at the Project. ER 1130-2-540 directs that the District Commander shall implement a program, upon availability of funds, to accomplish an inventory of historic properties and site evaluation at each civil works water resource project under his/her jurisdiction and administration to comply with Section 110(a)(2) of the NHPA.

EP 1130-2-540 directs the agency that on lands held in fee by the federal government under the administration and jurisdiction of the Corps of Engineers, District Commanders shall ensure that historic properties are given full consideration in all management and construction activities. The District Commander has full responsibility within existing statutes, administrative guidelines, and policy to protect, preserve, manage, and/or mitigate damage to historic properties on Project lands. These responsibilities include but are not limited to the following actions: real estate grants and land disposals, recreational development, wildlife management, construction, and operations and maintenance. Based on these responsibilities the Corps would be required to identify and address impacts on cultural resources for all types of Corps undertakings.

2.3 Socio-Economics

2.3.1 Market Area

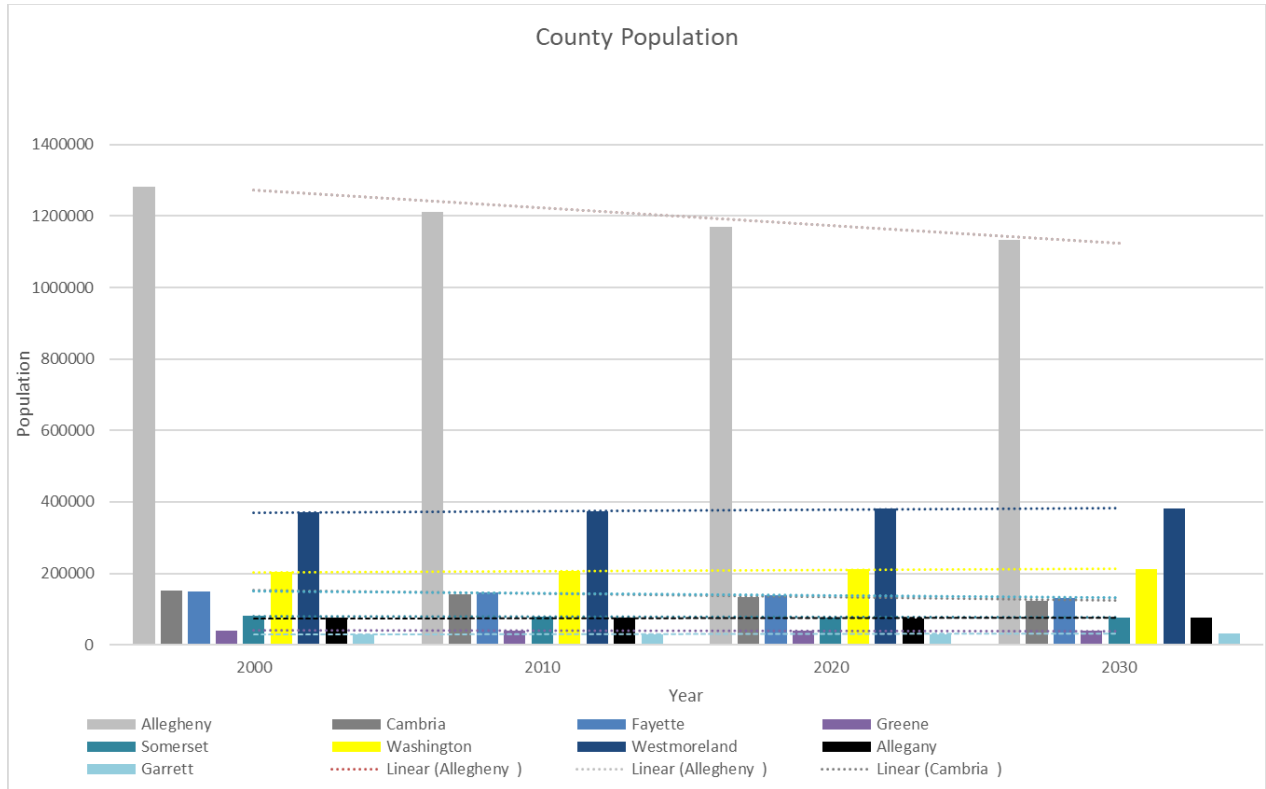
Youghiogheny Lake was constructed on the Youghiogheny River upstream from Confluence, PA which is located on the western edge of Somerset County, bordering Fayette County. The Project receives visitors primarily from Somerset County in which the Project is located, as well as some neighboring counties in both Pennsylvania and Maryland. Due to the size and

popularity of recreation at the Project, the market area for this analysis is focused on Somerset County as well as eight other counties in close proximity: Allegheny County, Cambria County, Fayette County, Greene County, Washington County, and Westmoreland County in Pennsylvania as well as Allegany County and Garrett County in Maryland.

2.3.2 Population

Based on census data and population predictions through 2030 around the adjacent counties, we can assume that all things being equal, recreation at the Project will decrease. Somerset County loses approximately 1,200 residents every ten years. Allegheny County loses approximately 49,600 residents every ten years. Cambria County loses approximately 9,500 residents every ten years. Fayette County loses approximately 5,600 residents every ten years. Greene County loses approximately 600 residents every ten years. Washington County gains approximately 3,400 residents every ten years. Westmoreland County gains approximately 3,500 residents every 10 years (Pennsylvania State Data Center, 2012). Allegany County gains approximately 900 residents every ten years. Garrett County gains approximately 100 residents every ten years (Maryland Department of Planning, Projections and State Data Center, 2020). The total population of these nine counties is expected to shrink by approximately 60,000 residents every 10 years. Graph 2-1 below shows the historic and projected populations for the counties in the market area.

Graph 2-1. Population of Counties in the Market Area



(Pennsylvania State Data Center, 2012; Maryland Department of Planning, Projections and State Data Center, 2020)

2.3.3 Income and Poverty Status

The median household income and poverty rate of each county in the market area were considered for the purpose of determining what choices the public might make when seeking recreation. 2018 census data for the nine counties in the market area and the states of Pennsylvania and Maryland were gathered for this update. Table 2-2 and 2-3 below shows the median household income and poverty rate (percentage of population that fall below the poverty line) for each county in the market area as well as the states of Pennsylvania and Maryland.

Table 2-2. Median Household Income and Poverty Rate by County in Pennsylvania

County	Allegheny	Cambria	Fayette	Greene	Somerset	Washington	Westmoreland	PA
Median Household Income	\$59,899	\$45,084	\$52,984	\$54,121	\$50,988	\$63,251	\$58,471	\$60,905
Poverty Rate	11.8%	14.8%	13.6%	14.2%	10.6%	8.5%	9.0%	12.2%

Table 2-3. Median Household Income and Poverty Rate by County in Maryland

County	Allegany	Garrett	MD
Median Household Income	\$42,068	\$49,619	\$83,242
Poverty Rate	16.6%	9.7%	9.0%

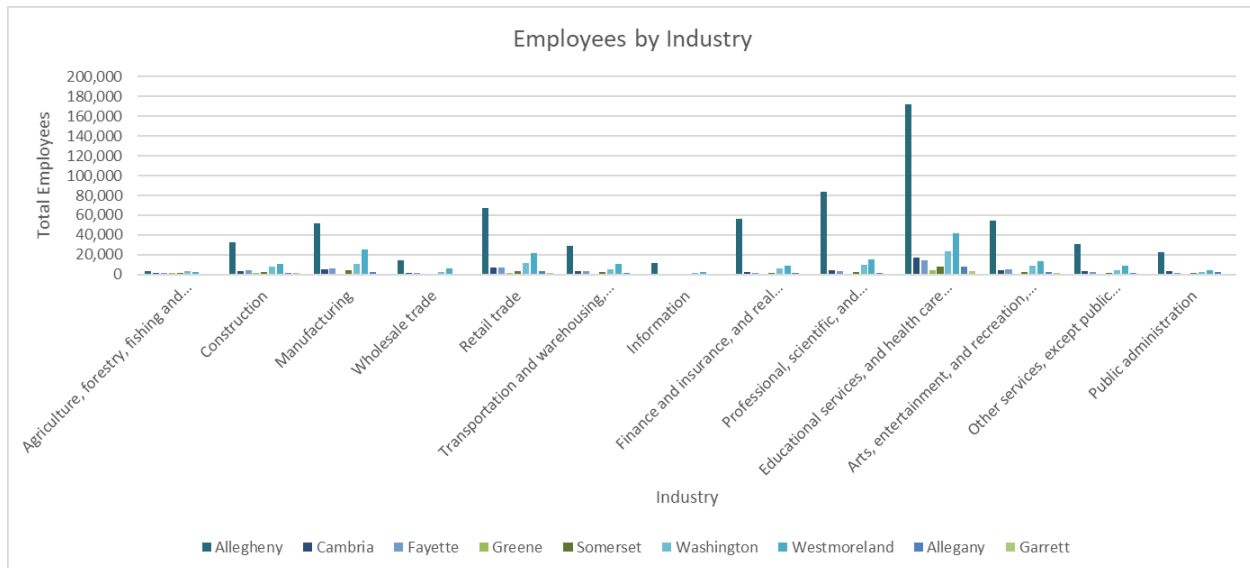
Only Washington County was above the state of Pennsylvania's average household income of \$60,905. Allegheny County, Somerset County, Washington County, and Westmoreland County had lower than the state of Pennsylvania's 12.2% of population below the poverty line (United States Census Bureau, 2020c; United States Census Bureau, 2020d). Both Allegany County and Garrett County were below the state of Maryland's average household income of \$83,242 and had higher than the state of Maryland's 9.0% of population below the poverty line (United States Census Bureau, 2020a; United States Census Bureau, 2020b). This data is discussed in greater detail in section 2.3.5 (Economic Impact of Recreation Related Spending) below.

2.3.4 Area Industries

Most of the counties in the market area for the Project are very similar with regard to the primary industries of employment, with all but Westmoreland County having Utilities and Mining, Quarrying, & Oil & Gas Extraction as top paying industries. The three highest paying industries in Somerset County are Utilities (\$68,194), Mining, Quarrying, & Oil & Gas Extraction (\$55,368), and Real Estate & Rental & Leasing (\$47,500). In Allegheny County, the three highest paying industries are Mining, Quarrying, & Oil & Gas Extraction (\$100,682), Agriculture, Forestry, Fishing & Hunting, & Mining (\$82,288), and Utilities (\$71,653). In Cambria County, the three highest paying industries are Utilities (\$65,982), Mining, Quarrying, & Oil & Gas Extraction (\$56,212), and Agriculture, Forestry, Fishing & Hunting, & Mining (\$50,069). In Fayette County, the three highest paying industries are Utilities (\$64,792), Mining, Quarrying, & Oil & Gas Extraction (\$60,714), and Agriculture, Forestry, Fishing & Hunting, & Mining (\$52,500). In Greene County, the three highest paying industries are Mining, Quarrying, & Oil & Gas Extraction (\$72,694), Utilities (\$67,500), and Agriculture, Forestry, Fishing & Hunting, & Mining (\$65,391). In Washington County, the three highest paying industries are Mining, Quarrying, & Oil & Gas Extraction (\$73,224), Utilities (\$67,664), and Agriculture, Forestry, Fishing & Hunting, & Mining (\$64,910). In Westmoreland County, the three highest paying industries are Utilities (\$76,713), Management of Companies & Enterprises (\$67,390), and Public Administration (\$61,008). In Allegany County, the three highest paying industries are Utilities (\$55,298), Mining, Quarrying, & Oil & Gas Extraction (\$46,848), and Public Administration (\$45,172). In Garrett County, the three highest paying industries are Utilities (\$59,479), Mining, Quarrying, & Oil & Gas Extraction (\$52,125), and Professional, Scientific, &

Technical Services (\$47,344) (Data USA, 2020). Given these top paying industries, particularly in Somerset and Fayette Counties, there could be increased pressure for rights of way onto the Project from utility, gas extraction, or even forestry companies. Graph 2-2 below shows number of employees in each industry for each of these nine counties in the market area.

Graph 2-2. Employment by Industry of Counties in the Market Area



(Data USA, 2020)

2.3.5 Economic Impact of Recreation Related Spending

The Corps provides water-based recreation opportunities throughout the country, which provide economic benefits to the local and regional communities in which Corps projects exist. To estimate the economic impact from the recreation-related spending at the Project, the Corps Institute for Water Resources, in collaboration with the Louis Berger Group and Michigan State University, have developed a regional economic impact modeling tool called Regional ECONomic System (RECONS). This modeling tool automates calculations and generates estimates of jobs and other economic measures, such as income and sales associated with the Corps American Recovery and Reinvestment Act (ARRA) and Civil Works program spending and secondary affects for Ports, Inland Water Way, Formerly Utilized Sites Remedial Action Program (FUSRAP), and Recreation. This is done by extracting multipliers and other economic measures from more than 1,500 regional economic models that were built specifically for Corps project locations (Chang, W.H., et al., 2019). For 2019, RECONS shows an estimated 625,903 visits (person-trips) at the Project, predicted to result in direct benefits to the region of \$26,187,373 in sales, \$9,815,532 in labor income, \$13,877,257 in economic value added (wages and salaries, payroll benefits, profits, rents, and indirect business taxes), and 373 jobs supported in the region (USACE-IWR, 2019). Based on the population, income, and poverty facts

presented in the sections above, a sizable portion of the local population will likely use the Project as a vacation destination based on proximity and the relatively lower costs associated with recreating closer to home as opposed to incurring additional costs by choosing a site further away. By choosing to go to the Project for recreational needs, the populace will also contribute to the local economy of the area.

2.4 Recreation Facilities, Activities, and Needs

2.4.1 Zones of Influence

The primary zones of influence encompass counties within the Pittsburgh Metropolitan Statistical Area and the Johnstown-Somerset Combined Statistical Area, which are partially the basis in summarizing the population associated with the Project. The Pittsburgh Metropolitan Statistical Area includes Allegheny County, Fayette County, Washington County, and Westmoreland County, which had an estimated total population of 2,324,743 in 2018. The Johnstown-Somerset Combined Statistical Area includes Cambria County and Somerset County, which had an estimated total population of population of 205,862 in 2018. Greene County, Allegany County, and Garrett County either do not belong to a Combined Statistical Area or are the only county in their statistical area as well as the market area for this Project and they had a combined population of 145,644 in 2010. The Project is located in Somerset County, near the borough of Confluence, PA. Somerset County's population as of the 2010 census was 78,393, a 2.1% decrease from the 2000 census (Census Reporter, 2021).

2.4.2 Visitation Profile

Visitation is common at the campgrounds and day-use areas as the Project is in close proximity to major interstates; Pittsburgh, PA; and Morgantown, WV. Peak recreation season is from May through October. Visitation is concentrated during the weekends and holidays in both peak and non-peak seasons. Popular recreational activities at the Project include angling, paddlecraft (e.g. canoes, kayaks), boating, camping, swimming, picnicking, hunting, bird watching, and hiking.

2.4.3 Recreation Analysis

Description of Facilities

The Project had an average yearly visitation of approximately 696,705 from 2017 to 2019. The Project is a popular local attraction with three campgrounds, four boat launches, two swim beaches, three reservable picnic shelters, and plenty of hunting and fishing access areas. The Project operates the Outflow Recreation Area, Mill Run Recreation Area, Somerfield North Recreation Area, and the Spillway Recreation Area.

Other recreation opportunities include Jockey Hollow Boat Launch operated by the PAFBC; hunting and fishing access areas managed by Maryland DNR; boat rentals, dock slips, fuel, and a

marine store at Yough Lake Marina; and campsites and cabins available for rent at Yough Lake Campground.

Customer Satisfaction and Considerations

Through the Master Plan scoping meetings and routine communication between staff and visitors, it has been identified that the areas that need most improvement are the access road across the dam and the road leading to Mill Run Recreation Area, adding a courtesy dock to Mill Run Recreation Area, and expanding the no-wake zone near Yough Lake Marina at the Route 40 bridge. There is also interest in having Wi-Fi availability at the Outflow Recreation Area campground.

2.4.4 Recreational Carrying Capacity

Carrying capacity, which includes both environmental (how much use the resource can support without being compromised) and social (how much use can occur before the quality of visitor experience is diminished) dimensions, is currently balanced at the Project. The Project experiences few fatalities or boating accidents, and the three campgrounds around the Project are occupied throughout the recreation season the majority of the time, especially on weekends and holidays. Picnic shelters are rented 90% of the time during the recreation season. Future recreational developments will require plans and studies to account for water quality and sedimentation changes, balancing recreational diversity, and accommodating new demands within a developed footprint in a manner that is environmentally and economically sustainable.

2.5 Related Recreational, Historical, and Cultural Areas

The Project is located within the Laurel Highlands tourism region by the Pennsylvania Department of Tourism. The Project is adjacent to the Ohiopyle State Park. It is also within a short distance of recreational attractions including the Addison Historic District, Bushy Run Battlefields, Fort Necessity National Battlefield, and the Flight 93 National Memorial. Additional nearby outdoor recreation opportunities include area campgrounds, hiking, and water and bike trails, including: Laurel Ridge State Park, Mammoth Park, and the Great Allegheny Passage trail.

2.6 Real Estate and Acquisition Policy

The Project covers of a total of 4,323.18 acres. That acreage includes land held in fee, land subject to flowage and operations easement, and land subject to the federal navigational servitude. There are approximately 108 total outgrants including shoreline licenses, with the majority of the Project being outgranted to PAFBC and Maryland DNR. There are no mineral tracts at the Project.

3. Land Allocation, Land Classification, Water Surface, and Project Easement Lands

This Master Plan is intended to guide the comprehensive management and development of recreation, natural, and cultural resources at the Project and define the Corps' responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop lands, waters, and resources. An important aspect in managing these goals is properly defining the appropriate use for lands and waters consistent with their congressionally authorized purpose.

3.1 Land Allocation

In accordance with EP 1130-2-550 (Change 5, 30 Jan 13), land allocations are the congressionally authorized purposes for which Corps lands were acquired. There are four categories of allocation:

3.1.1 Operations

Lands acquired for the congressionally authorized purpose of constructing and operating the Project. All of the Project has a land allocation of Operations, which means that all Project lands were originally acquired to provide safe, efficient operation of the Project and its authorized purposes. No specific parcels were acquired for or assigned to individual purposes of recreation, fish and wildlife management, or mitigation.

3.1.2 Recreation

Lands acquired specifically for the congressionally authorized purpose of recreation. Lands in this allocation can only be given a land classification of "Recreation". No specific parcels at the Project were acquired for or assigned to the purpose of recreation.

3.1.3 Fish and Wildlife

Lands acquired specifically for the congressionally authorized purpose of fish and wildlife management. Lands in this allocation can only be given a land classification of "Wildlife Management". No specific parcels at the Project were acquired for or assigned to the purpose of fish and wildlife.

3.1.4 Mitigation

Lands acquired specifically for the congressionally authorized purpose of offsetting losses associated with development of the Project. Lands in this allocation can only be given a land classification of "Mitigation". No specific parcels at the Project were acquired for or assigned to the purpose of mitigation.

3.2 Land Classification

Land classifications are the primary use for which Project lands are managed. Current standards identify the below classification categories:

- Project Operations
- High Density Recreation
- Mitigation
- Environmentally Sensitive Areas
- Multiple Resource Managed Lands
- Water Surface

The classification process refines the land allocations to fully utilize Project lands and considers public desires, legislative authority, regional and Project specific resource requirements, and suitability. Land classification indicates the primary use for which Project lands are managed. The Project manages lands according to five of the above six classifications (sans Mitigation). The system for classification has been realigned to meet current standards (see Appendix B, Plate 6 for the Land Classification map).

3.2.1 Project Operations

This classification includes lands required for the dam and associated structures, administrative offices, maintenance compound, and other areas that are used to operate and maintain the Project. Where compatible with operational requirements, Project Operations lands may be used for wildlife habitat management and recreational use, as long as the proposed activities do not negatively impact Project operations. Likewise, licenses, permits, easements, or other outgrants are issued only for uses that do not conflict with operational requirements. Public access to these areas is often restricted. For example, mooring private vessels or modification of land and vegetation are prohibited without explicit permission. Requests for a permit for a compatible use within an area designated for Project operations will be evaluated on a case-by-case basis and a decision will be made as to whether or not the proposed activity will be permitted, based on the potential impact to operations.

3.2.2 High Density Recreation

These lands are designated for intensive levels of recreational use to accommodate and support the recreational needs and desires of visitors. They include lands on which existing or planned major recreational facilities are located and allow for developed public recreation facilities, concession development, and high density or high-impact recreational use. In general, any uses of these lands that interfere with public enjoyment of recreational opportunities are prohibited. Low density recreation and wildlife management activities compatible with intensive recreation use are acceptable, most usually on an interim basis. No agricultural uses are permitted on these lands, except on an interim basis for maintenance of scenic or open space values. Permits, licenses, and easements are not issued for non-compatible manmade intrusions such as pipelines, overhead transmission lines, and non-Project roads, except where warranted by the public interest and no viable alternative area or route is available.

The facilities in these areas will accommodate the recreation needs of visitors in concentrated numbers, while also offering open space lands for the purpose of providing more complete and attractive recreation areas. The modernization of campsites and recreation facilities is anticipated to occur on a funds-available basis.

Requests for permits to conduct concessions, rentals, or any other business in these areas will be reviewed on a case-by-case basis and will involve real estate instruments and fee payment to the Corps.

Given the difficulty of maintaining current facilities, the development of more modern facilities demanded by recreational visitors will likely include partnering with stakeholders to share in the cost, operation, and maintenance of any such asset.

3.2.3 Environmentally Sensitive Areas

This classification consists of areas where scientific, ecological, cultural, or aesthetic features have been identified. Designation of these lands is not limited to just lands that are otherwise protected by laws such as the Endangered Species Act, the National Historic Preservation Act, or applicable state statutes. These areas must be identified and protected by management to ensure they are not adversely impacted. Typically, limited or no development of public use is allowed on these lands. No agricultural or grazing uses are permitted on these lands, unless necessary to implement a specific resource management benefit. These areas are typically distinct parcels located within another, larger land classification area.

Defining Environmentally Sensitive Areas as part of the Master Plan process assists in the protection of valuable resources. These sites are mapped and managed by the Corps.

Environmentally Sensitive Areas include locations of threatened and endangered species and cultural sites. Many factors contribute in identifying Environmentally Sensitive Areas. The degree of sensitivity varies by location and other contributing factors. An area may be available to construct a properly designed hiking trail, or may be actively managed by forest practices such as timber stand improvement that do not negatively impact the site's sensitivity. Other sites can be very sensitive to human disturbance and need adequate protection from development.

Examples of this degree of sensitivity would involve eagle nests, osprey nests, and heron rookeries. These animals are threatened by human activities especially during active breeding seasons.

Areas designated as environmentally sensitive can change over time, and continuous monitoring through programs like Multiple Species Inventory and Monitoring (MSIM) provide valuable information to keep identified sensitive areas current. Through the use of Geographic Information System (GIS) databases maintained with separated layers, the dynamic nature of sensitivity can be managed in an up-to-date program. Some areas may be highly sensitive to change, while other areas may need prescribed management to remain viable. The goal of

managing these areas is to protect and preserve known areas that contribute to the diversity and health of the Project.

3.2.4 Multiple Resource Management Lands

These lands can be divided into the following four sub-classifications: Low Density Recreation, Wildlife Management, Vegetative Management, and Future or Inactive Recreation Areas. In the future, some of these areas may be converted to High Density Recreation. Conversion to High Density Recreation may occur based on future recreation needs. The Corps must continue to carefully evaluate land use requests in these areas to include road and utility easements, rights of way for pipelines, resource mining activities, and other potential ground disturbing activities and to ensure that these actions do not negatively impact the environment in a significant manner.

3.2.4.1 Low Density Recreation

These lands are designated for dispersed and/or low impact recreation use. Development of facilities on these lands is limited. Emphasis is on providing opportunities for non-motorized activities such as walking, fishing, hunting, or nature study. Site-specific, low-impact activities such as primitive camping and picnicking are allowed. Facilities may include boat ramps, boat docks, trails, parking areas and vehicle controls, vault toilets, picnic tables, and fire rings.

In these areas, natural conditions preclude intensive public use development because extensive alteration of natural systems would be required. Difficult access is also a factor indicating low density use as most appropriate for these lands.

Private or long-term exclusive group use of these lands will not be permitted. Management practices leading to habitat improvements for the benefit of wildlife are encouraged. No licenses, permits, or easements will be issued for non-compatible manmade intrusions, such as underground or exposed pipelines, cables, overhead transmission lines, or non-Project roads. Exceptions to this restriction may be made where necessary to serve a demonstrated public need only in those instances where no reasonable alternative is available. Agricultural uses are permitted on this land. The focus for areas under the Low Density Recreation classification is on a balance of low-impact recreational activities along with conservation of natural areas and native species. Management of invasive species is also a priority for these areas to prevent their spread throughout the Project. Hunting is permitted in most areas under this classification to promote healthy populations of game species.

Low density recreation areas have the potential to be converted to High Density Recreation through the development of new trail systems, campgrounds, boat launches, or other recreational features. These areas also have the potential to be used for utility lines, timber sales, or mining activities if a third-party makes a request for such an activity. However, these actions would require additional study and would be approved on a case-by-case basis based on the anticipated impacts associated.

3.2.4.2 Wildlife Management

Proper management techniques will be applied wherever the opportunity exists to improve conditions for scenic value, timber stand improvement, wildfire prevention, pest control, and watershed protection. While all Project lands are managed for fish and wildlife habitat in conjunction with other land uses, Wildlife Management Area lands are designated specifically for wildlife management. They contain valuable wildlife habitat components that are managed, using guidance that includes State Wildlife Action Plans (SWAP) to yield habitat suitable for designated game and non-game species. These plans can be found by contacting the Pennsylvania Game Commission or Maryland Department of Natural Resources. Licenses, permits, and easements for such man-made intrusions such as pumping plants, pipelines, cables, transmission lines, and non-Project roads are usually not allowed on these lands; however, exceptions to this policy are allowable, if properly mitigated.

3.2.4.3 Vegetative Management

Vegetative management, including agricultural activities that do not greatly alter the natural character of the environment, are permitted for a variety of purposes, including erosion control, retention and improvement of scenic qualities, and wildlife management. Management activities focus on the protection and enhancement of forest resources and vegetative cover. Forests are managed as a multipurpose resource for sustained yield when consistent with recreation and wildlife management objectives and approved land uses. Hunting and fishing are allowed pursuant to tribal or state fish and wildlife management regulations where these activities are not in conflict with the safety of visitors and Project personnel. Other activities are conducted under the guidance of the Project's Forest, Fish and Wildlife Management Plan.

3.2.4.4 Future or Inactive Recreation Areas

These areas have site characteristics compatible either with future recreational development or recreation areas that are closed. Until there is an opportunity to develop or reopen these areas, they will be managed for multiple resources.

3.2.5 Water Surface

There are four possible sub-classifications.

3.2.5.1 Restricted

Water areas restricted for Project operations, safety, and security purposes.

3.2.5.2 Designated No-Wake

To protect environmentally sensitive shoreline and recreational water access areas from disturbance and/or to protect public safety.

3.2.5.3 Fish and Wildlife Sanctuary

Annual or seasonal restrictions on areas to protect fish and wildlife species during periods of migration, resting, feeding, nesting and/or spawning.

3.2.5.4 Open Recreation

Those waters available for year-round or seasonal water-based recreational use.

3.3 Easement Lands

Project easement lands are those properties where the Corps has an easement interest, but no fee title. Planned use and management of easement lands will be in strict accordance with the terms and conditions of the easement estate acquired for the Project. Easements are acquired for specific purposes and the Corps does not have the same rights or ownership as it does with fee owned land. There are three different types of easements – operations, flowage, and conservation.

3.3.1 Operations Easement

Operations easements are easements utilized for the purpose of conducting Project operations.

3.3.2 Flowage Easement

Flowage easements are easements utilized for the purpose of temporarily overflowing, flooding, and submerging private land. Generally, the purpose of these easements is to provide adequate storage for flood waters.

3.3.3 Conservation Easement

Conservation easements are easements utilized for the purpose of protecting wildlife, fisheries, recreation, cultural resources, environmental resources, or endangered species.

4. Resource Plan

The resource plan describes, in broad terms, how Project lands will be managed according to the established land classifications. Each classification is discussed in terms of anticipated public use and resource stewardship needs.

4.1 Classification and Justification

4.1.1 Project Operations

This classification includes lands required for the dam and outflow structures, Project office, ranger office, public restroom, two maintenance buildings, two government dwellings, and other areas used to operate and maintain the Project. There are 78.9 acres classified as Project Operations. Approximately 3 acres of this area are under license to D/R Hydro Inc. to operate a hydropower facility. The Chestnut Ridge Chapter of Trout Unlimited also operates a trout nursery in the stilling basin adjacent to the hydropower plant. The management plan (stated as “resource objectives”) for these areas is to continue providing physical security necessary to ensure continued operations of the dam and related facilities.

4.1.2 High Density Recreation

Lands developed for intensive recreational activities for the public are considered as high density recreation including day-use areas, campgrounds, commercial concessions (marinas, restaurants, resorts, etc.), and quasi-public development (oil and gas, electric, water, etc.). Future possibilities for development of these areas include expansion of trail systems utilizing emerging technologies such as Quick Reference (QR) codes and other electronic media outreach and expansion of additional park recreation features. There is a total of 149.6 acres classified as High Density Recreation (see Appendix B, Plate 7 for the Recreation map).

Outflow Recreation Area

The Outflow Recreation Area is currently used as a picnic and camping area, as well as for interpretive outdoor ranger programs for school children and special event days for those that are physically impaired. The campground has 61 Class A (full hook-up) campsites and two group camping areas that support tent camping and recreational vehicles. There are two reservable pavilions complete with electrical access. Additionally, there are flush restrooms and a shower house, a camper check-in station, sanitary dump station, paddlecraft launch area, hiking/biking trail and parking. The site includes a small pond that is stocked with fish for electro fishing demonstrations. Access to the river is provided by trails from parking areas located in this area. The water from the reservoir is cold and well aerated, supporting an excellent trout fishery. A unique feature of the campground includes a tent-only area for hike-in/bike-in campers and the development of a separate bicycle path through the campground that connects to the Great Allegheny Passage Trail. The day-use area is open year round at this site.

Spillway Recreation Area and Poplar Hollow

The Spillway Recreation Area includes the spillway area that was developed as an emergency overflow for the dam. Boat launching, picnicking, and swimming are the primary uses of this area. There are two restroom facilities, one restroom has vault toilets and the other is a Clevis Multrum (composting toilet) located by the picnic area. A parking area for 120 cars and 57 trailers is provided for the picnic area and a two-lane boat launch at the reservoir end of the spillway. Picnic areas are limited to a narrow wooded ledge adjacent to the reservoir on the east side. The swimming area was redesigned and relocated in 2000 to meet current guidelines as part of a project that also upgraded the boat launch including installing a kayak launch. This area also serves as the trailhead for the Fisherman's Trail. The western, or Poplar Hollow, section is primarily used for picnicking. These areas are open year round.

Somerfield North Recreation Area

This site is used for high density recreational purposes such as picnicking and boat launching. Picnic tables are placed around the recreation area and a reservable picnic pavilion is available. The boat launch area has a courtesy dock installed year round for temporary boat tie up. The two-lane boat ramp accommodates a parking area for 115 cars and 51 trailers. The launch area was upgraded in 1994. Somerfield North Recreation Area has been designated as a no swimming area since April 1999. Restroom facilities are also available in this area. This area is open year round.

Yough Lake Marina

Yough Lake Marina is operated by Leskinen Enterprises LLC. This area provides a launch ramp, fuel, dock slips available for rent, a marine store, boat rentals, and a parking lot for marina patrons. Restroom facilities are also provided. This area is open from May through October.

Mill Run Recreation Area

Camping is the primary use of this area. Facilities include 30 tent only campsites, a restroom, playground equipment, and a popular swim beach. Mill Run Recreation Area also has a boat ramp and a trailer dump station. This area is open year round.

Jockey Hollow Boat Launch

This area, operated by the PAFBC, includes a single lane boat launch and parking area. This area is open seasonally depending on water levels and weather.

Yough Lake Campground

This recreation area, operated by Laurel Highlands Outdoor Center, provides 101 class A camping sites (tent and recreational vehicles), five cabins, an amphitheater, swim beach, two-lane boat launch, two flush restrooms and one shower house, playground, kayak rentals, dump station, sewage treatment plant and a camp store which sells Laurel Highlands merchandise, firewood, lantern fuel, and snacks. This area is open from April through October.

Best Management Practices for High Density Recreation Lands:

- Provide access for and use by the elderly and people with disabilities
- No ground-disturbing activities in high density recreation areas, unless authorized by the Corps
- Interpret cultural resources to benefit visitors

- Protect the viewshed (geographical area that is visible from a location) in order to maintain current aesthetic values
- Prescribed fire should be considered as a management method for this land classification in appropriate locations

4.1.3 Environmentally Sensitive Areas

This classification consists of areas where scientific, ecological, cultural, or aesthetic features have been identified. Designation of these lands is not limited to just lands that are otherwise protected by laws such as the Endangered Species Act, the National Historic Preservation Act, or applicable state statutes. These areas must be identified and protected by management to ensure they are not adversely impacted. Typically, limited or no development of public use is allowed on these lands.

Environmentally Sensitive Areas include locations of threatened and endangered species and cultural sites. Some areas may be highly sensitive to change, while other areas may need prescribed management to remain viable. The goal of managing these areas is to protect and preserve known areas that contribute to the diversity and health of the Project. There are a total of 125.5 acres classified as Environmentally Sensitive Areas. Many of the wetlands are either previously disturbed or fall under the Water Surface classification and are not classified as Environmentally Sensitive Areas. .

The following types of landscape may be classified as an Environmentally Sensitive Area:

- Known or discovered cultural sites/archaeological sites
- Large tract woodlands
- Mature woodlands
- Reforestations
- Wetlands identified in the National Wetlands Inventory
- Lands possessing unique wildlife value by diversity or conservative species
- Steep slopes, often with outcrops or talus slopes
- Areas of aesthetic quality or having aesthetic “scenic” views
- Corridors between habitats that protect connectivity (e.g. riverine woodlands)

Archaeological Sites

Approximately 0.2 acres are classified as lands containing archaeological resources. These include prehistoric and historic sites. These sites will be managed to protect these resources in accordance with the provisions of applicable laws, including the Archaeological Resources Protection Act, National Historic Preservation Act, and Native American Graves Protection and Repatriation Act. These areas, along with any other possible archaeological sites, will continue to be surveyed for the presence of archeological resources when development activities are proposed to ensure that utilities placement, mining, installation of recreation features, and other

actions do not impact unknown resources. If additional resources are discovered, these parcels would be converted to this management category and additional protections would be afforded to ensure compliance with applicable laws. Some identified archaeological sites are already disturbed and are therefore not classified as Environmentally Sensitive Areas.

Wetlands

According to the National Wetland Inventory (NWI), the Project includes approximately 2,382.3 acres of wetlands. There are 4.5 acres of freshwater emergent wetlands, 35.9 acres of riverine wetlands, 2,302.9 acres of lake wetlands, 3 acres of freshwater pond wetlands, and 36 acres of freshwater forested/shrub wetlands. Many of these wetlands are either previously disturbed or fall under the Water Surface classification and are not classified as Environmentally Sensitive Areas.

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For the purposes of this classification, wetlands must have one or more of the following three attributes: 1) at least periodically, the land supports predominantly hydrophytes; 2) the substrate is predominantly undrained hydric soil; and 3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year. Wetlands provide many benefits such as habitat for fish and wildlife, natural water quality improvement, flood storage, and shoreline erosion protection.

In addition, there is a state listed species of thistle (*Cirsium*) in the Buffalo Run Wildlife Management Area that is protected and classified as an Environmentally Sensitive Area.

Best Management Practices for Environmentally Sensitive Areas:

- Control noxious weeds and other pests in a manner that avoids damage to existing desirable vegetation and sensitive areas (wetlands and streams)
- Preserve and protect existing wetland and other sensitive or unique habitats that support threatened and endangered species along with other wildlife
- Proponents of surface disturbing activities shall identify important, sensitive, or unique habitats in the vicinity of the Project and design the proposed project to avoid, minimize, or mitigate impacts to these resources
- Riparian areas are maintained and improved for the protection and enhancement of fisheries
- As a standard practice, ephemeral, perennial, and intermittent drainages and wetland/riparian areas will be avoided as locations for oil and gas related facilities, including drilling locations, production facilities, roads, and pipelines. Whenever

possible, facilities will be confined to existing alignments or locations, minimizing width requirements and maximizing multiple occupancy

- Surface disturbance will not be allowed within 660 feet of the source of a spring or seep, or within downstream riparian areas created by flows from the source or resulting from riparian area management
- Proponents of surface disturbing activities shall conduct surveys for federally and state-protected species and other species of concern within action areas and design the project to avoid, minimize, or mitigate impacts to these resources
- The Corps will prohibit the disturbance of any population of federally listed and special status plant species
- No motorized use, unless previously authorized, will be allowed within Environmentally Sensitive Area boundaries; other trails (i.e., foot trails, mountain bike trails, cross country skiing trails, etc.) will be analyzed on a case by case basis. Trail design, construction, and maintenance will ensure all criteria in which the Environmentally Sensitive Area was established will remain protected
- Prescribed fire should be considered as a management method for this land classification

4.1.4 Multiple Resource Managed Lands

This classification includes areas where the predominant use is for game and wildlife management or dispersed recreation. However, there are other compatible uses that may occur on these lands without impacting the predominant use.

4.1.4.1 Low Density Recreation

Low density refers to lands with minimal development or infrastructure that support passive public recreational use (e.g. primitive camping, fishing, hunting, trails, wildlife viewing). There are 954.5 acres at the Project that fall under this category. Many of these lands are undeveloped and used as natural areas.

Friendsville Park

This area consists of a walking trail and paddlecraft take out point. Friendsville Park is accessible for year round recreation use.

Best Management Practices for Low Density Recreation Lands:

- Provide access for and use by the elderly and people with disabilities
- No ground disturbing activities in low density recreation areas unless authorized by the Corps
- Interpret cultural resources to benefit visitors
- Protect the viewshed in order to maintain current aesthetic values

- Prescribed fire should be considered as a management method for this land classification in appropriate locations

The Non-Recreation Outgrant Policy (ER 1130-2-550, Chapter 17), which reflects nationwide guidance developed in 2009, will be used to evaluate requests for use of Corps lands and waters. Future non-recreation outgrant requests may be granted if one of the following two conditions are met and as long as Project purposes are not compromised:

- There is no viable alternative to the activity or structure being placed on Corps lands
- There is a direct benefit to the Project and their respective authorized mission

4.1.4.2 Wildlife Management Areas

Wildlife lands are available for sightseeing, wildlife viewing, nature study, hunting, and hiking. There are 157 acres classified as Wildlife Management Areas (WMAs). Taking of wildlife, including hunting, fishing, and trapping, may be allowed when compatible with the wildlife objectives for a given area and within federal and state fish and wildlife management regulations as established with ER 1130-2-540.

Wildlife management activities include upland small game and deer management through natural succession control, brush pile construction, and orchard improvement. Waterfowl, small game, and large game hunting is also permitted on the reservoir.

WMAs include Wilkins Hollow, Dark Hollow, and Buffalo Run. These WMAs are managed by Maryland DNR and the Project. They allow for hunting, fishing, and wildlife viewing. The Project also manages small WMAs for pollinator initiatives and invasive species removal for wildlife viewing and wood duck boxes.

Best Management Practices for Wildlife Management Areas:

- Surface disturbance will not be allowed within 660 feet (or if there are any more stringent state species-specific buffers) of active raptor nests on natural habitat features, such as trees, large brush and cliff faces
- The Master MOA between the Corps and the U.S. Department of Agriculture will guide nuisance species damage control. For more information, the referenced MOA can be found here: <https://corpslakes.erc.dren.mil/employees/cecwon/mou-archive.cfm>
- Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 45 db measured at 30 feet from the source of the noise
- Manage forest resources and other vegetation for balanced uses of recreation, wildlife, and fisheries
- Monitor forest conditions to document health and identify pests

- A habitat restoration plan shall be developed to avoid, minimize, or mitigate negative impacts on vulnerable wildlife while maintaining or enhancing habitat values for other species. The plan shall identify revegetation, soil stabilization, and erosion reduction measures that shall be implemented to ensure that all temporary use areas are restored. The plan shall require that restoration occur as soon as possible after completion of activities to reduce the amount of habitat converted at any one time and to shorten the length of recovery time to natural habitats
- Recovery plans for species federally-listed as threatened or endangered will be implemented under the authority of the Endangered Species Act, including the reintroduction or relocation of native special status species in areas on public land in coordination and cooperation with local governments
- Increased intensity of research and monitoring will be needed to evaluate changes in habitat condition, land use threats to the species, species use and distribution, reclamation efforts, propagation, and other projects that may help in enlarging the knowledge base of these species
- All land use management prescriptions will be maintained as currently established to ensure aesthetics, habitat quality, and overland water flow. All existing utilities and their operations and maintenance will not be impacted by this designation
- No motorized use, unless previously authorized, will be allowed within Wildlife Management Area boundaries; other trails (i.e., foot trails, mountain bike trails, cross country skiing trails, etc.) will be analyzed on a case by case basis
- Prescribed fire should be considered as a management method for this land classification

4.1.4.3 Future or Inactive Recreation Areas

There are 36 acres of lands classified as Future or Inactive Recreation Areas. There are plans to establish two primitive camping areas at Braddock Run as Future Recreation. In addition, Jockey Hollow Picnic Area is identified as an Inactive Recreation Area.

4.1.5 Water Surface

There are four Water Surface categories within the boundaries of the Project: Restricted, Open Recreation, Fish and Wildlife Sanctuary, and Designated No-Wake. These areas make up 2,820.3 acres that are within the reservoir's conservation pool. See Appendix B, Plate 7 for the Recreation map which shows the Water Surface categories.

4.1.5.1 Restricted

Restricted areas include those portions of the reservoir pool where public access is prohibited due to Project operations, security concerns, or to promote public safety. This includes the areas between the outlet structure and the upstream portion of the dam and the area immediately downstream of the dam. There are 5 acres at the Project that fall under this category.

4.1.5.2 Designated No-Wake

Designated no-wake zones are marked with buoys to protect environmentally sensitive shoreline areas, recreational areas (such as boat ramps and docks), and for public safety. Boats are required to slow down in these areas to prevent waves from impacting the shoreline. There are 368.2 acres of no-wake, and 18.1 acres of no-wake that are paddle friendly at the Project.

4.1.5.3 Open Recreation

Open recreation areas are waters that are available year-round or seasonally for water-based recreational use. There are 2,429 acres at the Project that fall under this category.

4.1.5.4 Fish and Wildlife Sanctuary

Fish and wildlife sanctuary zones have annual or seasonal restrictions on areas to protect fish and wildlife species during periods of migration, resting, feeding, nesting, and/or spawning. There are no acres at the Project that fall under this category.

Best Management Practices for Water Surface Areas:

- Maintain and, if possible, improve water quality and fisheries habitat structure to support a productive sport fishery and maintain healthy populations of native fish species
- Water quality monitoring at established stations should continue throughout the Project property and watershed, as the data gathered aids in conservation of the Projects aquatic resources
- Fish and macroinvertebrate surveys at established stations should continue throughout the Project property and watershed, as the data gathered aids in conservation of the Projects aquatic resources
- Continue coordinating monitoring activities at the Project with state and federal resource agencies

4.2 Easement Lands

There are 1.38 total acres of easement lands at the Project.

4.2.1 Operations Easement

The Corps has 0.68 acres of operations easement lands at the Project. These easements consist of two river gauging station easements and one spring pipeline easement.

4.2.2 Flowage Easement

The Corps has 0.7 acres of flowage easement lands at the Project.

4.2.3 Conservation Easement

The Corps has no acres of conservation easement lands at the Project.

Best Management Practices for Easement Lands:

- Monitor any activities occurring on easement lands to ensure that Corps rights, according to terms and conditions of the legal easement, remain unimpeded
- Promote an understanding of Corps boundary and mission by both the public and the owners of underlying private property
- Restrict development on easement lands and discharges of treated wastewater and other pollutants into the reservoir

5. Special Considerations Affecting Natural Resources

During the development of this Master Plan, several issues were identified that could affect or are affecting the stewardship and management potential of lands and waters at the Project.

5.1 Coal Mines

Currently, there are no active, inactive or abandoned coal mines on Project property. However, there are adjacent abandoned mines which could impact water quality. Mineral rights underlying the Project may be owned outright by the federal government, owned by a third party, or a combination thereof. There may be subordination agreements or surface restrictions in place. It is also possible for the Bureau of Land Management (BLM) to lease federally-owned mineral interests beneath the surface of Project land. It is necessary to review and consider the specific ownership documentation of each tract in order to determine the rights and controls that the Corps has on said tracts.

Historical coal mining activities in the area may result in negative environmental impacts such as abandoned mine drainage. Abandoned mine drainage is water that is polluted from contact with mining activity, and normally associated with coal mining. It is a common form of water pollution in areas where mining took place in the past. There are several issues with abandoned mines that impact water quality:

- Acid mine drainage (the most prevalent; see below)
- Alkaline mine drainage (this typically occurs when calcite or dolomite is present)
- Metal mine drainage (high levels of lead or other metals that drain from these abandoned mines)

Acid mine drainage is the formation and movement of highly acidic water rich in heavy metals. This acidic water forms through the chemical reaction of surface water (rainwater, snowmelt, pond water) and shallow subsurface water with rocks that contain sulfur-bearing minerals, resulting in sulfuric acid. Heavy metals can be leached from rocks that come in contact with the acid, a process that may be substantially enhanced by bacterial action. The resulting fluids may be highly toxic and, when mixed with groundwater, surface water, and soil, may have harmful

effects on humans, animals, and plants (USEPA, 2018). Coal mine locations will be managed for water quality concerns, overland water flow, erosion control, and environmental impacts. Surface occupancy will be avoided for coal mines.

5.2 Oil and Gas Development

Currently, there are no proposals for new oil and gas related activities on Project lands. There are no active, inactive or abandoned oil/gas wells on Project property. Mineral rights underlying the Project may be owned outright by the federal government, owned by a third party, or a combination thereof. There may be subordination agreements or surface restrictions in place. It is also possible for the BLM to lease federally-owned mineral interests beneath the surface of Project land. It is necessary to review and consider the specific ownership documentation of each tract in order to determine the rights and controls that the Corps has on said tracts. Oil and gas well locations will be managed for surface disturbance such as invasive species, water quality, overland water flow, and erosion control. Potential impacts of mineral extraction activities include the footprint of the extraction site and construction and operation of access roads. Mineral extraction within the Project boundary could infringe on general recreational areas or fish and wildlife related recreation, either directly or from pollutants that are a result of extraction operations. Surface occupancy will be avoided for oil and gas development.

5.3 Federally-Owned Minerals

Under the multiple-use principle, federal minerals beneath the surface of Corps lands may be made available for mineral exploration and extraction, consistent with Project activities. The General Mining Act of 1872 (30 U.S.C. 22-42) authorizes and governs prospecting and mining for economic minerals. The Mineral Leasing Act of 1920 (30 U.S.C. 181 et. seq.), authorizes and governs leasing of public lands for developing deposits of coal, petroleum, natural gas, and other hydrocarbons. The Materials Act of 1947 (30 U.S.C. 601-604) authorizes BLM to dispose of mineral materials on federal lands provided that the disposal is not otherwise expressly authorized or prohibited by law, and is not detrimental to the public interest. While the Mineral Leasing Act authorizes the BLM to issue oil and gas and coal leases, it does not require that leases be issued (Darin & Stills, 2002). The BLM must obtain the Army's approval and the Army, through the Engineering District, can place limitations in the lease regarding the extractions of these minerals (See AR 405-30; *see, e.g.*, 43 CFR § 3503.20). If a developer approaches the BLM for access to a certain parcel or mineral interest, the BLM notifies the Corps and requests title information for the parcel and any use stipulations the Corps might require. The Real Estate Office for the Corps provides the BLM with title information and any stipulations (AR 405-30). The BLM would, in turn, inform the party interested in leasing the federal minerals of all associated stipulations. If the developer is still interested, the BLM follows its procedures to make the minerals available. The Corps has the final say in whether minerals will be made available, and the Assistant Secretary of the Army (ASA) has final approval on any non-availability determination.

5.4 Owners of Private and State Minerals

Owners of private and state oil, gas, and coal rights have a property right to develop their interests, which generally includes reasonable use of the surface to the extent necessary to accomplish such development. However, this does not mean their operations are free from limitation or reasonable regulation that might originate under state and/or federal law, whether pursuant to property law concepts or other legal authorities. Under applicable state and federal laws and regulations, the mineral owner, whether it is private or state, and/or the lessee must coordinate with the Project to use the federally-controlled surface. For all types of mineral leases where surface occupancy is approved under a lease, the lessees must obtain prior approval for any surface activities on Corps-managed lands (Title 43 – Public Lands: Interior Code of Federal Regulations [CFR] Part 3160). It is the Project’s responsibility to protect Project purposes when allowing surface use. Moreover, while owners of oil, gas, and coal interests generally have the right to reasonable use of the surface to the extent necessary for private oil, gas, and coal exploration and development, they are not exempt from possible liability to the surface owner for damages stemming from such exploration and development.

5.5 State or Privately-Owned Minerals Accessed from State or Privately-Owned Land

When the Corps does not own the necessary estates in real property to control development within close proximity of dams and other Project structures, effective control of mineral extraction activities requires close coordination among the Project staff and the District Office, especially Operations, Real Estate, Engineering-Construction, and Office of Counsel. Operations personnel are often the first Corps employees to become aware of new or proposed mineral extraction activities near the Project. Mineral extraction activities may include exploration operations, mining operations, drilling operations, production operations, reworking operations (including hydraulic fracturing), and high pressure pipeline operations. Real Estate personnel must investigate the location of activities and determine the federal real property interests in the location. Engineering-Construction personnel must evaluate any new or proposed activities in order to decide whether the proposed activity is compatible with the structural integrity of the dam and other major structures. The Corps’ ability to regulate and dictate private mineral extraction on adjacent private lands is minimal; however, federal agencies have a duty to protect federal resources for authorized purposes. EC 1165-2-220 provides policy and procedural guidance for processing requests by private, public, tribal, or other federal entities to make alterations to, or temporarily or permanently occupy or use, any Corps Project under Section 408. Proposed alterations must not be injurious to the public interest or impair the usefulness of the Project.

5.6 Indiana Bat and Northern Long-Eared Bat

Currently listed as federally endangered, the Indiana bat (*Myotis sodalis*) is a small, dark brown to black colored bat that hibernates in caves and abandoned mines during winter months (starting mid-September into November) and roosts under peeling tree bark, under bridges, and

sometimes in buildings, during warmer months (starting mid-April into May). The total body length of an adult Indiana bat averages between 2-3 inches, with a wingspan of 9-11 inches. Populations have been declining since the 1960's, largely due to disturbance of winter cave hibernacula (USFWS, 2019). The northern long-eared bat (*Myotis septentrionalis*), currently listed as federally threatened, is a medium-sized bat with a total body length of 3.0-3.7 inches, and a wingspan of 9-10 inches. Their fur color can be medium to dark brown on the back and pale-brown on the underside, primarily distinguishable by its long ears (USFWS, 2020). The northern long-eared bat and Indiana bat are similar with respect to their behavior, habitat use, and range, as well as the anthropogenic activities threatening existing populations.

There is considerable suitable summer roosting habitat present in and amongst the forested components of the Project. At present, there is no current Corps management or survey plan in effect; however, the U.S. Fish and Wildlife Service (USFWS) has adopted regional, seasonal cutting/disturbance restrictions. Generally, tree-cutting activities should be carried out from mid-November through the end of March during which time bats are hibernating in non-forest habitats. If any tree-cutting is necessary from the beginning of April to mid-November, trees greater than or equal to three inches in diameter at breast height should not be cut or physically disturbed in order to avoid potentially killing or injuring roosting bats. Special considerations should be given to trees with the following characteristics indicative of suitable roosting habitat: 1) dead or dying trees and snags (with exfoliating bark); 2) live trees with exfoliating or defoliating bark in the trunk or branches (e.g., shagbark and shellbark hickory); and 3) trees or snags that have characteristics typical of roost sites for bats (i.e., have exfoliating or defoliating bark, or contain cracks, crevices, or holes).

Currently, no known occurrence of these bats has been confirmed at the Project. Regardless, Project staff adhere to the aforementioned cutting/disturbance restrictions. Corps staff at the Project will continue to work with USFWS and partner with other state and federal resource agencies to ensure that potential detrimental effects to managed resources are minimized on public lands entrusted to the Corps.

5.7 Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*), is protected by the Bald and Golden Eagle Protection Act (Eagle Act) and the Migratory Bird Treaty Act (MBTA). The MBTA and the Eagle Act protect bald eagles from a variety of harmful actions and impacts. The USFWS established the National Bald Eagle Management Guidelines to advise landowners, land managers, and others who share public and private lands with bald eagles of protective provisions that apply to human activities. A variety of human activities can potentially interfere with bald eagles, affecting their ability to forage, nest, roost, breed, or raise young. The guidelines are intended to help minimize impacts to bald eagles, particularly where they may constitute disturbance, which is prohibited by the Eagle Act (USFWS, 2007).

5.8 Invasive Aquatic and Terrestrial Species

The most common invasive terrestrial plant species occurring at the Project are: Japanese honeysuckle, Japanese knotweed, autumn-olive, buckthorns, purple loosestrife, common reed or phragmites, reed canary grass, garlic mustard, multiflora rose, giant hogweed, and bush honeysuckles. The most common invasive insects are: emerald ash borer (EAB), gypsy moth, and the hemlock woolly adelgid (HWA). While no management plan is currently in effect for invasive species, terrestrial or aquatic, on Corps managed property, considerations are taken when performing tasks on the Project to prevent the spread or introduction of invasive species. Efforts to educate the public on preventing the spread and introduction of invasive species is made through signage (e.g. Don't Move Firewood! signs), ranger led interpretive programs, and information on displays and pamphlets around the Project.

5.9 Unmanned Aircraft

Title 36, Parks, Forest and Public Property, Chapter 111, Part 327.4 states “The operation of “aircraft” on Project lands at locations other than those designated by the District Commander is prohibited. This provision shall not be applicable to aircraft engaged in official business of federal, state, or local governments or law enforcement agencies, aircraft used in emergency rescue in accordance with the direction of the District Commander or aircraft forced to land due to circumstances beyond the control of the operator.” The use of unmanned aircrafts for recreational purposes is currently prohibited under this regulation. It is possible in the future that the Project can designate a specific area for the operation of unmanned aircrafts.

5.10 Climate Change

Long-term changes in Pennsylvania’s climate (i.e., altered air temperature and/or precipitation rates) will affect habitats and species. Intolerant flora and fauna, as well as species currently existing on the edge of their range, are at greatest risk of local extirpation as a result of altered environmental conditions under climate change. Climate change was predicted on models and climate data. Given predictions, it may result in water management and water quality difficulties such as not being able to make summer pool in time for the recreation season or not having enough water in the late summer to meet downstream flow targets. Increased storm runoff due to climate change also has the potential to result in greater inputs of pollution which in turn can affect water quality of the reservoir and downstream of the Project. Similarly, increased runoff may alter rates of sedimentation within the reservoir. Ecosystems and associated species impacted by pre-existing anthropogenic stressors are also at greater risk. Thus, preserving and promoting healthy and connected habitats will be critical to ensuring long-term persistence of all species under climate change (NOAA, 2021).

6. Agency and Public Coordination

Throughout the Master Plan update process, the Corps involved the public, engaged with partners and stakeholders representing interests at the local, regional, state, and federal levels, and coordinated with sovereign (recognized) tribal nations.

Comments from the various partner, stakeholder, and public meetings were received on a variety of topics, including but not limited to:

1. Preferred qualities, characteristics, and components of the Project:

- The provision of recreational opportunities to the public without needing to become commercialized
- The maintenance of a more natural environment focused on habitat quality is preferred
- The ability to enjoy the reservoir without issues such as crowding and overdevelopment
- Quality fish habitat particularly for walleye as well as small mouth bass, panfish, and northern pike

2. Potential Threats and Concerns:

- Upstream sedimentation and acidic tributaries creating water quality concerns
- Invasive species encroaching on native plant and fish species
- Erosion in and around the Project causing roads to close and land masses to disappear
- Increasing size and speed of boats
- Increasing demand for boat rentals at the marina and general development
- Overflow of people from other nearby lakes impacting user experience at the Project
- Fluctuating water levels
- Changing fish populations over time
- Disposal of garbage at recreation sites
- Lack of sewage pump outs

3. Regional Needs/Opportunities:

Below are the identified regional needs/opportunities that the Project could potentially undertake:

- Improving fish habitat to encourage fish production
- Meeting the increasing demand for boating opportunities, while considering the impact to habitat, noise levels, public safety, and the overall preferred ‘non-commercial’ ambiance of the Project
- Maintaining current habitat and promoting native species growth where possible, while also seeking to conserve more habitat in the future
- Educating the public even more on the purposes and goings-on at the Project

- Improving access for boats to include quality of access currently provided, adding parking at key locations around the Project, and improving courtesy docks
- Restoring unused parts of the property for other recreational purposes

All comments made during these meetings, as well as those submitted online, were considered during the development of the current Master Plan. All formal comments submitted during the Public Comment Period meeting, along with Corps responses, can also be found in Appendix C.

6.1 Draft Release Meetings

The District released the revised draft of the Master Plan on August 4, 2021. The notification to stakeholders and resource agencies began the 30-day comment period which ended on September 2, 2021. A virtual public meeting was held on August 18, 2021 with the purpose of unveiling the proposed recommendations and land classifications and eliciting public comment on the proposed updates to the Master Plan, Shoreline Management Plan, and accompanying the Environmental Assessment. The public could provide comments during the meeting, as well as submit their comments via the online public comment tool, submitting a comment form by mail or email, or visiting the Youghiogheny River Lake office. See Appendix C for the public notice and associated outreach materials.

6.2 Outreach Efforts

The following outreach efforts were conducted to notify the public, stakeholders, and partners of the opportunities for involvement and to solicit input, beyond the meetings listed above, into the Master Plan update process:

- **Website:** A dedicated website was developed to describe the Master Plan process, changes in the Master Plan, and recommendations resulting from the Master Plan Revision as well as provide an avenue for additional comments to be submitted:
<https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>
- **Crowdsourc Reporter:** An online map based public feedback tool was set up to collect comments from Project visitors.
<https://lrp.maps.arcgis.com/apps/CrowdsourcReporter/index.html?appid=5b4859c61986476f9f6333bad856eeec#>
- **Mailings to Dock Owners:** A packet of information including the Project fact sheet, comment card, and information on the public scoping meeting as well as other ways to stay informed and provide input during the process were mailed to registered dock owners at Project.

- **Fact Sheet:** A Master Plan fact sheet was developed to inform partners, stakeholders, and the public about the purpose and scope of the Master Plan update. This fact sheet was sent in email invitations, mailed to dock owners, provided on the website, and hung up in Project day-use areas.
- **Agency and Partner Email Invitations:** Email invitations for the partner meeting were sent out via email to all partners with available contact information, inviting them to attend both the partner and public scoping meetings and provide information on how to submit comments. An email invitation was also sent notifying agencies and partners of the 30-day public comment period and draft release public meeting.
- **Public Facebook Posts:** Facebook posts were made on the Youghiogheny River Lake Facebook page advertising the Master Plan update, promoting the meetings themselves, and inviting comments. A Facebook Event was created for the draft release public meeting.
- **Press Releases:** Sent to local media prior to public engagement in an effort to notify the public of the upcoming meetings and opportunities to comment. An announcement was then posted in the local newspaper and posted on the District website.
- **Notice of Availability:** Pittsburgh District sent a Notice of Availability (NOA), required for National Environmental Policy Act compliance, to partners and stakeholders indicating the 30-day comment period for the Master Plan, Shoreline Management Plan and Environmental Assessment, along with the web address to access the documents. The NOA was either sent via an email invitation or mail depending on address availability and preference of the recipients.
- **Indian Nation Coordination Letters:** Letters were sent directly to Indian Nations in recognition of the Corps' Federal Tribal Trust responsibilities. The letters inquired as to whether the Indian Nations had any information relevant to the Project, invited them to contact the Pittsburgh District either via mail, email, or phone in order to submit any comments or concerns, and requested comments on the proposed revision of the Master Plan, Shoreline Management Plan, and Environmental Assessment.

6.3 Scoping Meetings

Scoping efforts began on July 8, 2020, with a meeting between Corps staff and Project partners and key stakeholders representing the Friends of the Youghiogheny River Lake, Yough Lake Marina, Maryland DNR, and the PAFBC. A virtual public meeting was held that same evening.

The objectives of these scoping meetings were to 1) communicate the Corps' intent and need to revise the Master Plan; 2) establish the scope of the Master Plan update; and 3) learn about the needs, opportunities, and concerns of partners, stakeholders, and the public. See Appendix C for a summary of the meetings and the public notice. Interested parties unable to attend the scheduled meetings or not located close to the Project site, could email the Pittsburgh District with their comments as well as submit via the online interactive comment tool.

7. Summary of Recommendations

This Master Plan conceptually establishes and guides the orderly development, administration, maintenance, conservation, enhancement, and management of all natural, cultural, and recreational resources at the Project. This section summarizes the proposed changes that can be found within this Master Plan and provides specific recommendations to be considered that will help guide the direction of Project management into the future.

Derived through correspondences, comments, scoping meetings (described in further detail below) by partners, stakeholders, and current and potential Project partners, along with Corps staff knowledge of the Project, the recommendations below address the regional needs, threats, and opportunities identified throughout the planning process.

These management recommendations are non-regulatory and available for use by any citizen, group, or agency. They have been analyzed in the Environmental Assessment associated with this Master Plan in order to identify potential impacts and any additional analysis and coordination that may be necessary.

7.1 Coordination and Partnerships

The modest size of the staff at the Project creates a prime opportunity for partners and volunteers to augment and advance the operations and management at the Project.

Therefore, an overarching recommendation for the Project is to create partnerships to leverage fiscal resources and continue to involve local communities and stakeholders in achieving the resource objectives set forth in Section 1.6. This recommendation includes working with federal and state agencies to leverage resources for complimentary natural resources management, with recreation service providers to improve user experiences, with environmental groups to improve habitat, and with educational and community groups to encourage volunteer activities that are mutually beneficial.

The Corps should keep abreast of all current and future development plans for the area including local and state plans regarding resources and opportunities within the region. The Corps should

also seek to continuously stay engaged and further coordination efforts. To encourage coordination and partnership, the Project staff should engage with external partners including but not limited to:

- Maryland Department of Natural Resources
- Pennsylvania Fish and Boat Commission
- U.S. Coast Guard
- Friends of the Youghiogheny River Lake
- Yough Lake Marina
- Tub Run
- Yough Walleye Association
- Confluence Bureau of Tourism
- Turkeyfoot Historical Society
- Chestnut Ridge Trout Unlimited
- Audubon Society
- Ducks Unlimited
- Lions Club
- Local Boy and Girl Scout Troops

Opportunities ripe for partnerships include: establishment of educational and wildlife improvement projects, utilization of Project facilities for biological stations, creation of a Volunteer Village to allow a place for volunteers to live and work, working with seasonal natural resource crews, enhancement of pollinator plot initiatives, creation of a high water level alert system, and offering paddlecraft courses as well as vessel inspections.

7.2 Facility Modernization

The Corps will continue to modernize current facilities at the Project. Modernization activities will occur within existing footprints of recreation areas and prioritize actions that improve visitor safety and experience where funding is available and in accordance with Engineer Manual (EM) 1110-1-400, Engineering and Design – Recreation Facility and Customer Service Standards, 1 Nov 2004. Potential improvements are described in detail in Section 1.6 of this Master Plan and were developed using information gathered during the public input process and expert knowledge of the Project staff. Examples of potential improvement projects are provided below.

Specific potential improvements for safety if resourcing and/or a successful partnership becomes available at the Project include:

- Installment of informational and directional signs around the Project and trails;
- Demarcation of property lines (fee and flowage); and
- Improvements to roads leading to, and surrounding, the Project.

Specific potential improvements for improved visitor experience if resourcing and/or a successful partnership becomes available at the Project include:

- Identification of Project Site Areas (PSAs) with low use and degraded facilities; divest when appropriate;
- Establishment of different ways for visitors to explore the Project, including: development of a Project Check-In app that enables visitors to access park maps, learn about the Project, check-in, and log information from their experience;
- Create ADA accessible boat launch and restrooms at Somerfield North Recreation Area;
- Extend Fisherman's Trail and add in new multi-use trails;
- Add in courtesy dock to Mill Run Recreation Area;
- Establish spawning grounds for fish to include floating islands and suspended fish habitat structures;
- Add in full hookup sites to the Outflow Recreation Area campground to include water, sewage and electric;
- Add in dog park below the dam;
- Add in two fish washing stations at Somerfield North Recreation Area and Outflow Recreation Area; and
- Identify and demolish unused dwellings.

7.3 Land Classification Changes

The land classification changes discussed in this document and evaluated in the accompanying Environmental Assessment represent the changes in land use, management strategies, and guidance concerning naming conventions that have occurred since the original Master Plan for this Project was developed. Updating and highlighting naming conventions and/or classifications as part of the Master Plan will ensure that the conservation of valuable resources continues uninhibited.

Table 7-1. Conversion of Land and Water Classifications

Original	Proposed
Multiple Resource Management <ul style="list-style-type: none"> • Recreation, Low Density • Wildlife Management, General • Vegetative Management • Inactive or Future Recreation 	Multiple Resource Management <ul style="list-style-type: none"> • Low Density Recreation • Wildlife Management • Vegetative Management • Future or Inactive Recreation
Environmentally Sensitive Areas	Environmentally Sensitive Areas
Mitigation	Mitigation
Recreation	High Density Recreation
Operations	Project Operations
Prohibited Boating	Restricted

Open Water Recreation	Open Recreation
River Recreation	n/a
No-Wake	Designated No-Wake
n/a	Fish and Wildlife Sanctuary

This table reflects a change in terminology classifications of land and water.

Table 7-2. Summary of Land Classification Changes

Existing Land Classifications	Existing Acres	Proposed Land Classifications	Proposed Acres
Multiple Resource Management <ul style="list-style-type: none"> • Recreation, Low Density • Wildlife Management, General • Vegetative Management • Inactive or Future Recreation 	1,047.6	Multiple Resource Management <ul style="list-style-type: none"> • Low Density Recreation • Wildlife Management • Vegetative Management • Future or Inactive Recreation 	954.5 157 0.0 36
Environmentally Sensitive Areas	187.3	Environmentally Sensitive Areas	125.5
Mitigation	0.0	Mitigation	0.0
Recreation	193.5	High Density Recreation	149.6
Operations	72.5	Project Operations	78.9
Prohibited Boating	44.6	Restricted	5
Open Water Recreation	2,345.1	Open Recreation	2,429
River Recreation	57.8	n/a	
No-Wake	372.8	Designated No-Wake	368.2
		Designated No-Wake (Paddle Friendly)	18.1
n/a	0.0	Fish and Wildlife Sanctuary	0.0

Acres numbers for historical land classifications were calculated in GIS software by scanning, georeferencing, and digitizing the 2007 Land Classification map. Due to the scale and other limitations of the original hand-drawn map, acreages should be considered very approximate.

While these land classifications may be updated in the future, those described in this document, dated 2021, represent the most current and relevant uses of various Project lands. Additional details of the uses and management goals for individual Project site areas will be provided in a forthcoming OMP for the Project.

7.4 Development Requests

Some development requests include adding an ADA accessible boat launch and restrooms and a fish washing station at Somerfield North Recreation Area. Other development requests for the Outflow Recreation Area include adding in full hookup sites for water, sewage, and electric, and adding in a fish washing station.

Additionally, the Project would like to extend Fisherman's Trail, add in new multi-use trails, add in a courtesy dock to Mill Run Recreation Area, and add in a dog park below the dam.

Lastly, Project staff would like to identify and demolish any unused dwellings and establish spawning grounds for fish to include floating islands and suspended fish habitat structures.

7.5 Wildlife Management and Environmentally Sensitive Areas

The Corps land at the Project represents a significantly-sized riparian corridor consisting of valuable wildlife lands. These lands are vulnerable to change by human disturbance. Therefore, large portions of these lands are outgranted to other agencies with the primary focus being wildlife management. At the Project there are large portions of land acreage remaining in an undeveloped natural state (i.e., heavily forested and rich in riverine habitat and wetlands). The Corps will continue to coordinate with resource agency partners to successfully manage these lands for the use and enjoyment of our visitors and the conservation of our valuable natural resources. In the future, the Corps should develop survey methods to identify sensitive habitats, possibly using MSIM, and use the results to designate additional Environmentally Sensitive Areas, which would be converted from multiple resource managed lands. It is recommended that these lands be protected from human disturbance and development activities to the extent possible in compliance with all applicable laws and regulations. If development activities are proposed for these areas, the Corps will work with partners to minimize the disturbance or mitigate the impacts. The Corps will also consider proactive steps to enhance natural areas for sensitive species and to restore sensitive habitats through native vegetation plantings, removal of invasive species, and/or other efforts targeted at non-game species habitat. In addition, the Corps will continue to protect cultural resources in existing Environmentally Sensitive Areas and promote education related to these resources.

7.6 Threatened and Endangered Species

Federally-listed threatened and endangered plant and animal species will be managed according to USFWS Recovery Plans. State listed species will be protected through partnerships and agreements with state agencies. Best Management Practices, which are to be used to manage threatened and endangered species at the Project, have been outlined in Sections 4 and 5.

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APPENDIX A

APPLICABLE PUBLIC LAWS, FEDERAL STATUTES, AND EXECUTIVE ORDERS

The following public laws, federal statutes, and executive orders are applicable to the Project.

A.1 PL59-209, Antiquities Act of 1906: The first federal law established to protect what are now known as "cultural resources" on public lands. It provides a permit procedure for investigating "antiquities" and consists of two parts: An act for the Preservation of American Antiquities, and Uniform Rules and Regulations.

A.2 PL74-292, Historic Sites Act of 1935: Declares it to be a national policy to preserve for (in contrast to protecting from) the public, historic (including prehistoric) sites, buildings, and objects of national significance. This act provides both authorization and a directive for the Secretary of the Interior, through the National Park Service, to assume a position of national leadership in the area of protecting, recovering, and interpreting national archeological historic resources. It also establishes an "Advisory Board on National Parks; Historic Sites, Buildings, and Monuments, a committee of eleven experts appointed by the Secretary to recommend policies to the Department of the Interior".

A.3 PL74-409, Rivers and Harbors Act of 1935: This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes.

A.4 PL74-738, Flood Control Act of 1936: This act authorizes the construction of certain public works on rivers and harbors for flood control, and for other purposes.

A.5 PL75-761, Flood Control Act of 1938: This act authorizes the construction of certain public works on rivers and harbors for flood control, and for other purposes.

A.6 PL78-534, Flood Control Act of 1944: Section 4 of the act, as amended, authorizes the Corps to construct, maintain, and operate public parks and recreational facilities in reservoir areas and to grant leases and licenses for lands, including facilities, preferably to federal, state or local governmental agencies.

A.7 PL85-500, Rivers and Harbors Act of 1958: This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

A.8 PL85-624, Fish and Wildlife Coordination Act 1934: This act, as amended, sets down the general policy that fish and wildlife conservation shall receive equal consideration with other Project purposes and be coordinated with other features of water resource development programs. Opportunities for improving fish and wildlife resources and adverse

Appendix A

effects on these resources shall be examined along with other purposes which might be served by water resources development.

A.9 PL86-645, Rivers and Harbors Act of 1960: This act authorizes the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and for other purposes.

A.10 PL86-717, Forest Conservation: This act provides for the protection of forest cover for reservoir areas under this jurisdiction of the Secretary of the Army and the Chief of Engineers.

A.11 PL88-578, Land and Water Conservation Fund Act of 1965: This act established a fund from which Congress can make appropriations for outdoor recreation. Section 2(2) makes entrance and user fees at reservoirs possible by deleting the words "without charge" from Section 4 of the 1944 Flood Control Act, as amended.

A.12 PL89-72, Federal Water Project Recreation Act of 1965: This act requires that not less than one-half the separable costs of developing recreational facilities and all operation and maintenance costs at federal reservoir projects shall be borne by a non-federal public body. An OCE/OMB implementation policy made these provisions applicable to projects completed prior to 1965.

A.13 PL89-90, Water Resources Planning Act (1965): This act established the Water Resources Council and gives it the responsibility to encourage the development, conservation, and use of the Nation's water and related land resources on a coordinated and comprehensive basis.

A.14 PL89-272, Solid Waste Disposal Act, as amended: This act authorized a research and development program with respect to solid-waste disposal. It proposes (1) to promote a national research and development program for new and improved methods of proper and economic solid-waste disposal, including studies directed toward the conservation of national resources by reducing the amount of waste and unsalvageable materials and by recovery and utilization of potential resources in solid waste; and (2) to provide technical and financial assistance to state and local governments and interstate agencies in the planning, development, and conduct of solid-waste disposal programs.

A.15 PL89-665, National Historic Preservation Act of 1966: This act provides for: (1) an expanded National Register of significant sites and objects; (2) matching grants to states undertaking historic and archeological resource inventories; and (3) a program of grants-in aid to the National Trust for Historic Preservation; and (4) the establishment of an Advisory Council on Historic Preservation. Section 106 requires that the President's Advisory Council on Historic Preservation have an opportunity to comment on any undertaking which adversely affects properties listed, nominated, or considered important enough to be included on the National Register of Historic Places.

A.16 PL90-483, Rivers and Harbors and Flood Control Act of 1968, Mitigation of Shore Damages: Section 210 restricted collection of entrance fee at Corps lakes and reservoirs to users of highly developed facilities requiring continuous presence of personnel.

A.17 PL91-190, National Environmental Policy Act of 1969 (NEPA): NEPA declared it a national policy to encourage productive and enjoyable harmony between man and his environment, and for other purposes. Specifically, it declared a “continuing policy of the federal Government...to use all practicable means and measures...to foster and promote the general welfare, to create conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.” Section 102 authorized and directed that, to the fullest extent possible, the policies, regulations and public law of the United States shall be interpreted and administered in accordance with the policies of the Act.

A.18 PL91-611, Rivers and Harbors and Flood Control Act of 1970: Section 234 provides that persons designated by the Chief of Engineers shall have authority to issue a citation for violations of regulations and rules of the Secretary of the Army, published in the Code of Federal Regulations.

A.19 PL92-463, Federal Advisory Committee Act: The Federal Advisory Committee Act, as amended, is the legal foundation defining how federal advisory committees operate. The law has special emphasis on open meetings, chartering, public involvement, and reporting.

A.20 PL92-500, Federal Water Pollution Control Act Amendments of 1972: The Federal Water Pollution Control Act of 1948 (PL 845, 80th Congress), as amended in 1956, 1961, 1965 and 1970 (PL 91- 224), established the basic tenet of uniform State standards for water quality. PL92-500 strongly affirms the federal interest in this area. “The objective of this act is to restore and maintain the chemical, physical and biological integrity of the Nation’s waters.”

A.21 PL92-516, Federal Environmental Pesticide Control Act of 1972: This act completely revises the Federal Insecticide, Fungicide and Rodenticide Act. It provides for complete regulation of pesticides to include regulation, restrictions on use, actions within a single State, and strengthened enforcement.

A.22 PL93-81, Collection of Fees for Use of Certain Outdoor Recreation Facilities: This act amends Section 4 of the Land and Water Conservation Act of 1965, as amended to require each federal agency to collect special recreation use fees for the use of sites, facilities, equipment, or services furnished at federal expense.

A.23 PL93-251, Water Resources Development Act of 1974: Section 107 of this law establishes a broad federal policy which makes it possible to participate with local governmental entities in the costs of sewage treatment plan installations.

A.24 PL93-291, Archaeological Conservation Act of 1974: The Secretary of the Interior shall coordinate all federal survey and recovery activities authorized under this expansion of the 1960 act. The Federal Construction Agency may transfer up to one percent of project funds to the Secretary with such transferred funds considered non-reimbursable project costs.

A.25 PL93-303, Recreation Use Fees: This act amends Section 4 of the Land and Water Conservation Act of 1965, as amended, to establish less restricted criteria under which federal agencies may charge fees for the use of campgrounds developed and operated at federal areas under their control.

A.26 PL93-523, Safe Drinking Water Act: The act assures that water supply systems serving the public meet minimum national standards for protection of public health. The act (1) authorizes the Environmental Protection Agency to establish federal standards for protection from all harmful contaminants, which standards would be applicable to all public water systems, and (2) establishes a joint federal-state system for assuring compliance with these standards and for protecting underground sources of drinking water.

A.27 PL94-422, Amendment of the Land and Water Conservation Fund Act of 1965: Expands the role of the Advisory Council. Title 2 - Section 102a amends Section 106 of the Historical Preservation Act of 1966 to say that the Council can comment on activities which will have an adverse effect on sites either included in or eligible for inclusion in the National Register of Historic Places.

A.28 PL98-63, Supplemental Appropriations Act of 1983: The act authorized the Corps of Engineers Volunteer Program. The United States Army Chief of Engineers may accept the services of volunteers and provide for their incidental expenses to carry out any activity of the Army Corps of Engineers except policy making or law or regulatory enforcement.

A.29 PL99-662, The Water Resources Development Act of 1986: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.30 PL101-640, Water Resource Development Act of 1990: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.31 PL101-646, Coastal Wetlands Planning, Protection, & Restoration Act of 1990: Provides authorization to carry out projects for the protection, restoration, or enhancement of aquatic and associated ecosystems, including projects for the protection, restoration, or creation of wetlands and coastal ecosystems.

A.32 PL100-676, Water Resource Development Act of 1988: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.33 PL102-580, Water Resource Development Act of 1992: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.34 PL104-303, Water Resource Development Act of 1996: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.35 PL106-53, Water Resource Development Act of 1999: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.36 PL106-541, Water Resource Development Act of 2000: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.37 PL110-114, Water Resource Development Act of 2007: Provides for the conservation and development of water and related resources and the improvement and rehabilitation of the Nation's water resources infrastructure.

A.38 PL113-121, The Water Resources Reform and Development Act of 2014: This act authorizes the U.S. Army Corps of Engineers to carry out missions to develop, maintain, and support the nation's vital ports and waterways infrastructure needs and support effective and targeted flood protection and restoration needs.

A.39 30 U.S.C. 22-42, General Mining Act of 1872: Authorizes and governs prospecting and mining for economic minerals, such as gold, platinum, and silver, on federal public lands.

A.40 30 U.S.C. 181, Mineral Leasing Act of 1920, as amended by the Federal Onshore Oil and Gas Leasing Reform Act of 1987: Authorizes and governs leasing of public lands for developing deposits of coal, petroleum, natural gas, and other hydrocarbons, in addition to phosphates, sodium, sulfur, and potassium.

A.41 30 U.S.C. 226, Lease of Oil and Gas Lands: Authorizes the use of public lands for oil and gas exploration and development.

A.42 30 U.S.C. 601-604, Materials Act of 1947: Authorizes the BLM to dispose of mineral materials on federal lands provided that the disposal is not otherwise expressly authorized or prohibited by law, and is not detrimental to the public interest.

A.43 16 U.S.C. 661-664, Fish and Wildlife Coordination Act of 1934, as amended by PL85-624: Provides the basic authority of the U.S. Fish and Wildlife Service to become involved in the evaluation of impacts to fish and wildlife from proposed water resource development projects or when federal actions result in the control or modification of a natural stream or body of water.

A.44 16 U.S.C. 668-668d, Bald and Golden Eagle Protection Act of 1940, as amended: Prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*), including their nests or eggs.

A.45 16 U.S.C. 1531-1544, Endangered Species Act of 1973: Provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend.

A.46 16 U.S.C. 703-712, Migratory Bird Treaty Act of 1918: Makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations.

A.47 AR 405-30, Mineral Exploration and Extraction of (15 July 1984): Governs exploration and extraction of minerals on Department of Army property.

A.48 43 CFR § 3503.20, Available Areas Managed by Others: The Bureau of Land Management will consult with the surface management agency before issuing a permit or lease for public domain lands where the surface is administered by another federal agency.

A.49 43 CFR Part 3160, Onshore Oil and Gas Operations: Gives the Bureau of Land Management authority to issue permits or leases on public lands for the purposes of exploration, extraction, or removal of oil or gas.

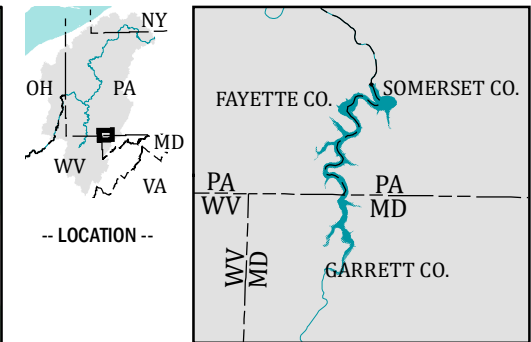
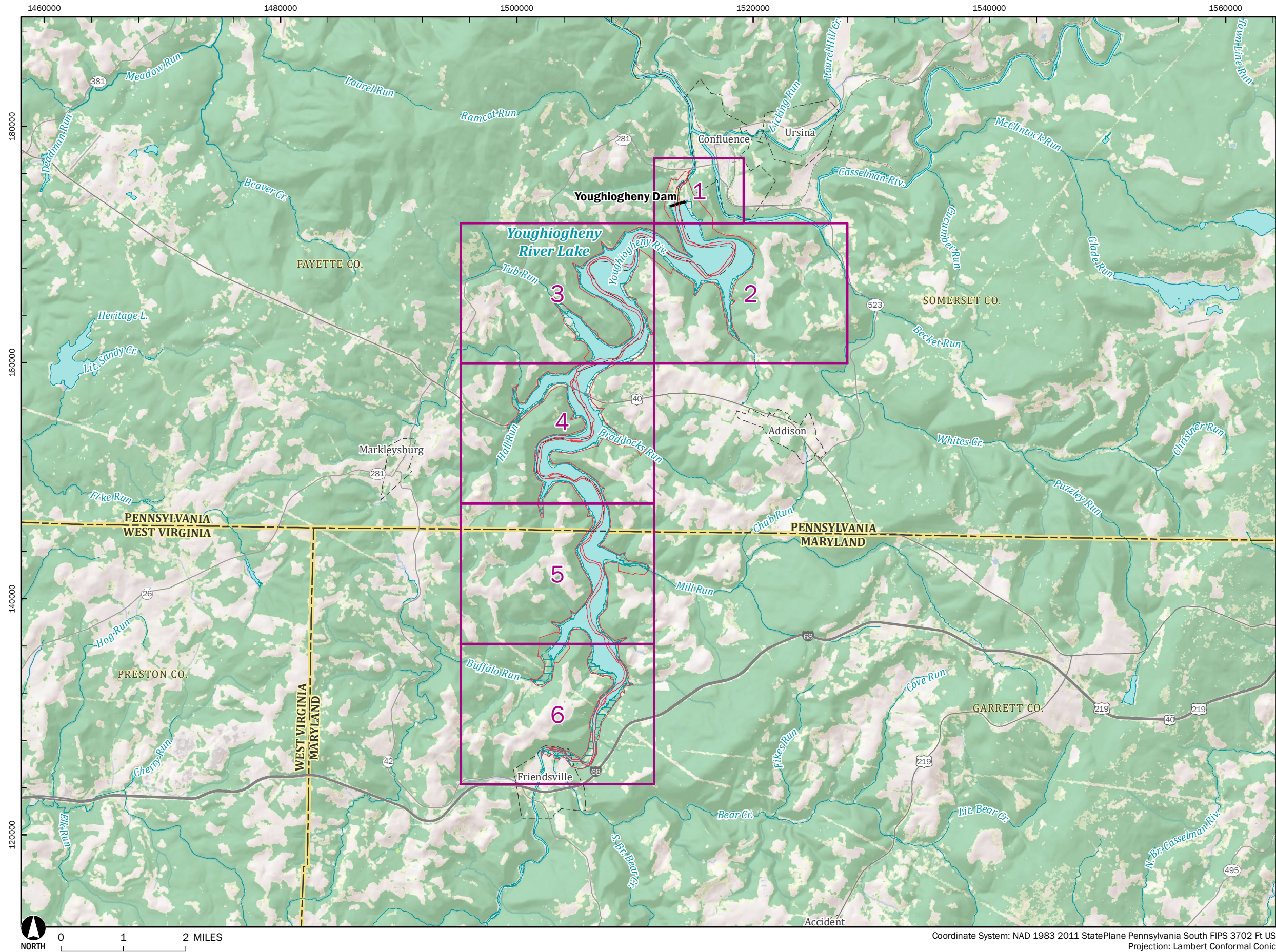
A.50 CFR, Title 36, Parks, Forests and Public Property, Chapter III: Principle set of rules and regulations issued by the U.S. Army Corps of Engineers regarding public use of water resource development projects.

A.51 Executive Order (EO) 13112, Invasive Species (FR: 03 Feb 1999), as amended by EO 13751, Safeguarding the Nation From the Impacts of Invasive Species (FR: 08 Dec 2016): Executive order to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause.

APPENDIX B

MAP PLATES

Maps are for graphical purposes only. They do not represent a legal survey. While every effort has been made to ensure that this data is accurate and reliable within the limits of the current state of the art technology, the Corps cannot assume liability for any damages caused by any errors or omissions in the data, nor as a result of the failure of the data to function on a particular system. The Corps makes no warranty, expressed or implied, nor does the fact of distribution constitute such a warranty.



Legend

Sheet

Fee Boundary

Data: USACE, USGS

YOUGHIOGHENY RIVER LAKE

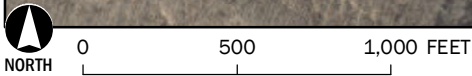
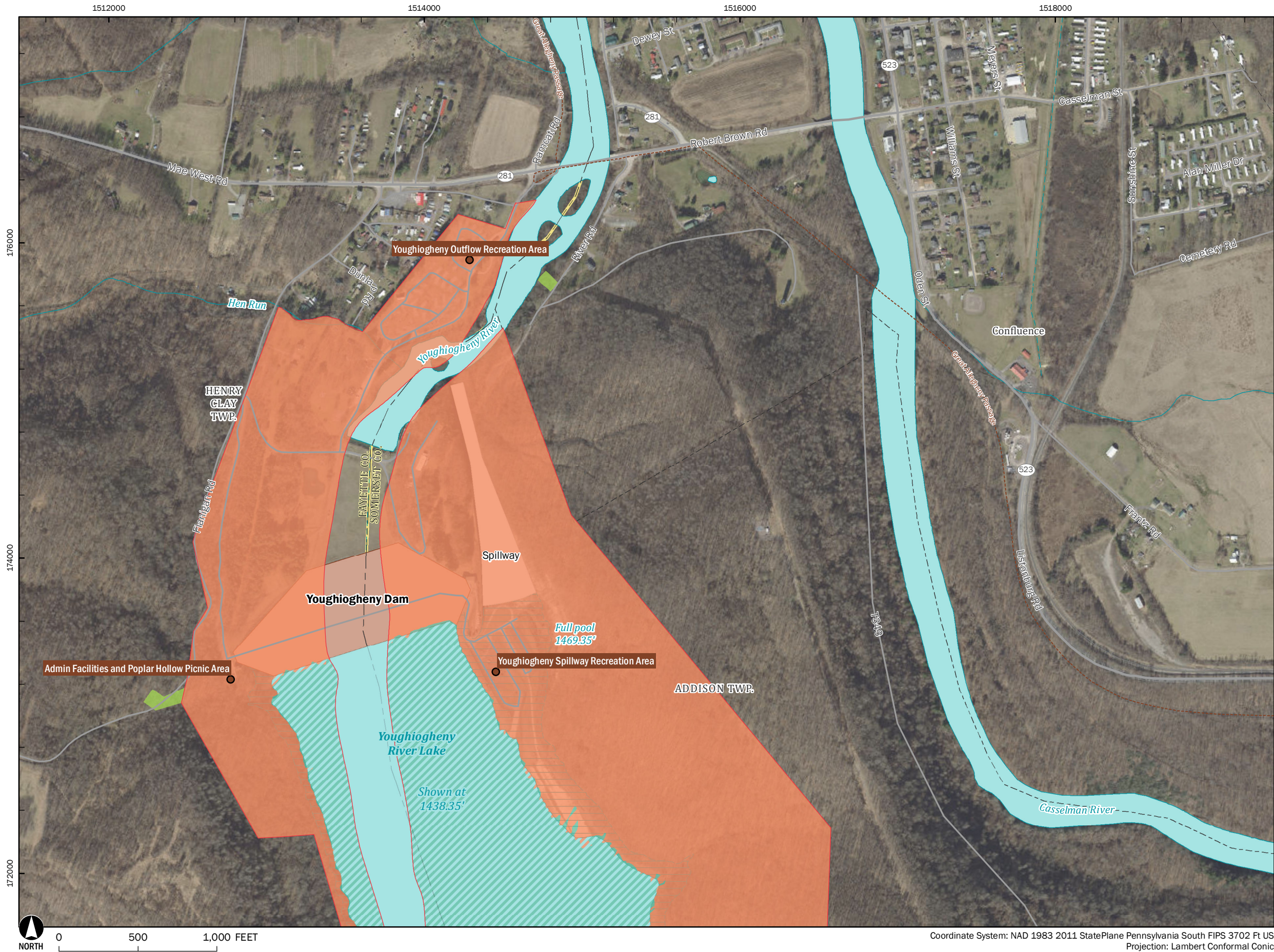
Master Plan

Plate 2: Overview and Transportation Corridors
and Sheet Index

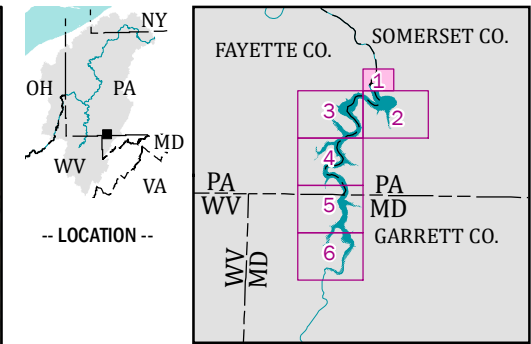


Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471

Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic



Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic



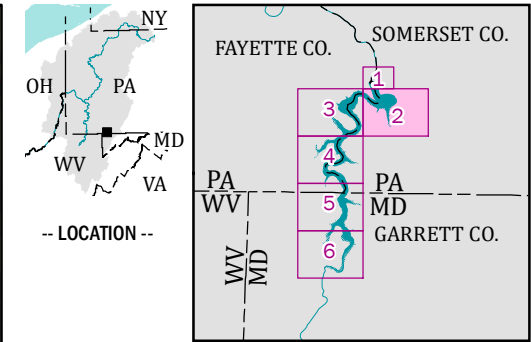
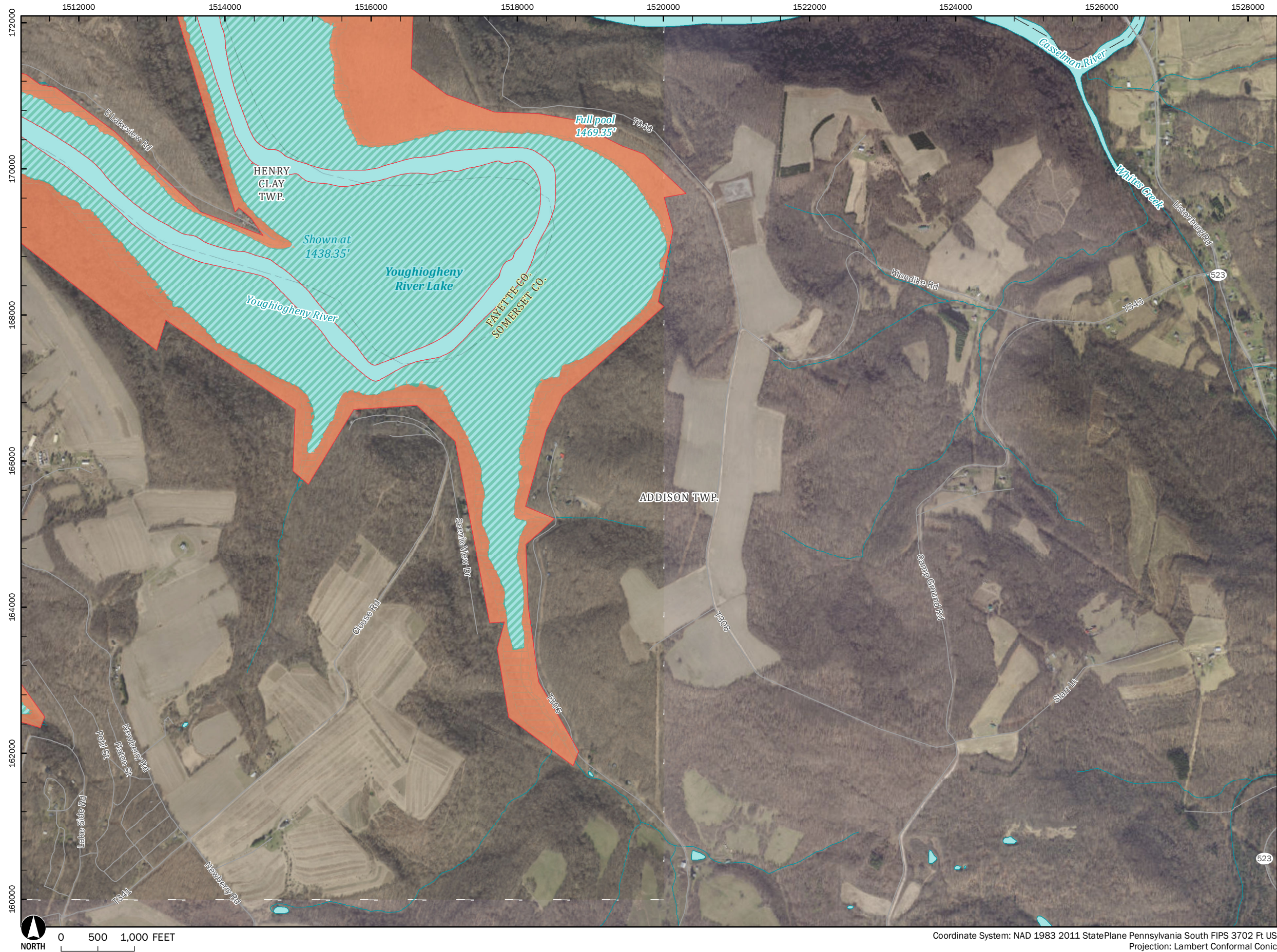
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- Recreation Area
- Fee Boundary
- Ownership, Management, Pool**
- Fee, No Outgrant, Above Pool
- ▨ Fee, No Outgrant, Within Pool
- Fee, Outgrant - Fish Mgmt - PA Fish and Boat Commission, Above Pool
- ▨ Fee, Outgrant - Fish Mgmt - PA Fish and Boat Commission, Within Pool
- Fee, Outgrant - Fish Wildlife - Maryland DNR, Above Pool
- ▨ Fee, Outgrant - Fish Wildlife - Maryland DNR, Within Pool
- Fee, Outgrant - Parks and Rec - PA Fish and Boat Commission, Above Pool
- ▨ Fee, Outgrant - Parks and Rec - PA Fish and Boat Commission, Within Pool
- Fee, Outgrant - Parks and Rec - Town of Friendsville, Above Pool
- Fee, Outgrant - Commercial - Laurel Highlands Rental, Above Pool
- ▨ Fee, Outgrant - Commercial - Laurel Highlands Rental, Within Pool
- Fee, Outgrant - Commercial - Leskinen Enterprises, Above Pool
- ▨ Fee, Outgrant - Commercial - Leskinen Enterprises, Within Pool
- Easement (Flowage) Above Pool
- No Ownership or Easement, Within Pool

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 3: Boundaries
Sheet 1 of 6
Damsite



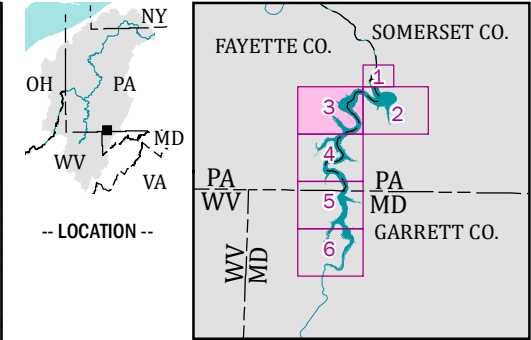
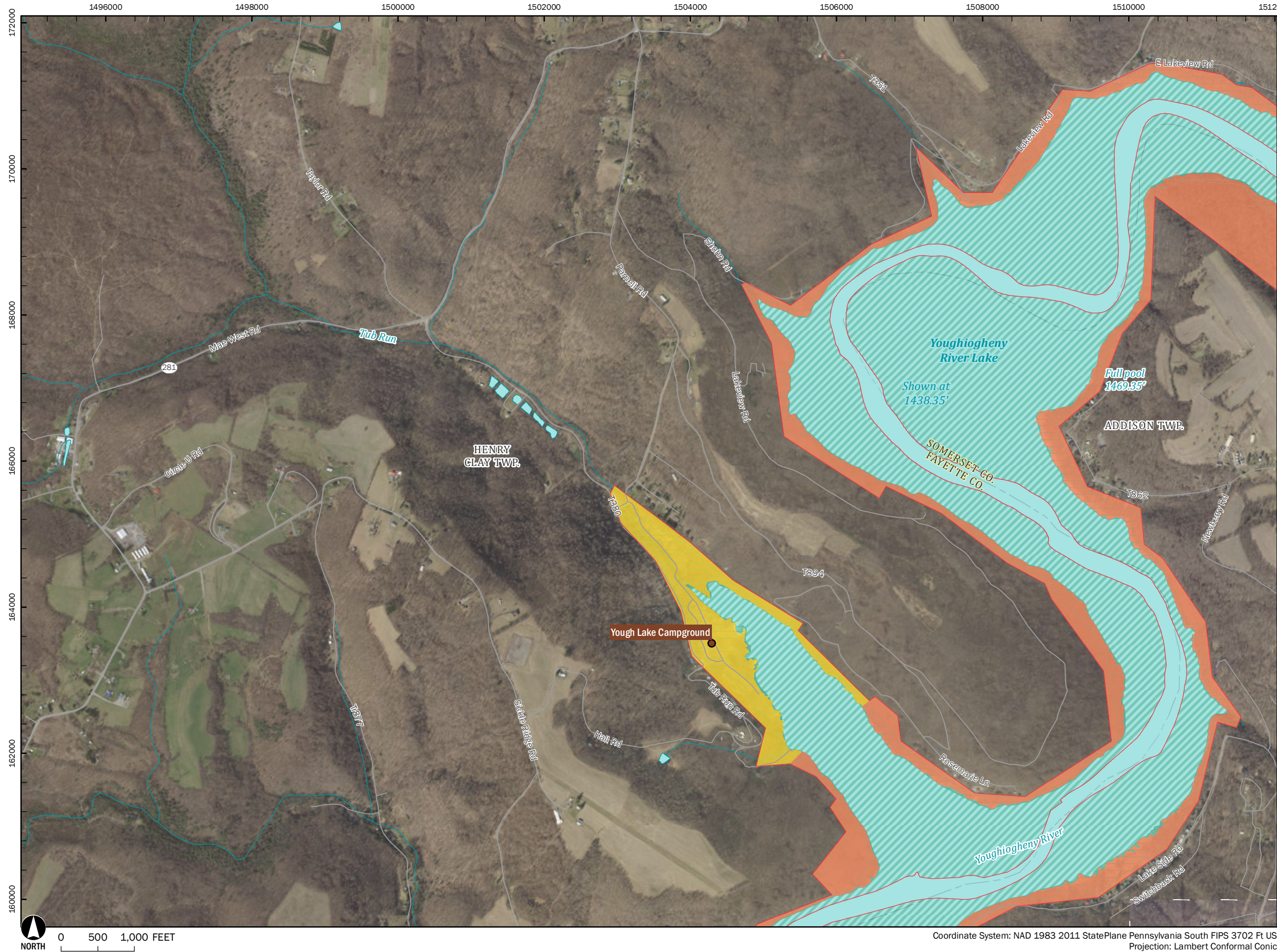
Legend

- Recreation Area
- Fee Boundary
- Ownership, Management, Pool**
- Fee, No Outgrant, Above Pool
- ▨ Fee, No Outgrant, Within Pool
- Fee, Outgrant - Fish Mgmt - PA Fish and Boat Commission, Above Pool
- ▨ Fee, Outgrant - Fish Mgmt - PA Fish and Boat Commission, Within Pool
- Fee, Outgrant - Fish Wildlife - Maryland DNR, Above Pool
- ▨ Fee, Outgrant - Fish Wildlife - Maryland DNR, Within Pool
- Fee, Outgrant - Parks and Rec - PA Fish and Boat Commission, Above Pool
- ▨ Fee, Outgrant - Parks and Rec - PA Fish and Boat Commission, Within Pool
- Fee, Outgrant - Parks and Rec - Town of Friendsville, Above Pool
- Fee, Outgrant - Commercial - Laurel Highlands Rental, Above Pool
- ▨ Fee, Outgrant - Commercial - Laurel Highlands Rental, Within Pool
- Fee, Outgrant - Commercial - Leskinen Enterprises, Above Pool
- ▨ Fee, Outgrant - Commercial - Leskinen Enterprises, Within Pool
- Easement (Flowage) Above Pool
- No Ownership or Easement, Within Pool

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 3: Boundaries
Sheet 2 of 6
Clouse/Klondike



Legend

- Recreation Area
- Fee Boundary
- Ownership, Management, Pool**
- Fee, No Outgrant, Above Pool
- ▨ Fee, No Outgrant, Within Pool
- Fee, Outgrant - Fish Mgmt - PA Fish and Boat Commission, Above Pool
- ▨ Fee, Outgrant - Fish Mgmt - PA Fish and Boat Commission, Within Pool
- Fee, Outgrant - Fish Wildlife - Maryland DNR, Above Pool
- ▨ Fee, Outgrant - Fish Wildlife - Maryland DNR, Within Pool
- Fee, Outgrant - Parks and Rec - PA Fish and Boat Commission, Above Pool
- ▨ Fee, Outgrant - Parks and Rec - PA Fish and Boat Commission, Within Pool
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Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

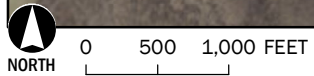
YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 3: Boundaries

Sheet 3 of 6

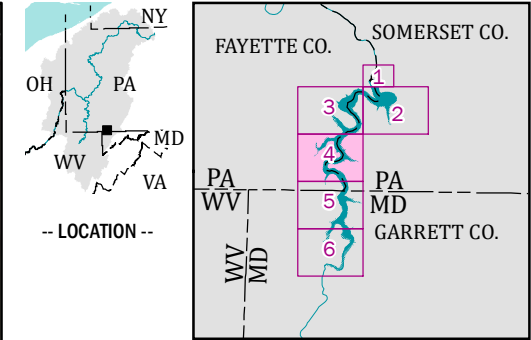
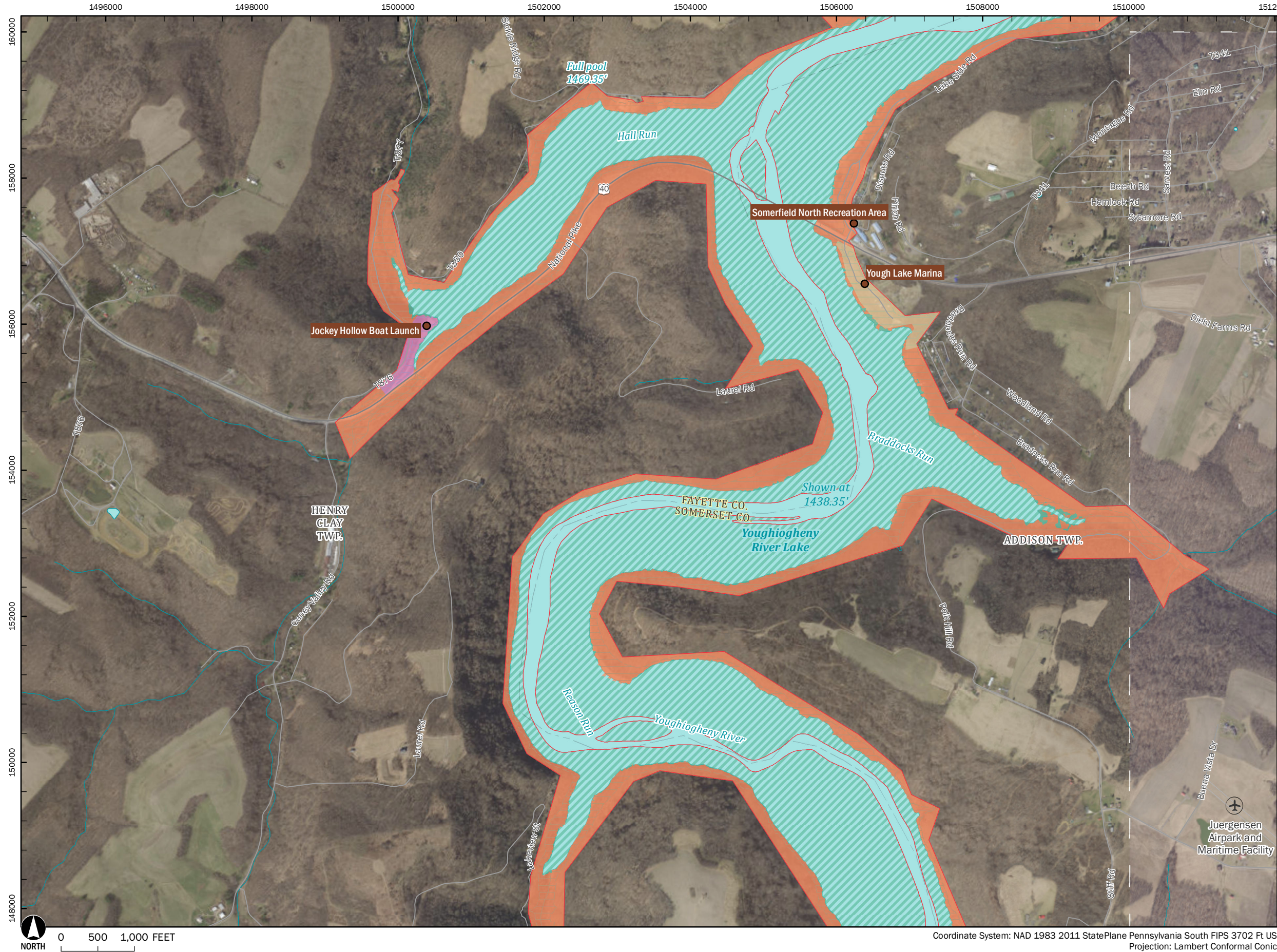
Tub Run



Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic



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Legend

- Recreation Area
- Fee Boundary
- Ownership, Management, Pool**
- Fee, No Outgrant, Above Pool
- ▨ Fee, No Outgrant, Within Pool
- Fee, Outgrant - Fish Mgmt - PA Fish and Boat Commission, Above Pool
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Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

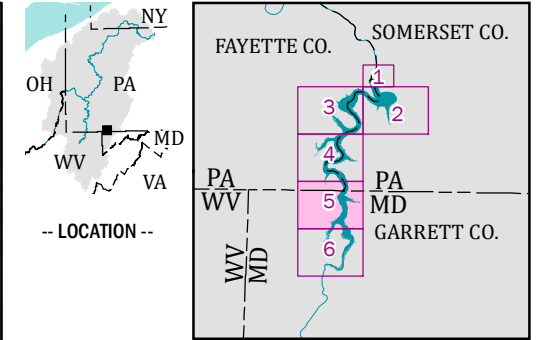
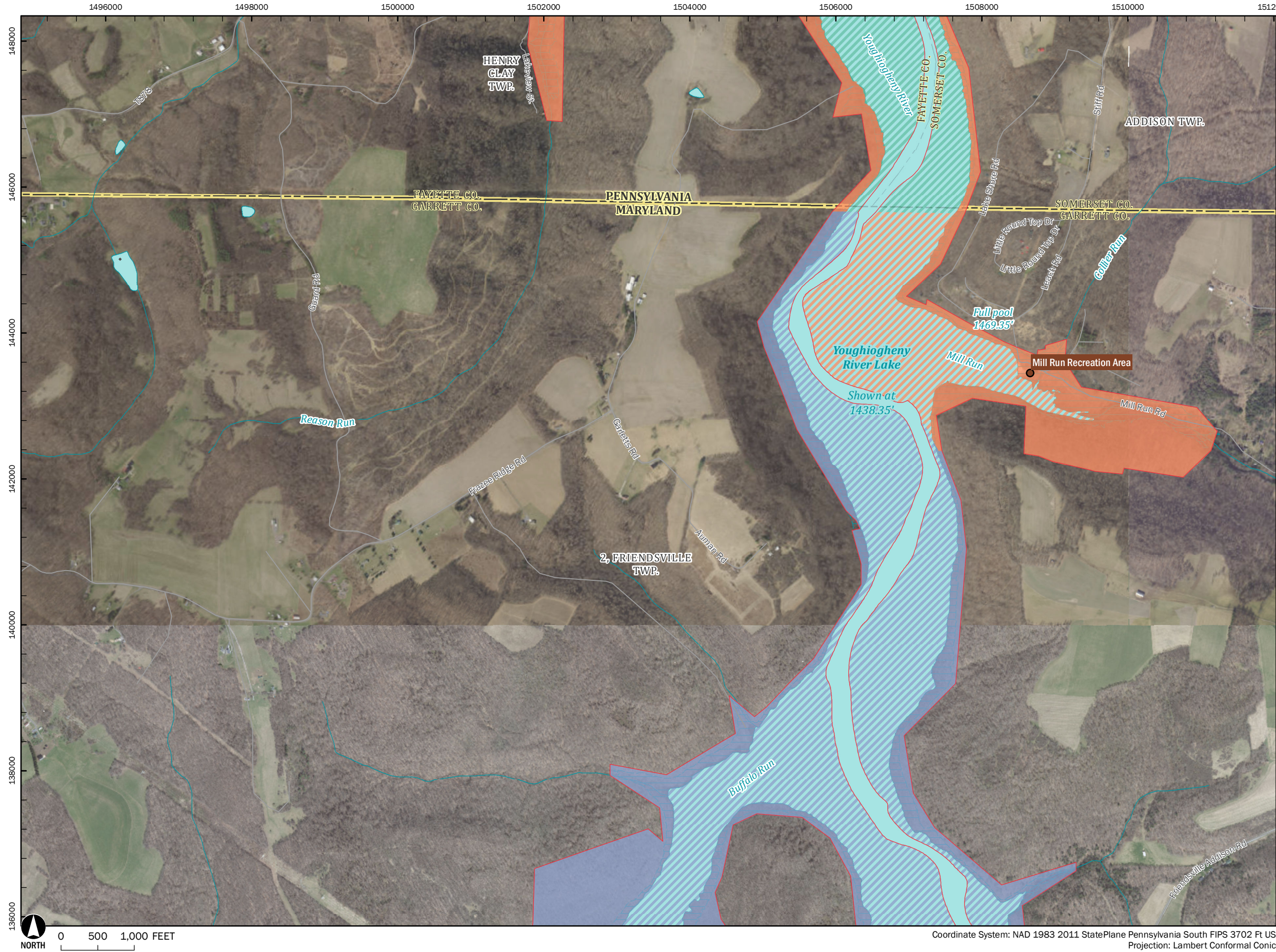
Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 3: Boundaries
Sheet 4 of 6
Somerfield/National Pike



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Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic



Legend

- Recreation Area
- Fee Boundary
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Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 3: Boundaries

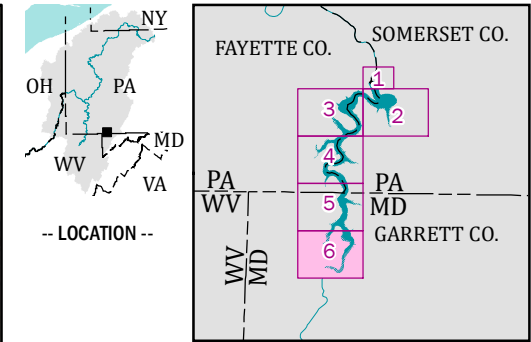
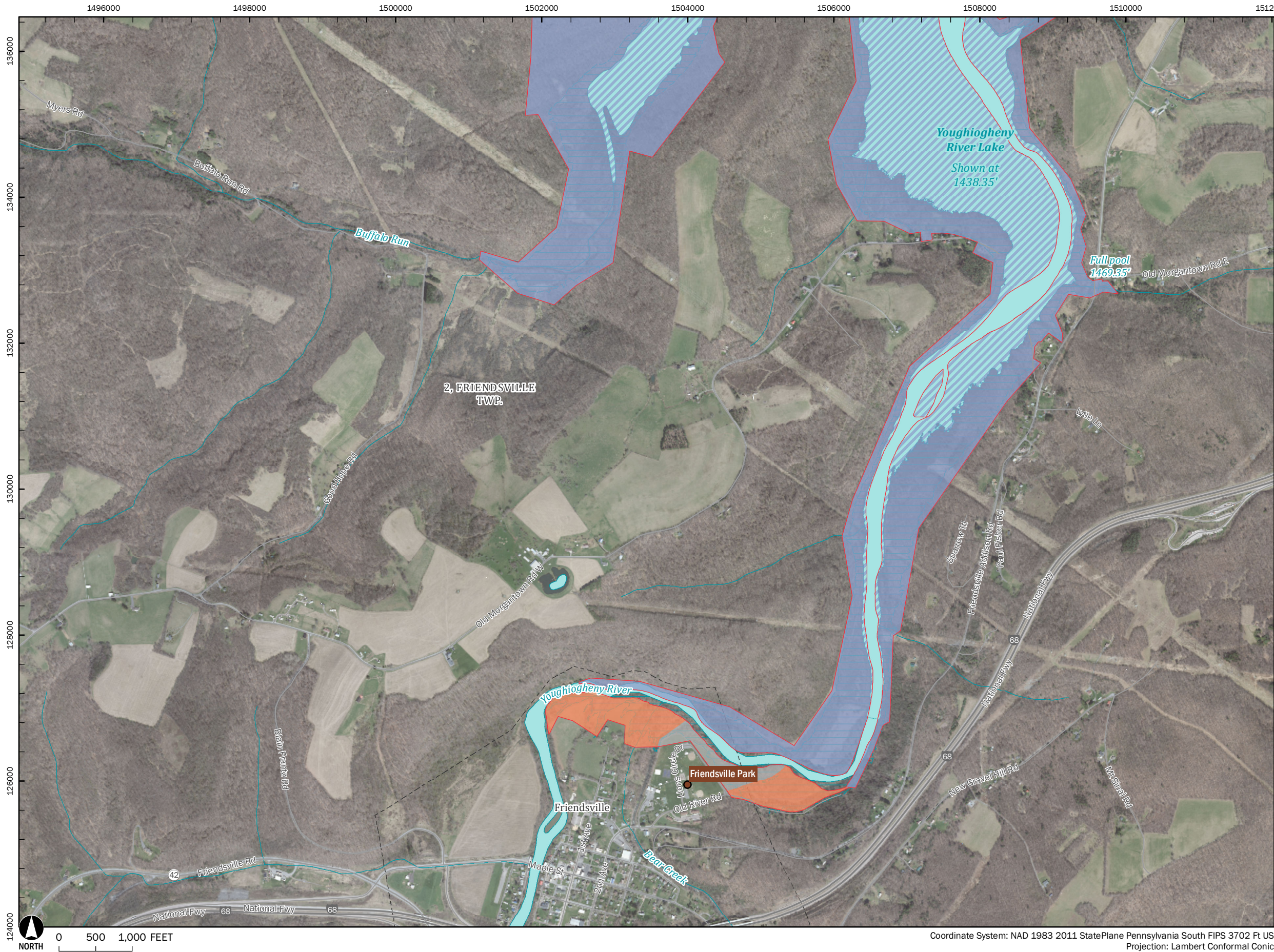
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Mill/Reason



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Projection: Lambert Conformal Conic



Legend

- Recreation Area
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Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE

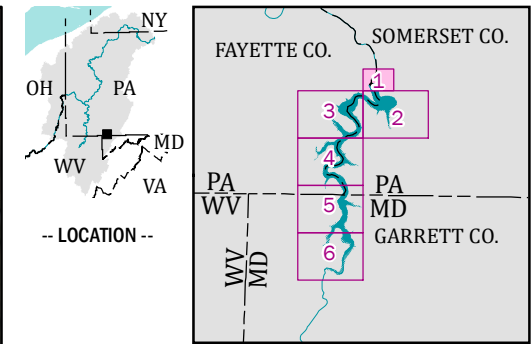
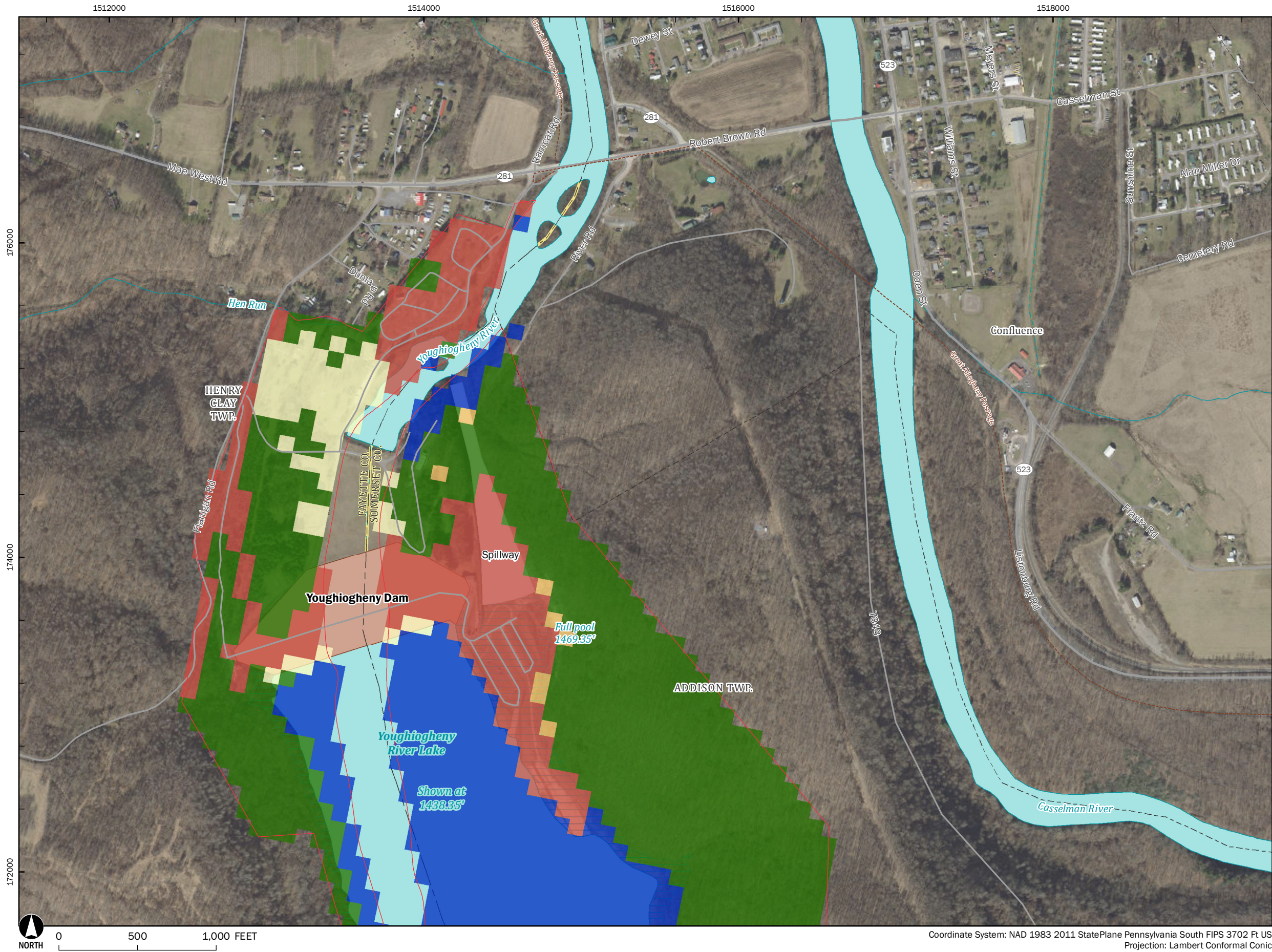
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Plate 3: Boundaries
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Friendsville Area



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Projection: Lambert Conformal Conic



National Vegetation Classification data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

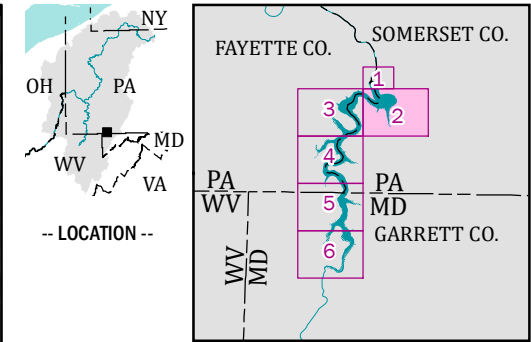
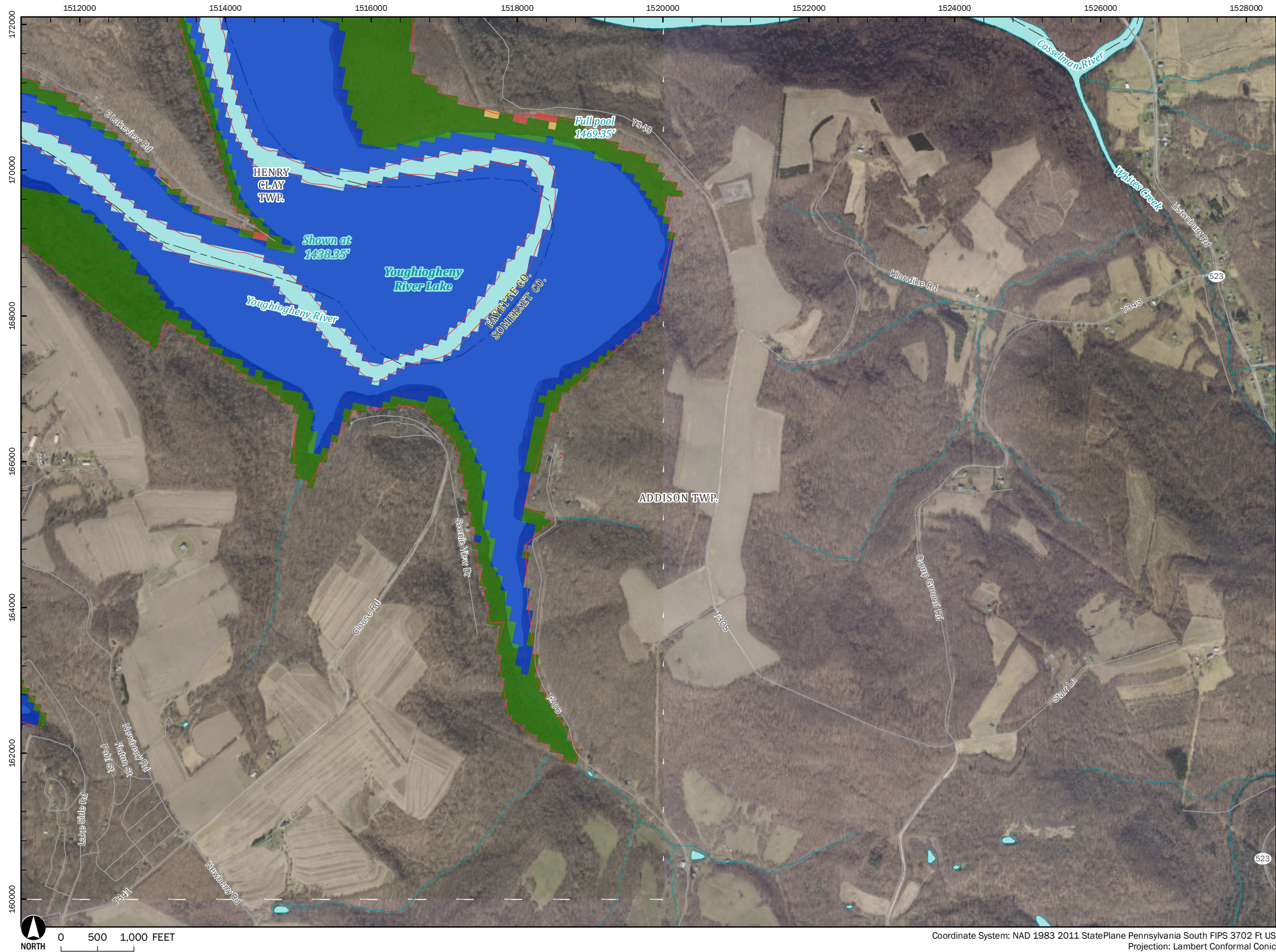
Data: USACE, USGS, USGS GAP/LANDFIRE
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 4: Vegetative Classification
Sheet 1 of 6
Damsite



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Projection: Lambert Conformal Conic



Legend

Fee Boundary

National Vegetation Classification

Class

- Agricultural Vegetation
- Developed & Other Human Use
- Forest & Woodland
- Open Water
- Shrubland & Grassland

National Vegetation Classification data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS, USGS GAP/LANDFIRE
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

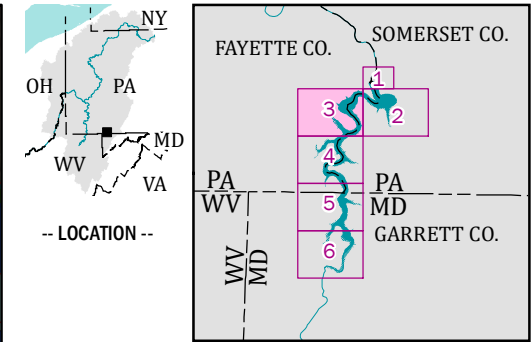
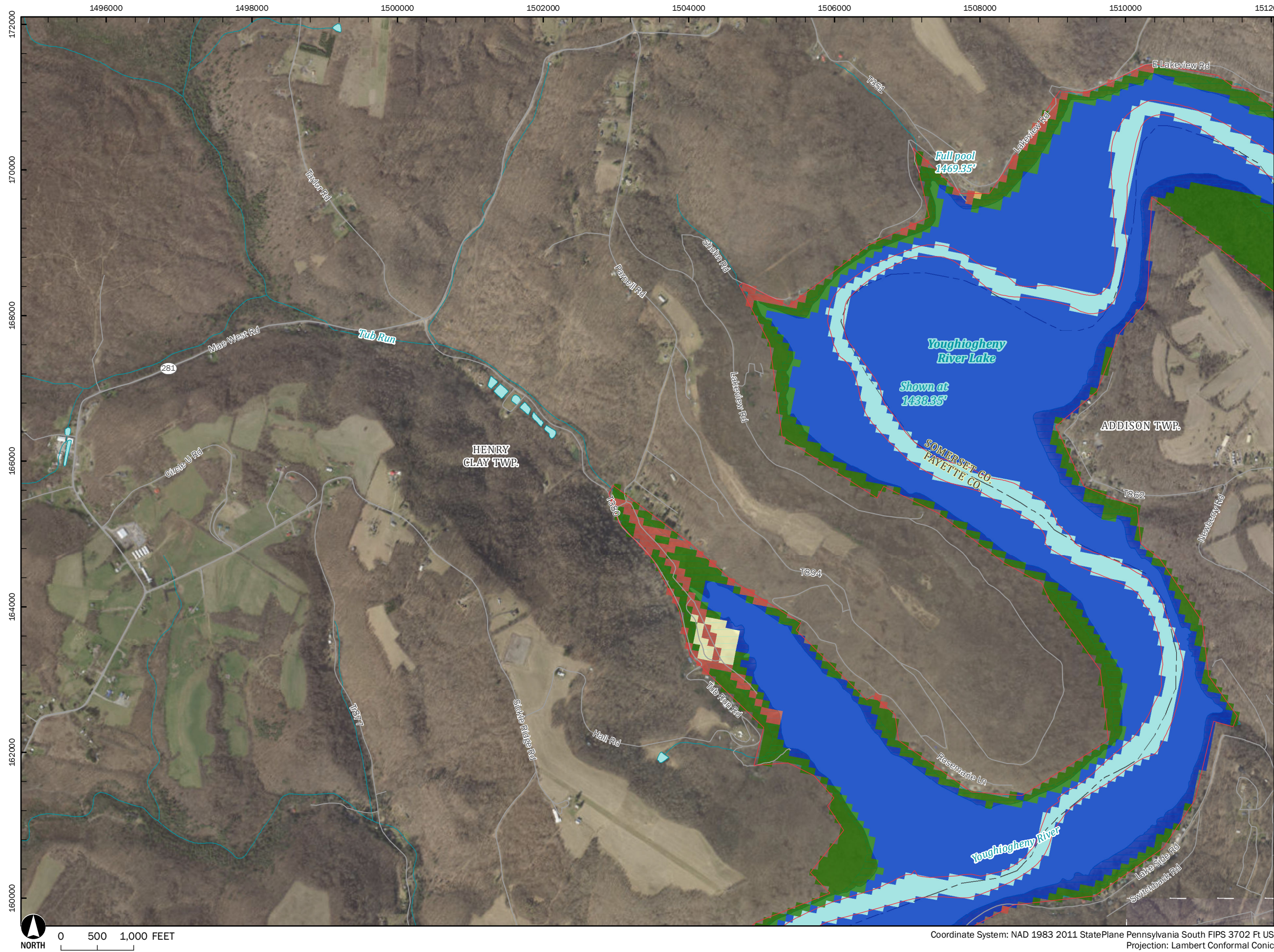
YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 4: Vegetative Classification

Sheet 2 of 6

Clouse/Klondike



Legend

Fee Boundary

National Vegetation Classification

Class

- Agricultural Vegetation
- Developed & Other Human Use
- Forest & Woodland
- Open Water
- Shrubland & Grassland

National Vegetation Classification data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS, USGS GAP/LANDFIRE
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

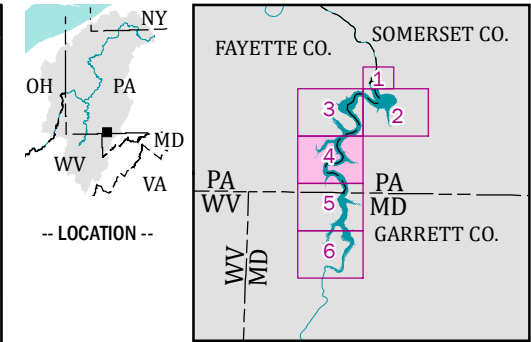
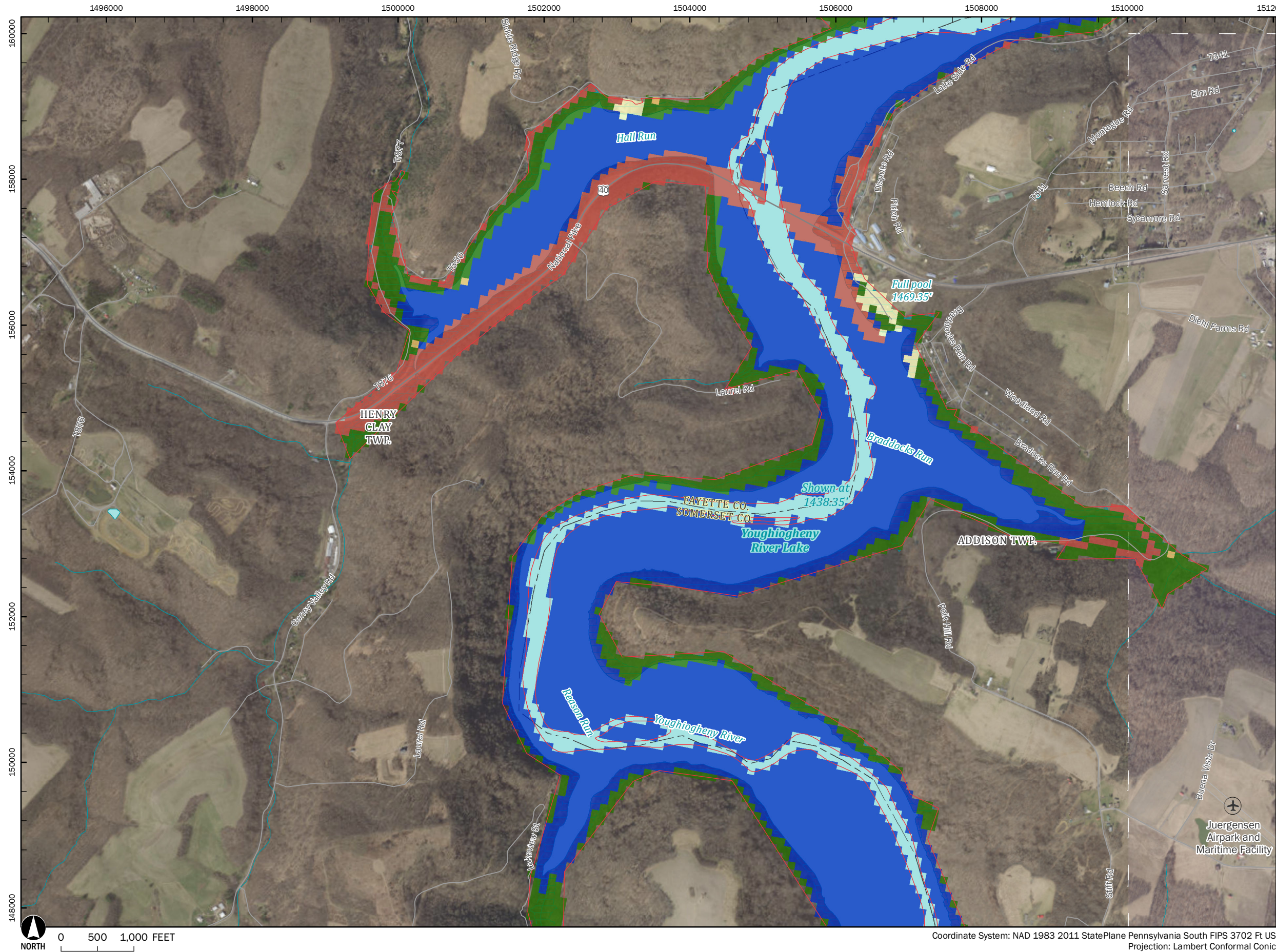
YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 4: Vegetative Classification

Sheet 3 of 6

Tub Run



Legend

Fee Boundary

National Vegetation Classification

Class

- Agricultural Vegetation
- Developed & Other Human Use
- Forest & Woodland
- Open Water
- Shrubland & Grassland

National Vegetation Classification data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

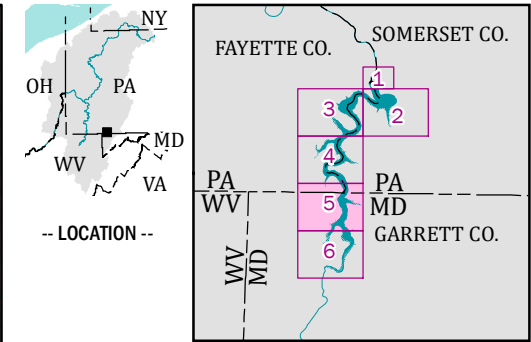
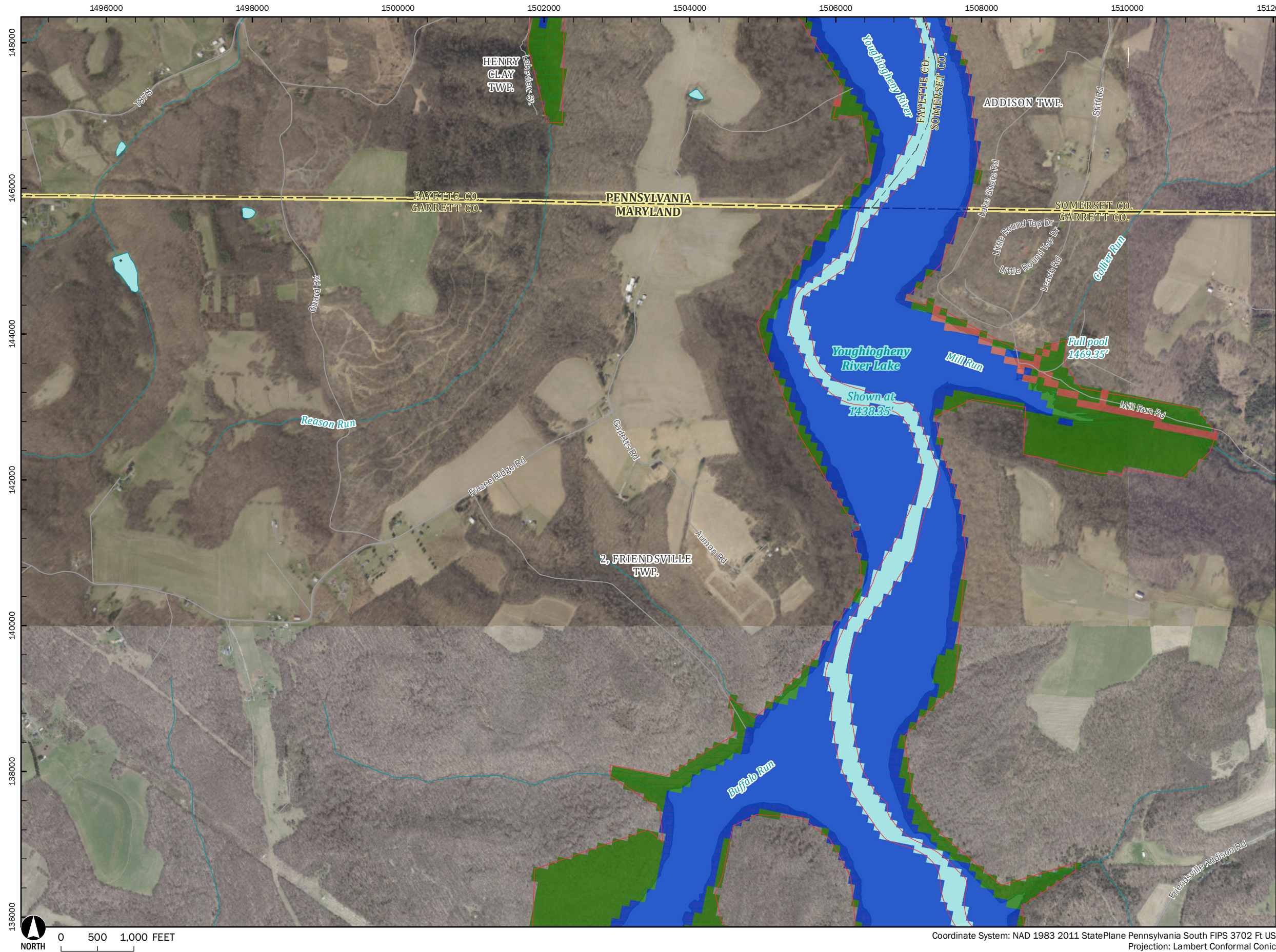
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Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 4: Vegetative Classification
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Somerfield/National Pike



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Projection: Lambert Conformal Conic



Legend

Fee Boundary

National Vegetation Classification

Class

- Agricultural Vegetation
- Developed & Other Human Use
- Forest & Woodland
- Open Water
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National Vegetation Classification data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS, USGS GAP/LANDFIRE
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 4: Vegetative Classification

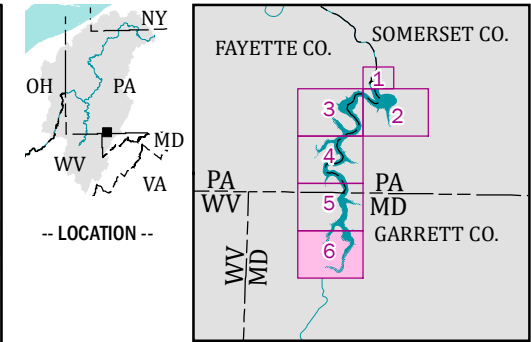
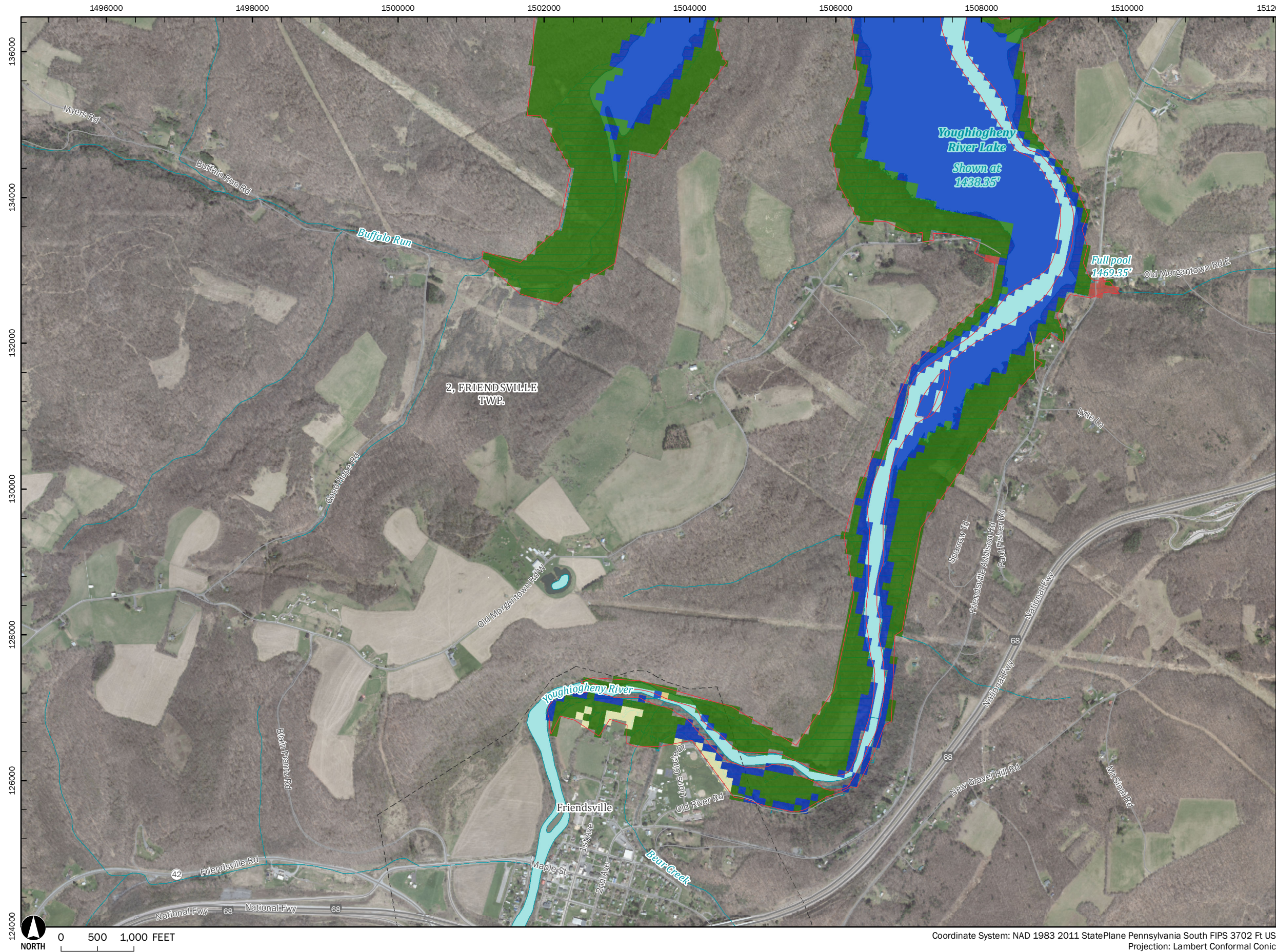
Sheet 5 of 6

Mill/Reason



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Projection: Lambert Conformal Conic



Legend

Fee Boundary

National Vegetation Classification

Class

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- Forest & Woodland
- Open Water
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National Vegetation Classification data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

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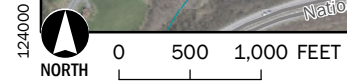
YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 4: Vegetative Classification

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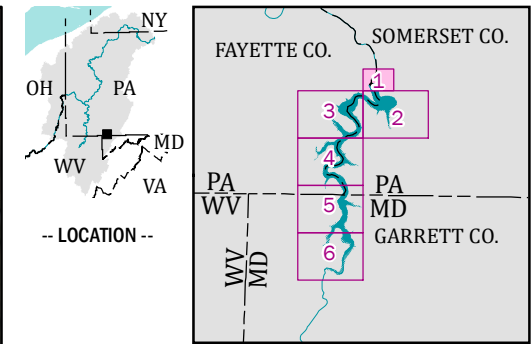
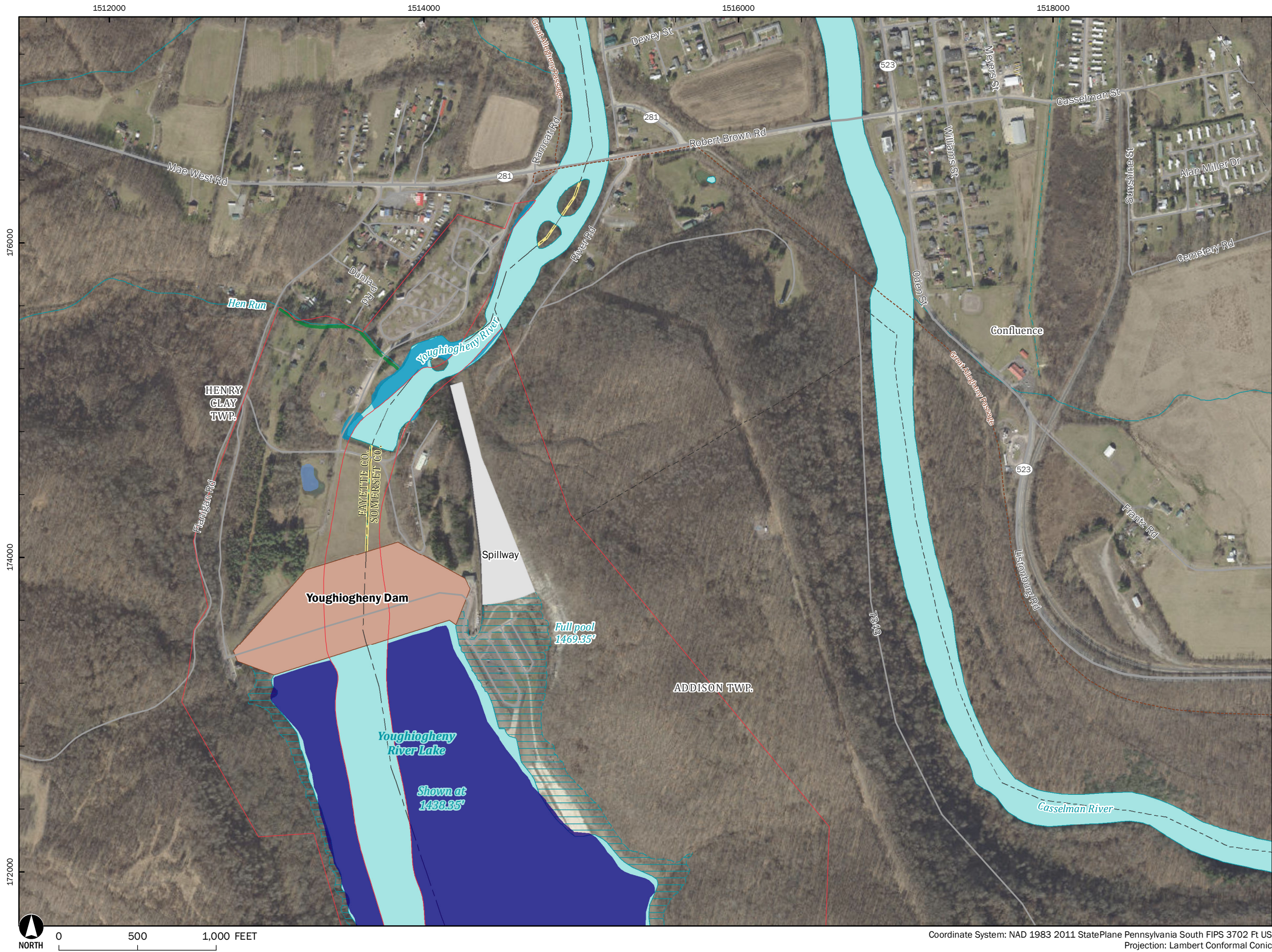
Friendsville Area



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Projection: Lambert Conformal Conic

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Legend

Fee Boundary

National Wetlands Inventory

Type

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

National Wetlands Inventory data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS, USFWS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

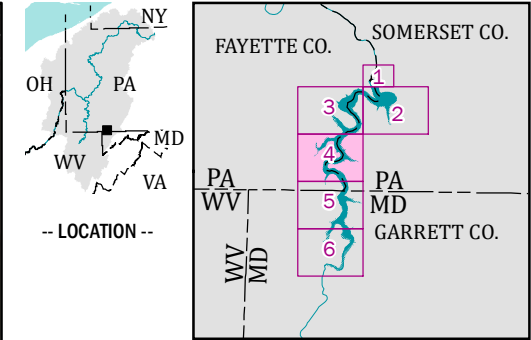
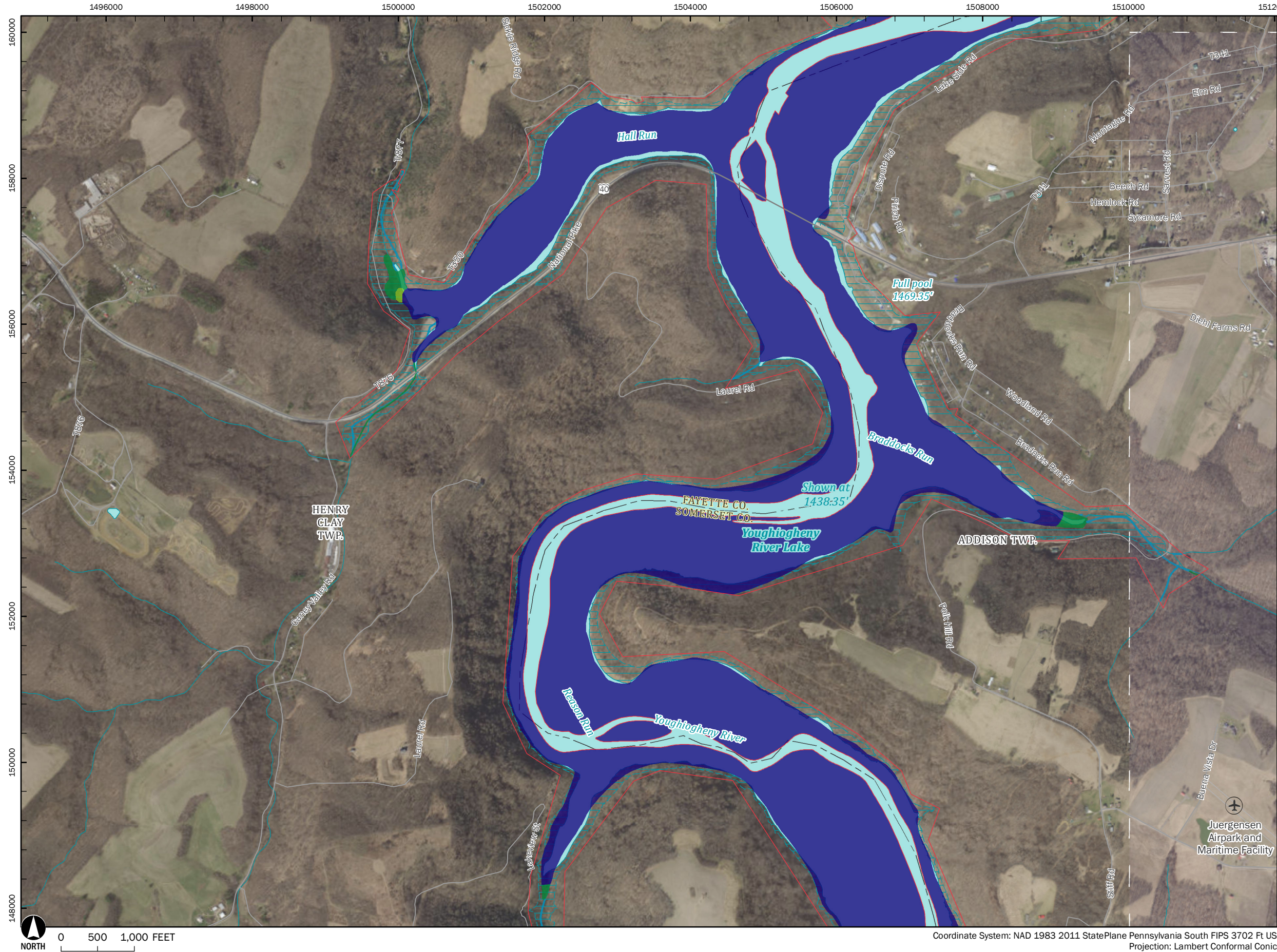
YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 5: Wetlands

Sheet 1 of 6

Damsite



Legend

Fee Boundary

National Wetlands Inventory

Type

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

National Wetlands Inventory data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS, USFWS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE

Master Plan

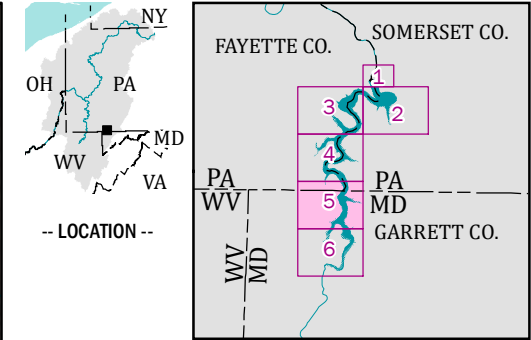
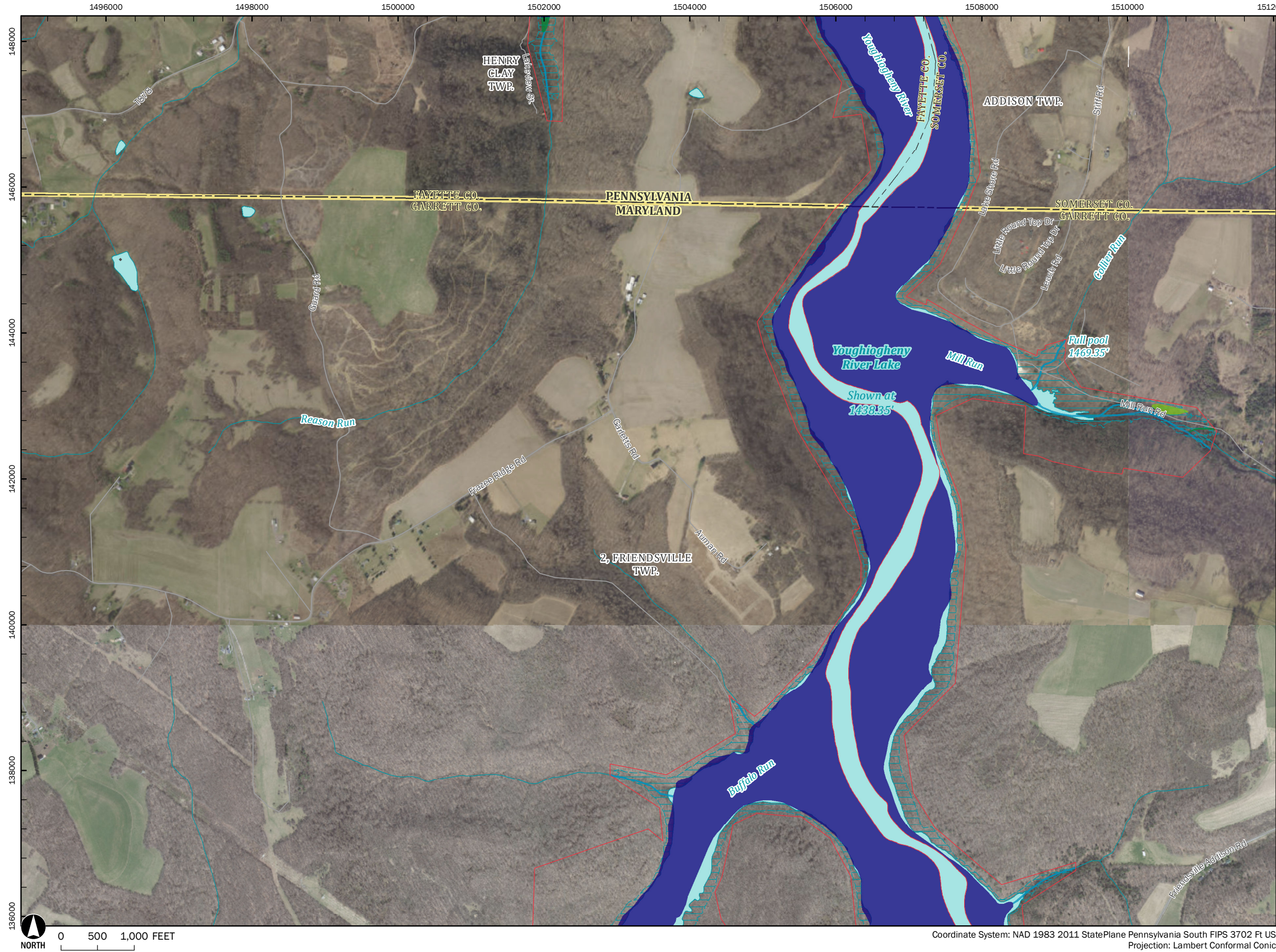
Plate 5: Wetlands

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Somerfield/National Pike



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Legend

Fee Boundary

National Wetlands Inventory

Type

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

National Wetlands Inventory data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS, USFWS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 5: Wetlands

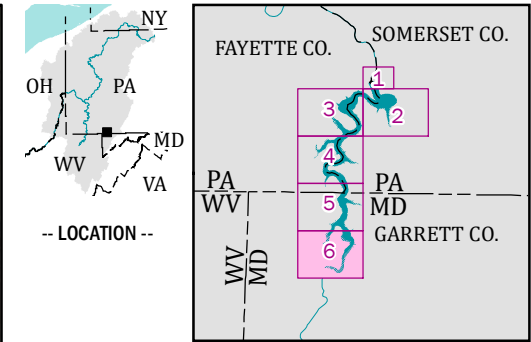
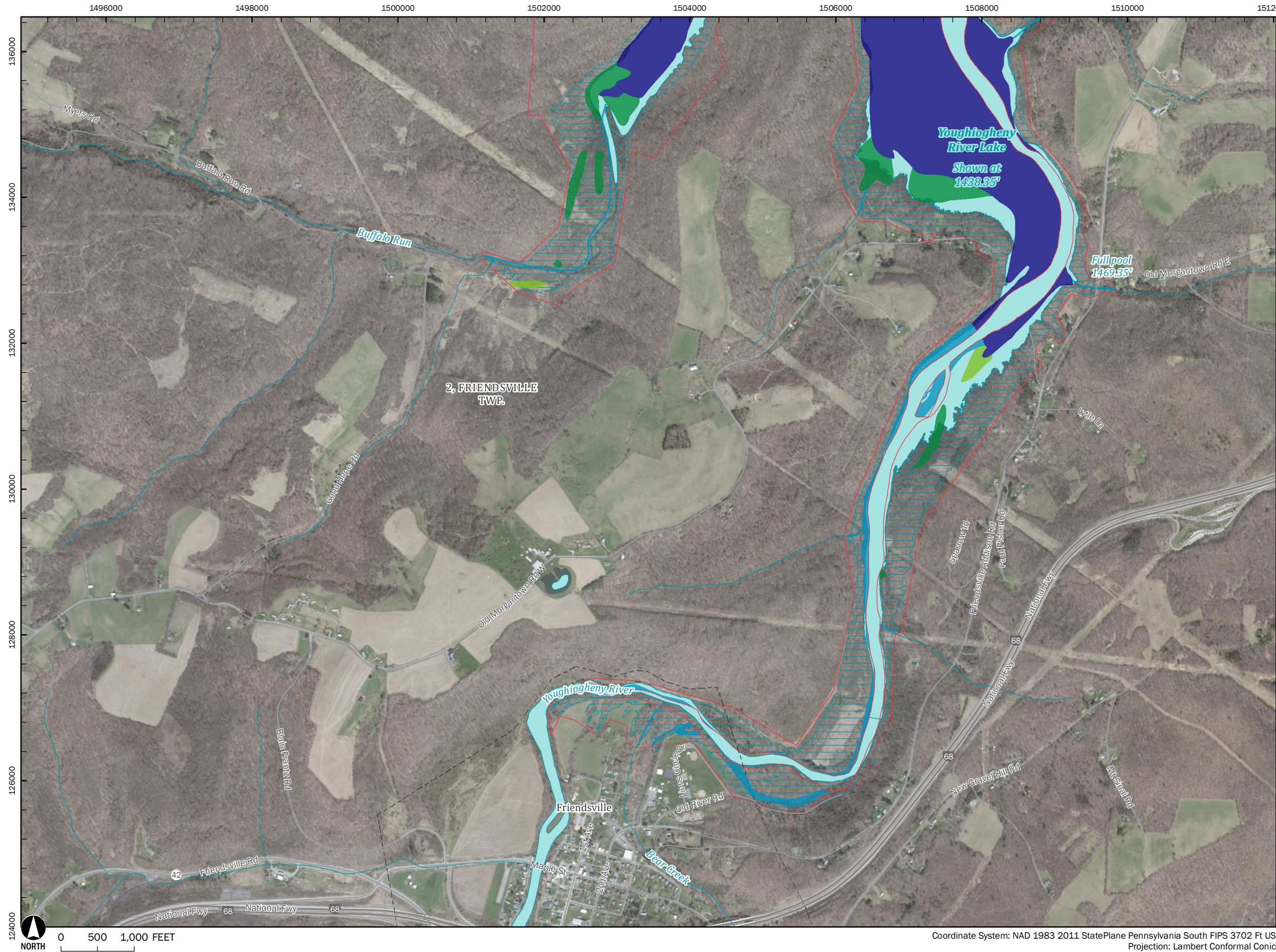
Sheet 5 of 6

Mill/Reason



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Projection: Lambert Conformal Conic



Legend

Fee Boundary

National Wetlands Inventory

Type

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- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

National Wetlands Inventory data shown within fee boundary only.

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

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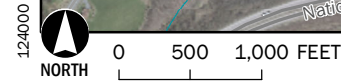
YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 5: Wetlands

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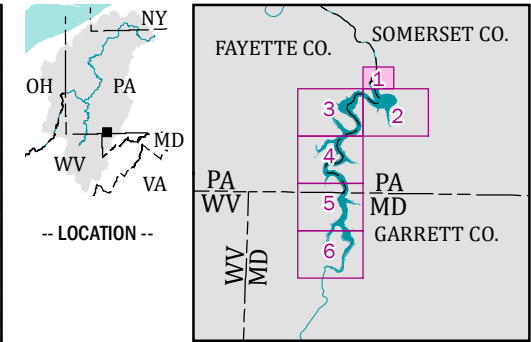
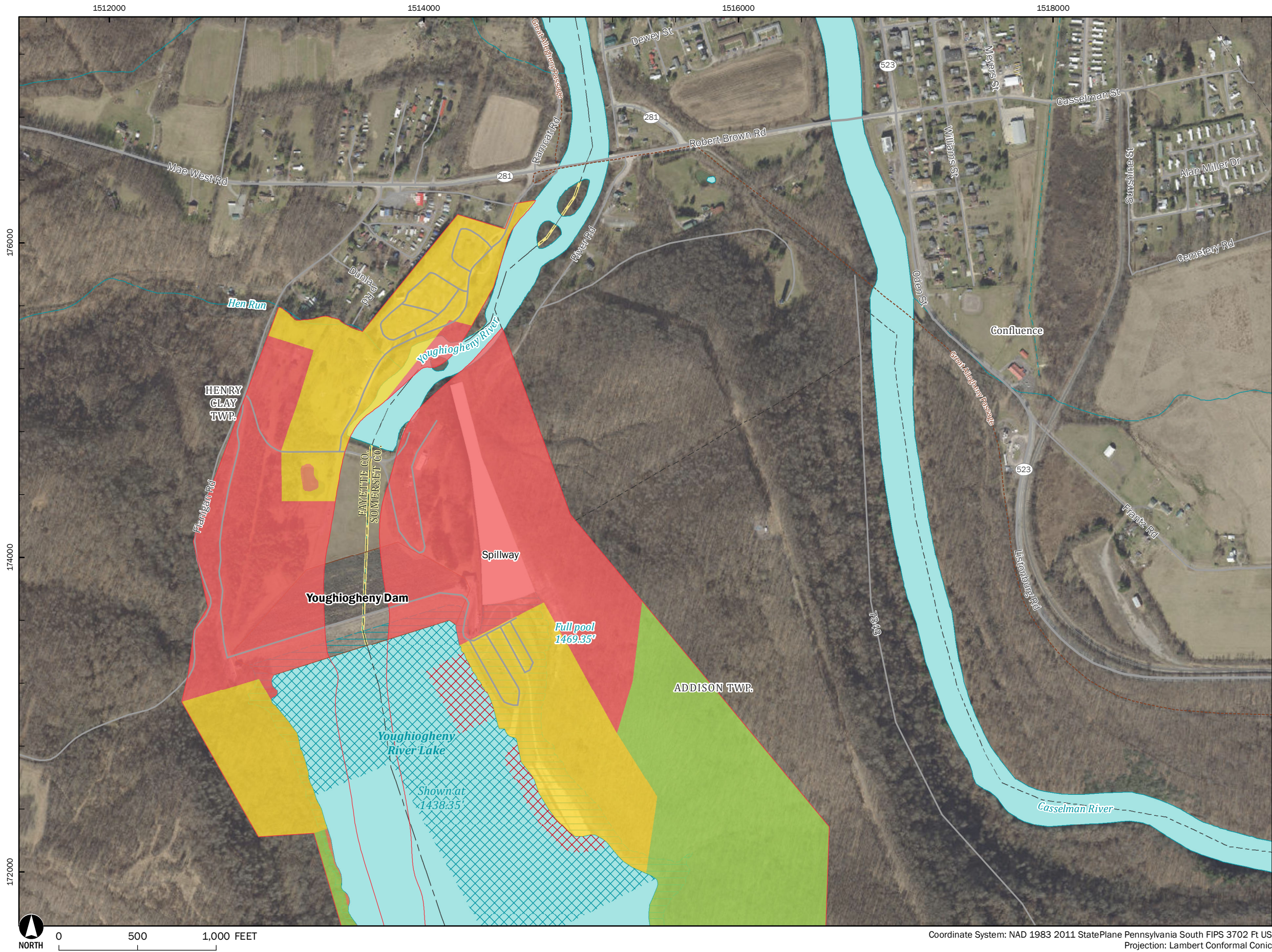
Friendsville Area



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Projection: Lambert Conformal Conic



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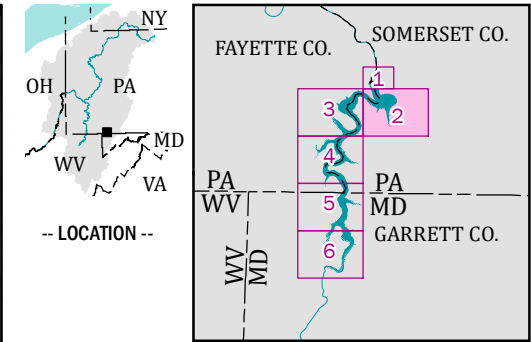
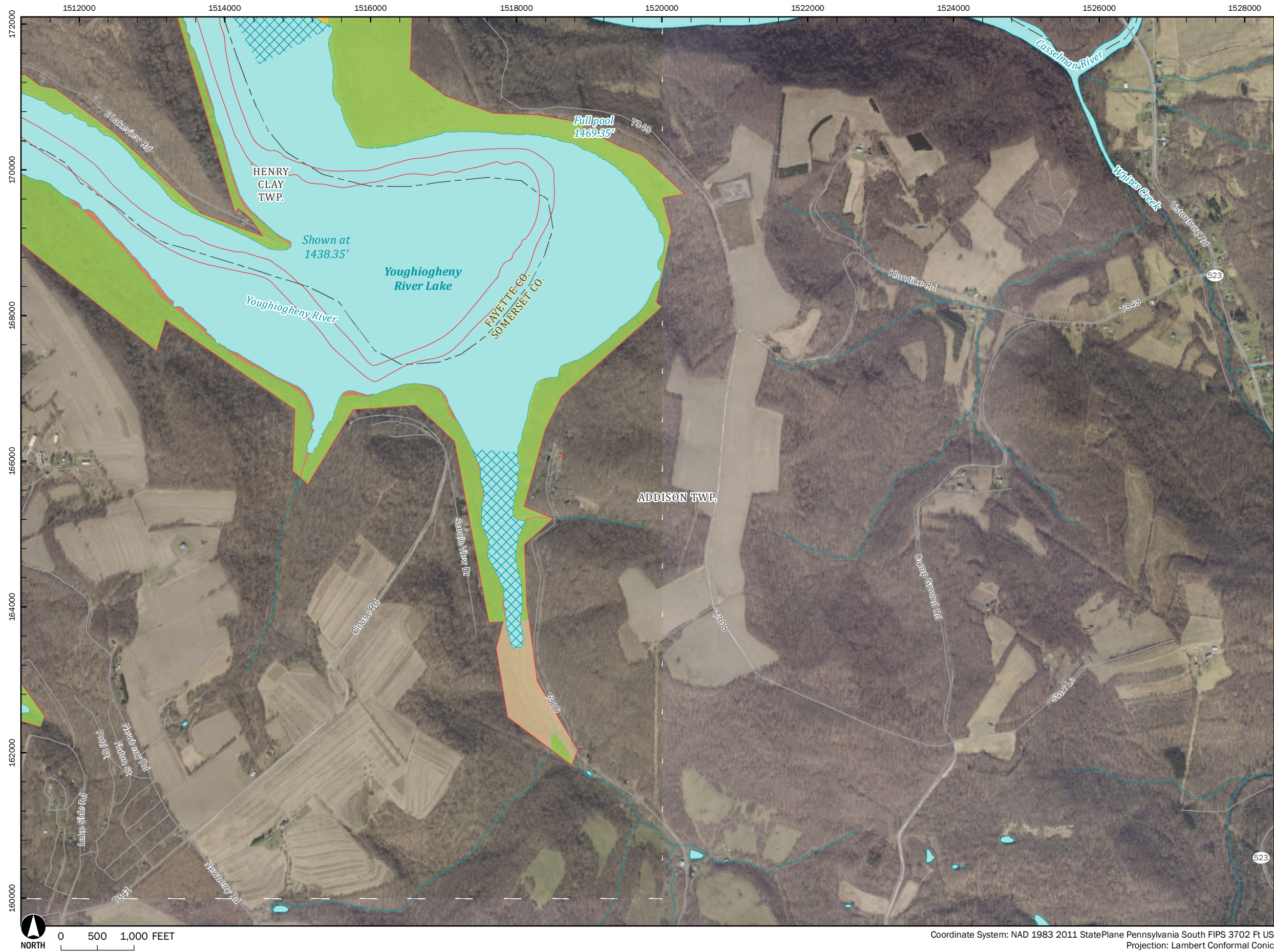


- Legend**
- Fee Boundary
 - Land Use Classification**
 - Environmentally Sensitive Areas
 - High Density Recreation
 - Multiple Resource: Future or Inactive Recreation Areas
 - Multiple Resource: Low Density Recreation
 - Multiple Resource: Wildlife Management
 - Project Operations
 - Water Zoning**
 - Restricted
 - No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 6: Land Classification
Sheet 1 of 6
Damsite



Legend

Fee Boundary

Land Use Classification

- Environmentally Sensitive Areas
- High Density Recreation
- Multiple Resource: Future or Inactive Recreation Areas
- Multiple Resource: Low Density Recreation
- Multiple Resource: Wildlife Management
- Project Operations

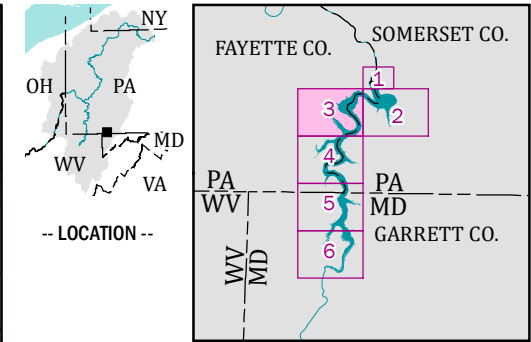
Water Zoning

- Restricted
- No-Wake
- Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 6: Land Classification
Sheet 2 of 6
Clouse/Klondike



Legend

- Fee Boundary
- Land Use Classification**
 - Environmentally Sensitive Areas
 - High Density Recreation
 - Multiple Resource: Future or Inactive Recreation Areas
 - Multiple Resource: Low Density Recreation
 - Multiple Resource: Wildlife Management
 - Project Operations
- Water Zoning**
 - Restricted
 - No-Wake
 - Open Recreation

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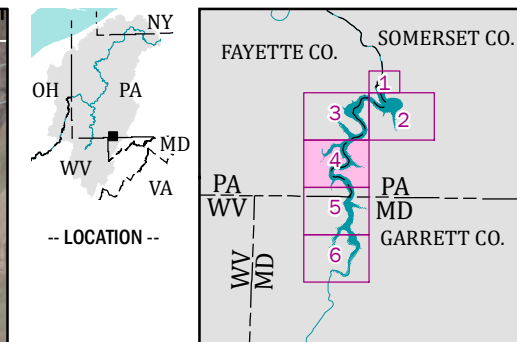
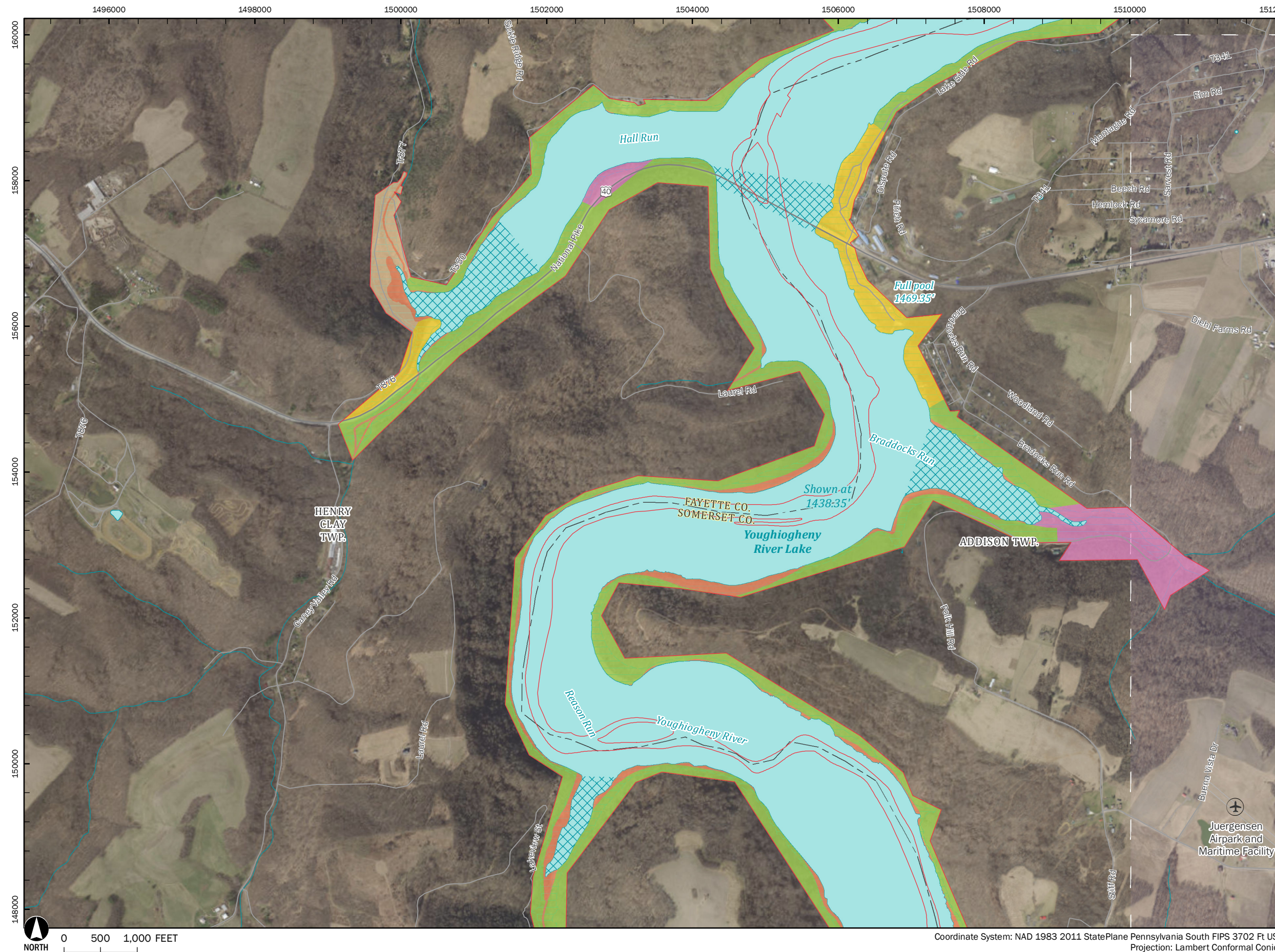
Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 6: Land Classification
Sheet 3 of 6
Tub Run










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Projection: Lambert Conformal Conic



Legend

-  Fee Boundary
- Land Use Classification**
-  Environmentally Sensitive Areas
 -  High Density Recreation
 -  Multiple Resource: Future or Inactive Recreation Areas
 -  Multiple Resource: Low Density Recreation
 -  Multiple Resource: Wildlife Management
 -  Project Operations

Water Zoning

-  Restricted
 No-Wake
 Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE

Master Plan

Plate 6: Land Classification

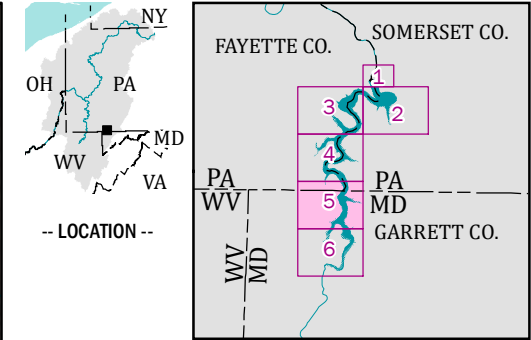
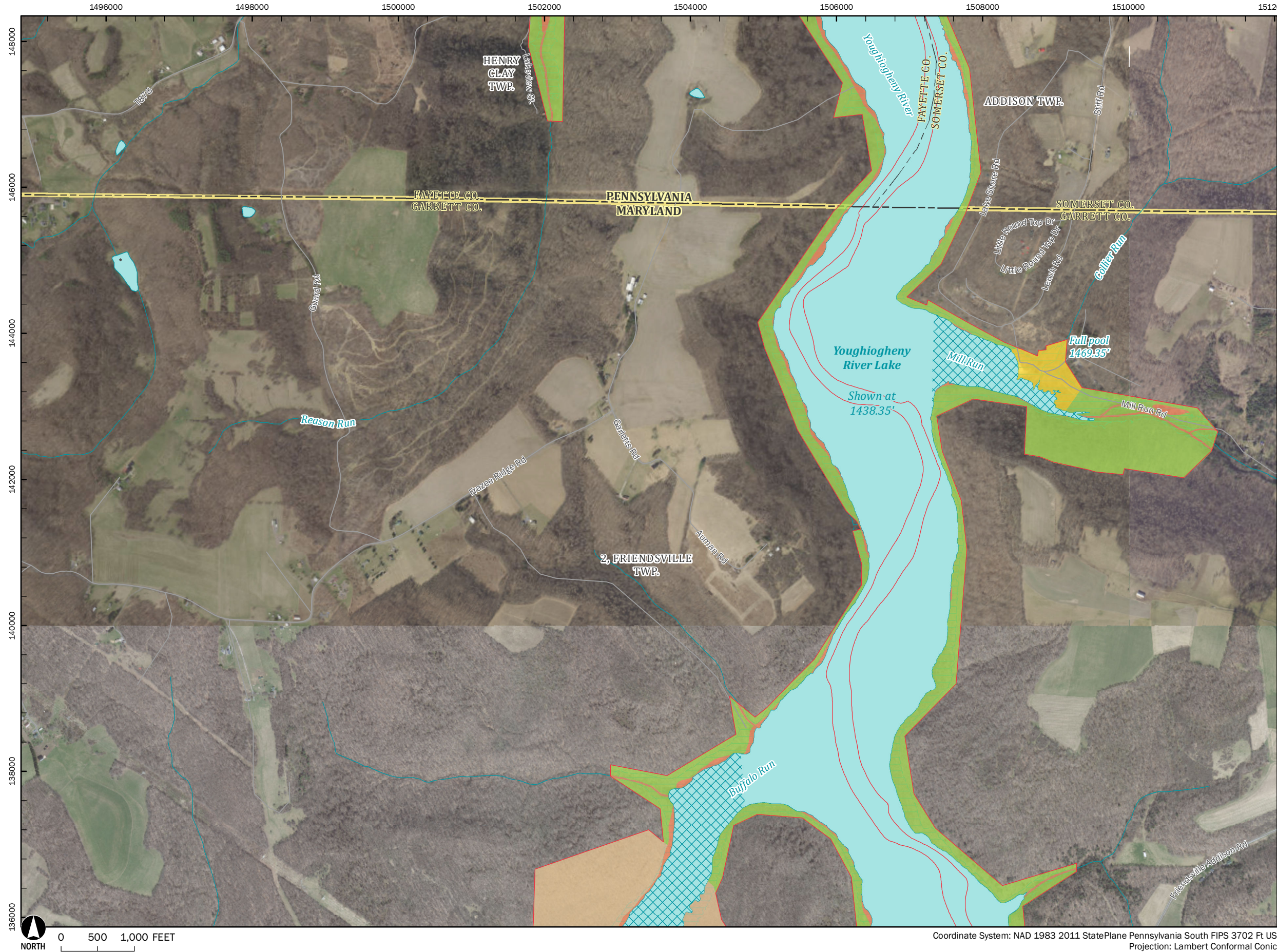
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Somerfield/National Pike



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Legend

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 - Multiple Resource: Wildlife Management
 - Project Operations
- Water Zoning**
 - Restricted
 - No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

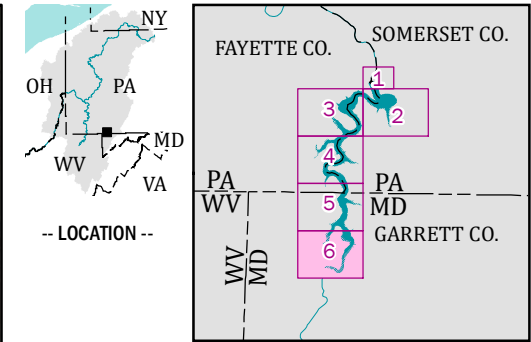
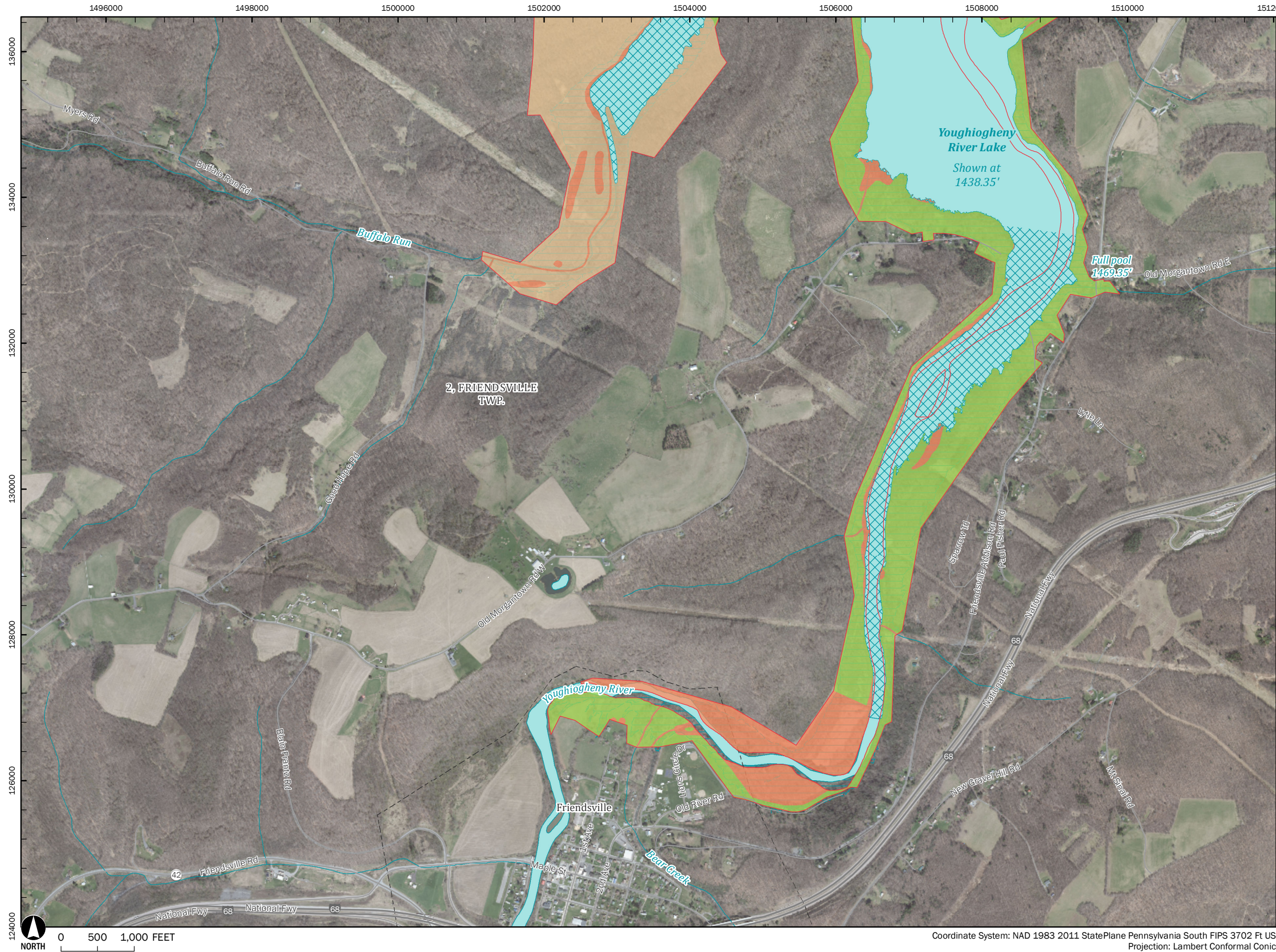
Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 6: Land Classification
Sheet 5 of 6
Mill/Reason



Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471

Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic

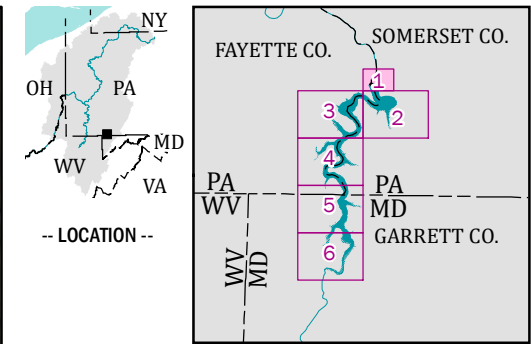
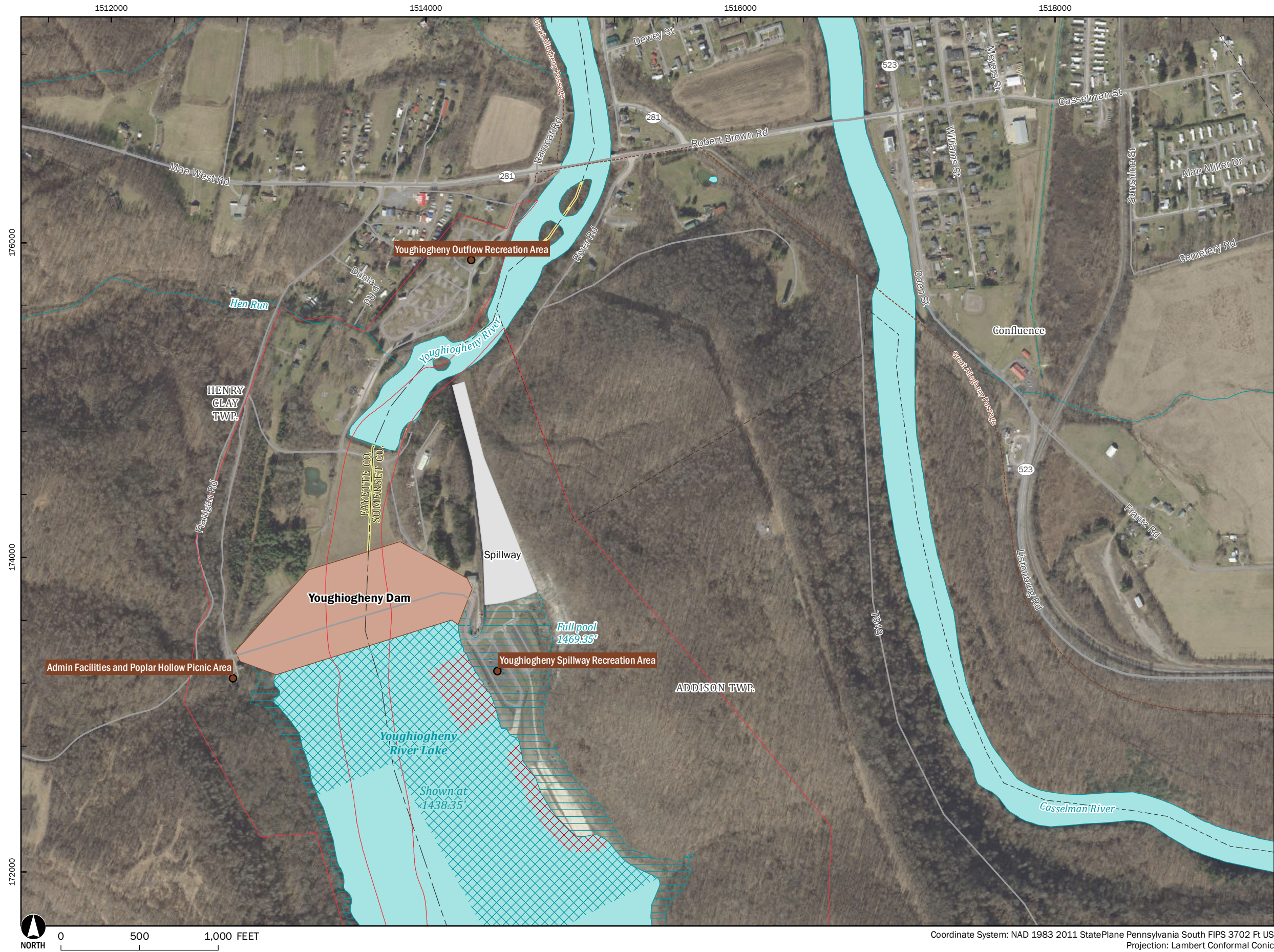


- Legend**
- Fee Boundary
 - Land Use Classification**
 - Environmentally Sensitive Areas
 - High Density Recreation
 - Multiple Resource: Future or Inactive Recreation Areas
 - Multiple Resource: Low Density Recreation
 - Multiple Resource: Wildlife Management
 - Project Operations
 - Water Zoning**
 - Restricted
 - No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 6: Land Classification
Sheet 6 of 6
Friendsville Area



Legend

- Recreation Area
- Fee Boundary
- Water Zoning**
 - ▨ Restricted
 - ▨ No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

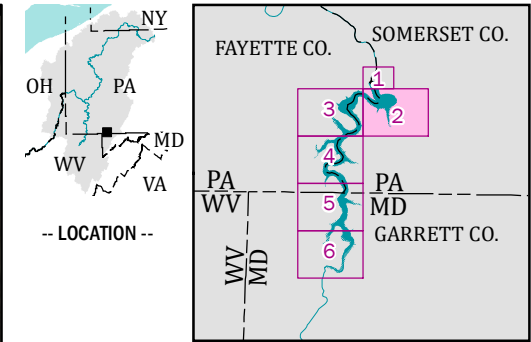
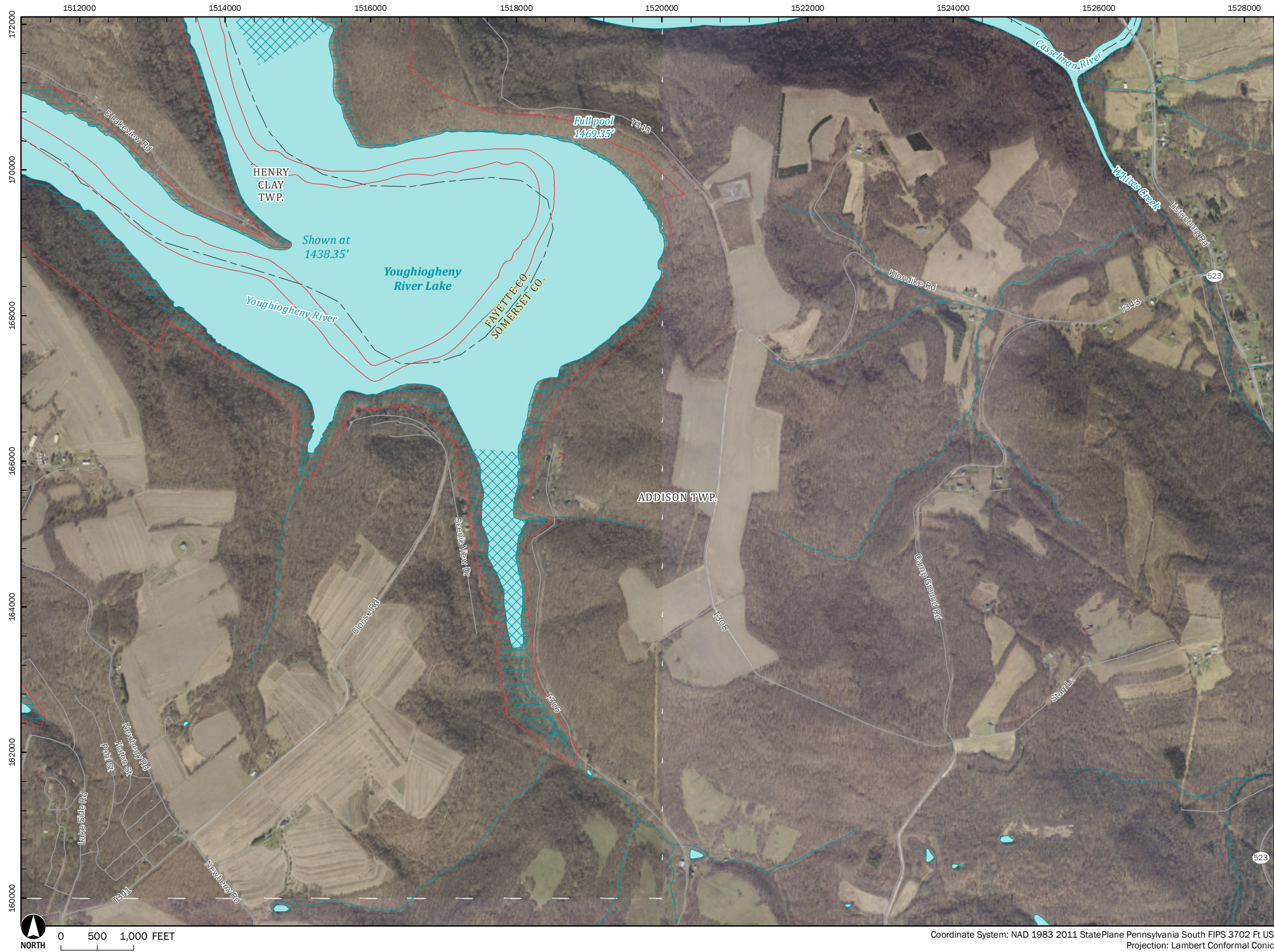
Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 7: Recreation
Sheet 1 of 6
Damsite



Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471

Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic



- Legend**
- Recreation Area
 - Fee Boundary
 - Water Zoning**
 - ▨ Restricted
 - ▨ No-Wake
 - ▨ Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

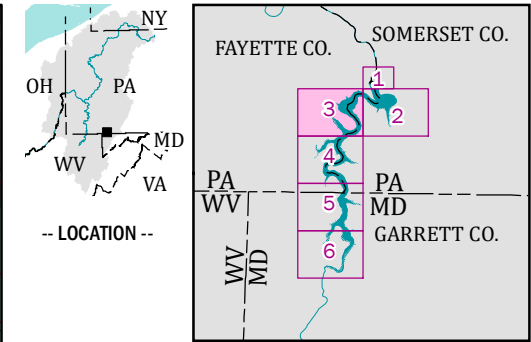
Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 7: Recreation
Sheet 2 of 6
Clouse/Klondike



Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471

Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic

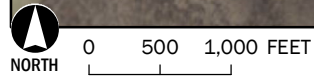


- Legend**
- Recreation Area
 - Fee Boundary
 - Water Zoning**
 - ▨ Restricted
 - ▨ No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

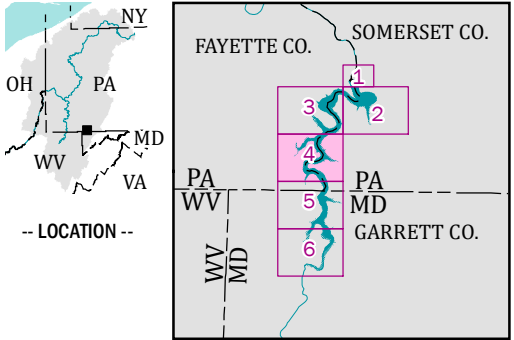
YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 7: Recreation
Sheet 3 of 6
Tub Run



Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic



Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471



- Legend**
- Recreation Area
 - Fee Boundary
 - Water Zoning**
 - ▨ Restricted
 - ▩ No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

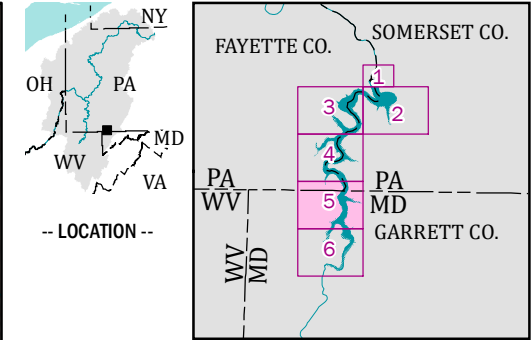
Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 7: Recreation
Sheet 4 of 6
Somerfield/National Pike



Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471

Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic



Legend

- Recreation Area
- Fee Boundary
- Water Zoning**
 - ▨ Restricted
 - ▨ No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

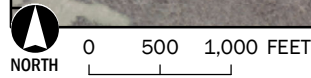
Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

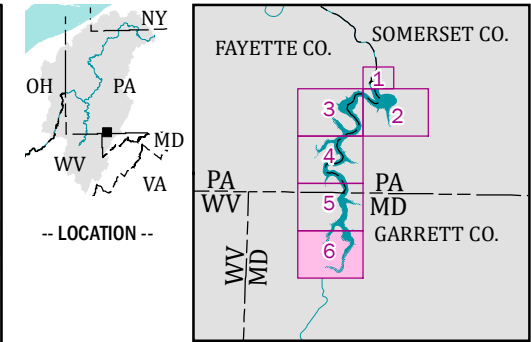
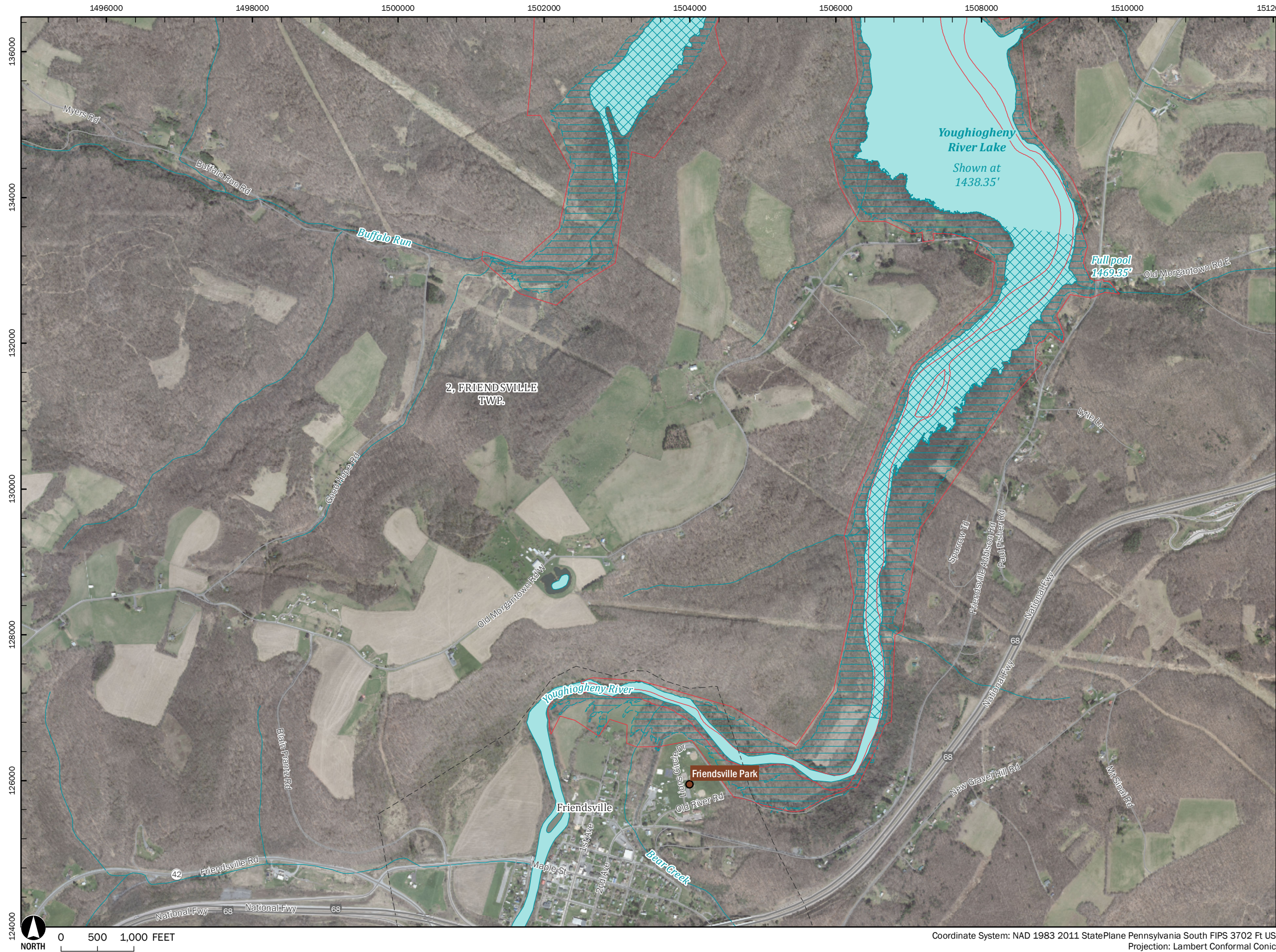
YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 7: Recreation
Sheet 5 of 6
Mill/Reason



Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471

Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic





- Legend**
- Recreation Area
 - Fee Boundary
 - Water Zoning**
 - ▨ Restricted
 - ▩ No-Wake
 - Open Recreation

Youghiogheny River Lake is shown at approximate summer pool (1438.35 feet NAVD88)

Data: USACE, USGS
Imagery: Pennsylvania Emergency Management Agency (PEMA), State of Maryland

YOUGHIOGHENY RIVER LAKE
Master Plan
Plate 7: Recreation
Sheet 6 of 6
Friendsville Area



Pub. 22 July 2021
USACE LRP Geospatial
erik.w.breedon
412-395-7471

Coordinate System: NAD 1983 2011 StatePlane Pennsylvania South FIPS 3702 Ft US
Projection: Lambert Conformal Conic

APPENDIX C

SUMMARY OF PUBLIC COMMENTS

Master Plan Update Fact Sheet

Youghiogheny River Lake

Master Plan Revision

The US Army Corps of Engineers, Pittsburgh District (Corps), is revising the Youghiogheny River Lake Master Plan to guide the management of government-owned and leased lands around the Lake. This will impact future use of natural resources and recreational activities at Youghiogheny River Lake for the next 25 years.

This is your opportunity to let the Corps know how you would like the Lake to be managed in the future. The Master Plan Update process will include an analysis of potential effects of updates in the land management plan on the natural and social environment, including: fish and wildlife, cultural and historic resources, recreational opportunities, economics, land use, aesthetics, and public health and safety.

Objectives of Update

- Conserve the resources of the Lake within the current policies and guidelines of the Corps of Engineers
- Accommodate current and projected use patterns with maximum efficiency
- Identify and protect cultural and natural resources
- Attract maximum participation by the general public and local government

Why Update

The last Master Plan was updated in 2007 and does not reflect current conditions at the Lake. Changes in Corps regulations and community needs necessitate a revision to this Master Plan.

The Master Plan revision will classify the government lands around the Lake based on environmental and socioeconomic considerations, public input, and an evaluation of past, present, and forecasted trends. This update is stewardship driven and seeks to balance recreational development and use with the goal of conservation of natural and cultural resources.



Share your perspective, sign up for our mailing list, and/or let us know how you'd prefer to be involved in the Youghiogheny River Lake Master Plan Update by visiting us at:

<https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>

SAVE THE DATE

Master Plan Revision VIRTUAL Public Meeting

When: Wednesday, July 8th from 6:00-7:30 PM

Where: <https://usace.webex.com/meet/PittsburghDistrict>
USA Toll-Free: (877) 336-1831
Access Code: 1048650, Security Code: 1234

*For those wishing to practice logging into the virtual meeting space, a drop-in practice session will be held Tuesday, July 7 from 6:00 - 7:00 PM using the same log-in information as above.

Unable to attend the virtual meeting? No problem!

The comment form provides information on the additional opportunities we've provided for you to learn about this process and provide your input.

About the Lake

Authorized by the Flood Control Act of 1938, Youghiogheny River Lake is one of 16 flood control projects in the Pittsburgh District. An important link in a system of flood control projects, Youghiogheny River Lake provides flood protection for the Monongahela River Valley and the upper Ohio River.

Since its completion in 1943, the Youghiogheny River Lake reservoir has prevented flood damages estimated to be in excess of \$569 million. Youghiogheny River Lake has the capacity to store the equivalent run-off of 11 inches of precipitation from its 434 square mile drainage area. Youghiogheny River Lake also stores water and releases it downstream during dry periods to improve water quality and increase flow for domestic and industrial use, navigation, recreation, esthetics and aquatic life.

Authorized missions of Youghiogheny River Lake:

- Flood Damage Reduction
- Low Flow Augmentation
- Pollution Abatement
- Recreation
- Water Supply

Master Plan 101

The Corps is responsible for the maintenance, restoration and stewardship of natural resources on the multipurpose reservoir projects it manages. To facilitate the management and use of these lands, a Master Plan is maintained for each reservoir.

A Master Plan is a strategic land use management document that guides the comprehensive management and development of recreation, natural and cultural resources at Corps reservoirs and provides a vision for how the lake should look in the future.

The Pittsburgh District is proposing to adopt and implement a revision to the Youghiogheny River Lake Master Plan which was last updated in 2007.





NEWS RELEASE

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Pittsburgh District
Public Affairs Office
1000 Liberty Avenue
20th Floor
Pittsburgh, PA 15222-4186

FOR IMMEDIATE RELEASE
July 1, 2020
Release No. NR20-183
Contact: Carol Vernon
Phone 412-395-7500/01/02
CELRP-PA@usace.army.mil

Corps to Host Virtual Meeting on Youghiogheny River Lake Master Plan Revision

PITTSBURGH – The U.S. Army Corps of Engineers Pittsburgh District is hosting a virtual public meeting to kick off the Youghiogheny River Lake Master Plan revision. The corps is seeking public input about environmental and recreational subjects to consider during the master plan revision process.

WHO: U.S. Army Corps of Engineers Pittsburgh District.

WHAT: Pittsburgh District is hosting a virtual public scoping meeting to collect community input on revisions they'd like to see to the Youghiogheny River Lake Master Plan. The virtual meeting will be conducted through a webinar application and consist of a presentation followed by a question-and-answer session.

The public can review the current master plan and propose revisions at <https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>. The public comment period will close on August 7, 2020.

Comments can also be submitted via email to CELRP-PA@usace.army.mil or mailed to Youghiogheny River Lake, 497 Flanigan Road, Confluence, PA 15424.

WHEN: 6 to 7:30 p.m., Wednesday, July 8.

WHERE:

Web meeting:

<https://usace.webex.com/meet/PittsburghDistrict>
To join the meeting, click the link, select "Call Me," and enter your phone number.

Call-in number:

USA Toll-Free: (877) 336-1831
Access Code: 1048650
Security Code: 1234

Additional information about the meeting and instructions to join the webinar can be found at the Pittsburgh District website: <https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>.

WHY: A master plan is a strategic land and water use management document that guides the comprehensive management, conservation, and development of recreation, natural and cultural resources at Corps reservoirs and provides a vision for future management. Last updated in 2007, Youghiogheny River Lake's current master plan requires revision due to changes in corps regulations and community needs. The master plan revision will classify government lands around the reservoir based on environmental and socioeconomic considerations; public input; and an evaluation of past, present, and forecasted recreations trends. Revisions to the current master plan aim to balance recreational development and use with conserving natural and cultural resources.

U.S. ARMY CORPS OF ENGINEERS – PITTSBURGH DISTRICT
1000 LIBERTY AVENUE, 20TH FLOOR, PITTSBURGH, PA 15222

Media can contact the Public Affairs office at CELRP-PA@usace.army.mil.

For more information, visit: www.lrp.usace.army.mil and join us on the Youghiogheny River Lake Facebook Page.

Follow the Pittsburgh District: [Twitter](#), [Facebook](#) and [Flickr](#)

KnowTakeWear. Know the waterways. Take a safety course. Wear your life jacket.

-30-



US Army Corps
of Engineers ®
Pittsburgh District

Youghiogheny River Lake Master Plan

Public Comment Form

Name (optional): _____

Email (optional): _____

Please note that by adding your email you will be added to the Master Plan mailing list.

Master Plan Comments - Opportunities & Concerns

Topics to consider: Recreation. Environmental Resources. Cultural Resources. Safety.
If your comment relates to a specific location, please specify.

Cut along this line



US Army Corps
of Engineers ®
Pittsburgh District

Youghiogheny River Lake Master Plan

Options for Providing Input

We recognize that people come from near and far to enjoy Youghiogheny River Lake. To allow all those who enjoy the Lake to participate in this Master Plan update process, we are providing multiple ways for everyone to learn more about this process and to provide input into the Plan.

Below are the ways in which you can engage during the initial phase of this process.

1. Attend the virtual public meeting.

Scheduled for Wednesday, July 8 from 6:00 - 7:30 p.m. Additional information is provided on the fact sheet included in this mailing.

Unable to make the virtual public meeting? No problem!

The meeting will be recorded and placed on our project website.

2. Visit the Youghiogheny River Lake Master Plan website.

Go the website directly using this URL:

<https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>

Or search for the US Army Corps of Engineers, Pittsburgh District website and find the Master Plan logo on the home page. This will direct you to the site as well.

3. Cut off and mail in the other side of this comment form. Send your comment form to:

Youghiogheny River Lake
497 Flanigan Road, Confluence, PA 15424

4. Call the Youghiogheny River Lake office.

The office number is (814) 395-3242.

5. Email your comments to our Public Affairs Office inbox.

Email celrp-pa@usace.army.mil

Have any questions? Reach out!

Cut along this line

Comment forms may be mailed to:
Youghiogheny River Lake, 497 Flanigan Road, Confluence, PA 15424
by Friday, August 7, 2020



Carson, Andrea L CIV USARMY CELRP (USA)

Subject: Youghiogheny Lake Master Plan Virtual Public meeting

Start: Wed 7/8/2020 2:00 PM
End: Wed 7/8/2020 3:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: McLaughlin, Alicia D CIV USARMY CELRP (US)

-----Original Appointment-----

From: McLaughlin, Alicia D CIV USARMY CELRP (US)
Sent: Friday, June 26, 2020 10:33 AM

Subject: Youghiogheny Lake Master Plan Virtual Public meeting
When: Wednesday, July 8, 2020 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where:

Good morning,

We are having a Master Plan Virtual Public meeting on Wednesday July 8th from 6:00-7:30 pm. This will be a WebEx Virtual meeting. Attached is the invite with the WebEx information to log into the meeting as well as the toll free number to call to join the meeting.

We would like to have a virtual meeting with our stakeholders prior to the public meeting. We have time set aside on July 8th to meet with you all from 2:00-3:00pm. We would like your input and suggestions on what you would like to see changed or added to Yough Lake's Master Plan. You will use the same Webex info and toll free number for this meeting as well as the evening Public Meeting.

Here is the info to sign in or to call in for the meeting.

Web Meeting

<https://usace.webex.com/meet/PittsburghDistrict>

To join the meeting, 1) click the link above, 2) enter in your Name, Organization and email address in the spaces provided, 3) when the webinar space loads, click the phone symbol and select the "Call Me" option, 4) and enter your phone number to access the audio portion of the meeting.

Voice

If you are unable to join the web meeting, you are still free to call in.

USA Toll-Free: (877)336-1831

Access Code: 1048650

Security Code: 1234



Yough Comment
Card.pdf



Yough Land
Sheet.pdf



Yough SMLP
Comments.docx

If you have any questions, please feel free to give the office a call. 814-395-3242

Thank you

Best,

Alicia McLaughlin
Park Ranger
Youghiogheny River Lake
497 Flanigan Road
Confluence, PA 15424
814-395-3242 Office
alicia.d.mclaughlin@usace.army.mil



News Releases

- [2021 \(16\)](#)
- [2020 \(34\)](#)
- [2019 \(28\)](#)
- [2018 \(40\)](#)
- [2017 \(35\)](#)
- [2016 \(20\)](#)
- [2015 \(15\)](#)
- [2014 \(10\)](#)
- [2013 \(15\)](#)
- [2012 \(14\)](#)

Corps to host virtual meeting on Youghiogheny River Lake Shoreline, Master Plan revisions

PITTSBURGH DISTRICT

Published Aug. 5, 2021 /

Updated: Aug. 5, 2021



PHOTO I

U.S. Army Corps of Engineers regulations require master plans to be periodically reviewed to ensure they meet current needs. The Master Plan guides the use of government-owned and leased lands around the Youghiogheny River Lake, the Shoreline Management Plan, and manages the shoreline in a way that promotes safe and healthful use, and maintaining environmental safeguards for the public. Community input is critical to the Master Plan and Shoreline Management Plan updates and will affect the Youghiogheny River Lake for the next 25 years.

[PRINT](#) | [E-MAIL](#)

PITTSBURGH – The U.S. Army Corps of Engineers Pittsburgh District is hosting a virtual public meeting to seek public feedback about proposed changes to the Youghiogheny River Lake Master and Shoreline Management Plan updates. The proposed changes to the plans are based on previously collected community feedback.

WHO: The U.S. Army Corps of Engineers Pittsburgh District.

WHAT: Pittsburgh District is hosting a virtual meeting to gather input from the public on proposed changes to the Youghiogheny River Lake Master and Shoreline Management plans. The virtual meeting, conducted virtually online, will consist of a presentation followed by a question-and-answer and comment session.

The public will have access to view a recording of the meeting and comment on the revised 2021 Master Plan, Shoreline Management Plan, and associated Environmental Assessment through the Youghiogheny River Lake website at <https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan>

The public comment period will close on September 2, 2021.



US Army Corps of Engineers Pittsburgh District Website

WHEN: 6 to 7:30 p.m., Wednesday, August 18, 2021.

WHERE:

Web meeting: <https://usace1.webex.com/meet/PittsburghDistrict>

To join the meeting, click the link, select “Call Me,” and enter your phone number.

Call-in number: USA Toll-Free: (844) 800-2712

Access Code: 199 341 3549

Security Code: 1234

WHY:

U.S. Army Corps of Engineers regulations require master plans to be periodically reviewed to ensure they meet current public and environmental needs. The Master Plan guides the use of government-owned and leased lands around the Youghiogheny River Lake, the Shoreline Management Plan aims to protect and manage the shoreline in a way that promotes safe and healthful use, and maintaining environmental safeguards ensure a quality resource for use by the public. Community input is critical to the Master Plan and Shoreline Management Plan updates and will affect the management and usage of Youghiogheny River Lake for the next 25 years.

Media can contact the Public Affairs office at CELRP-PA@usace.army.mil.

FOLLOW the Pittsburgh District: [Twitter](#) and [Facebook](#).

Know. Take. Wear. Know the waterways. Take a safety course. Wear your life jacket.

Contact

Doug Swisher

814-395-3242

814-395-3242 (cell)

Douglas.N.Swisher@usace.army.mil

1000 Liberty Avenue, Pittsburgh, PA

Release no. 21-012

Youghiogheny River Lake

Youghiogheny River Lake Master Plan & Shoreline Management Plan

Updates on the Plans

The U.S. Army Corps of Engineers Pittsburgh District is revising both the Youghiogheny River Lake Master Plan (MP) and Shoreline Management Plan (SMP). The Master Plan guides the use of government-owned and leased lands around the lake. The Shoreline Management Plan aims to protect and manage the shoreline in a way that promotes safe and healthful use, while maintaining environmental safeguards to ensure a quality resource for use by the public.

We have completed our scoping phases for both documents and have prepared draft updated documents informed by the comments we collected during the scoping phases. The Corps has created a combined Environmental Assessment (EA) for the MP and SMP.

The Pittsburgh District is proposing to adopt and implement a revision to the Youghiogheny River Lake MP which was last updated in 2007 and the SMP which was last updated in 1987. This is your opportunity to comment on the Corps' proposed changes and future management for the reservoir.

Update Objectives

For the Master Plan

- Conserve the resources of the reservoir within the current policies and guidelines of the Corps
- Accommodate current and projected recreational use patterns with maximum efficiency
- Identify and protect cultural and natural resources
- Attract maximum participation by the general public

For the Shoreline Management Plan

- Promote the safe and healthful use of these shorelines by the public
- Maintain environmental safeguards to ensure a quality resource now and into the future
- Achieve a balance between permitted private uses and resource protection for general public use



Learn more about the update process, review the proposed changes, and share your perspective by visiting us at our website:

<https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>

SAVE THE DATE

Master Plan and Shoreline Management Plan Revision VIRTUAL Public Meeting

When: Wednesday, August 18th from 6:00-7:30 PM

Where: <https://usace1.webex.com/meet/PittsburghDistrict>
USA Toll-Free: (844) 800-2712
Access Code: 199 341 3549, Security Code: 1234

Unable to attend the virtual meeting? No problem!

If you cannot attend in-person, send us your input by:
Online - Visit our website and use the online comment tool

Email - Douglas.N.Swisher@usace.army.mil

Or mail/visit - Youghiogheny River Lake
497 Flanigan Rd
Confluence PA 15424

About the Lake

Authorized by the Flood Control Act of 1938, Youghiogheny River Lake is one of 16 flood control projects in the Pittsburgh District. An important link in a system of flood control projects, Youghiogheny River Lake provides flood protection for the Monongahela River Valley and the upper Ohio River.

Since its completion in 1943, the Youghiogheny River Lake reservoir has prevented flood damages estimated to be in excess of \$569 million. Youghiogheny River Lake has the capacity to store the equivalent run-off of 11 inches of precipitation from its 434 square mile drainage area. Youghiogheny River Lake also stores water and releases it downstream during dry periods to improve water quality and increase flow for domestic and industrial use, navigation, recreation, esthetics and aquatic life.

Authorized missions of Youghiogheny River Lake:

- Flood Damage Reduction
- Low Flow Augmentation
- Pollution Abatement
- Recreation
- Water Supply

MP and SMP 101

A MP guides the management of government owned and leased lands around the reservoir. This will influence future use of natural resources and recreational activities to ensure the sustainability of the reservoir. The planning process includes an analysis of potential effects of any proposed changes to the MP on the natural and social environment, including: fish and wildlife, cultural and historic resources, recreational opportunities, economics, land use and public health and safety.

The SMP guides the management of shorelines in a manner which will promote the safe and healthful use of these shorelines while maintaining environmental safeguards to ensure a quality resource for use by the public. The planning process includes an analysis of potential effects of any proposed changes to the SMP, including: the natural and social environment, fish and wildlife, cultural and historic resources, recreational opportunities, economics, land use, aesthetics, and public health and safety.





US Army Corps
of Engineers®
Pittsburgh District

Youghiogheny River Lake Master Plan and Shoreline Management Plan Public Comment Form

Name (optional): _____

Email (optional): _____

Master Plan and Shoreline Management Plan

Please provide your comments, questions, or ideas.

If your comment, question, or idea relates to a specific location, please specify.

Cut along this line

Comment forms may be mailed to:
Youghiogheny River Lake, 497 Flanigan Road, Confluence, PA 15424, by
Wednesday, September 2, 2021



US Army Corps
of Engineers®
Pittsburgh District

Youghiogheny River Lake Master Plan and Shoreline Management Plan Options for Providing Input

To allow all those who enjoy Youghiogheny River Lake to participate in this Master Plan and Shoreline Management Plan update process, we are providing multiple ways for everyone to review and comment on the revised Plans.

Below are the ways in which you can engage during the final phase of this process.

1. Review the Master Plan, Shoreline Management Plan, and Environmental Assessment.

You can review the Master Plan, Shoreline Management Plan, and Environmental Assessment at:

- Youghiogheny River Lake (497 Flanigan Road, Confluence, PA 15424) Monday-Friday between 7:30AM-4:00PM
- Visit our website at:
<https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>
OR scan the QR code below

2. Comment on the Master Plan, Shoreline Management Plan, and Environmental Assessment.

You can comment on the Master Plan, Shoreline Management Plan, and Environmental Assessment by:

- Cut off and mail in the other side of this comment form.
Send your comment form to:
Youghiogheny River Lake
497 Flanigan Road, Confluence, PA 15424
- Comment using our Crowdsource Reporter Tool at:
<https://lrp.maps.arcgis.com/apps/CrowdsourceReporter/index.html?appid=5b4859c61986476f9f6333bad856eeec>
- Email your comments to:
Douglas.N.Swisher@usace.army.mil

Have any questions? Reach out!

Cut along this line



From: Wood, Heather L CIV USARMY CELRP (USA) <Heather.L.Wood@usace.army.mil>
Sent: Wednesday, August 4, 2021 7:21 AM
Subject: Youghiogheny River Lake Master Plan and Shoreline Management Plan Update

Good morning,

The U.S. Army Corps of Engineers, Pittsburgh District (USACE) is revising the Youghiogheny River Lake Master Plan and the Youghiogheny River Lake Shoreline Management Plan. The USACE has prepared a draft updated Master Plan (MP), draft updated Shoreline Management Plan (SMP), and draft Environmental Assessment (EA), and invites submission of comments related to the proposed MP, SMP, and EA.

The USACE will consider all submissions received before the expiration date of the public comment period prior to finalizing the Master Plan, Shoreline Management Plan, and Environmental Assessment. The nature or scope of the Plans may be changed upon consideration of the comments received.

The draft MP, SMP, EA, and Finding of No Significant Impact are available electronically at:

<https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Youghiogheny-River-Lake/Youghiogheny-Master-Plan/>

A virtual public meeting will be held on August 18, 2021 from 6:00-7:30 PM. See details below:

Web meeting:

<https://usace.webex.com/meet/PittsburghDistrict>

To join the meeting, click the link, select "Call Me," and enter your phone number.

Call-in number:

USA Toll-Free: (877)336-1831

Access Code: 1048650

Security Code: 1234

Comments may be submitted by:

- Emailing Heather.L.Wood@usace.army.mil (enter "Youghiogheny River Lake Master Plan" in subject line)
- Using our Crowdsourc Reporter Tool (<https://lrp.maps.arcgis.com/apps/CrowdsourcReporter/index.html?appid=5b4859c61986476f9f6333bad856eeec>), or
- Mailing comments to the following address using the attached comment form:

Youghiogheny River Lake
497 Flanigan Road
Confluence, PA 15424

Comments must be received by 2 September 2021 to ensure consideration.

Please reach out if you have any questions.

Heather Wood
Natural Resource Specialist
US Army Corps of Engineers
Pittsburgh District Office
1000 Liberty Avenue
Pittsburgh, PA 15222
412-395-7203
Heather.L.Wood@usace.army.mil

From: Wood, Heather L CIV USARMY CELRP (USA) <Heather.L.Wood@usace.army.mil>
Sent: Tuesday, August 17, 2021 7:21 AM
Subject: Youghiogheny River Lake Master Plan and Shoreline Management Plan Public Meeting

Good morning,

Just a reminder that Youghiogheny River Lake's Master Plan and Shoreline Management Plan public meeting is tomorrow, 18 August from 6:00-7:30PM.

I apologize, but the meeting information on my previous email was incorrect. See below for updated information.

Web meeting (recommended):

<https://usace1.webex.com/meet/PittsburghDistrict>

To join the meeting, copy the link into your browser. When prompted, enter your name and email. On the next screen, select "Call Me," and enter your phone number. Click to Join the Meeting.

Detailed instructions on how to join the meeting are attached.

If you're unable to join us in the webinar space, you have the option to call-in only:

USA Toll-Free: (844) 800-2712

Access Code: 199 341 3549

Security Code: 1234 (if prompted)

Please feel free to reach out if you have any questions. Thank you.

Heather Wood
Natural Resource Specialist
US Army Corps of Engineers
Pittsburgh District Office
1000 Liberty Avenue
Pittsburgh, PA 15222
412-395-7203
Heather.L.Wood@usace.army.mil

APPENDIX D

ENGINEER REGULATIONS, PAMPHLETS, MANUALS, AND CIRCULARS

- D.1** ER 200-1-5, Environmental Quality – Policy for Implementation and Integrated Application of the U.S. Army Corps of Engineers Environmental Operating Principles and Doctrine, 30 Oct 2003
- D.2** ER 1130-2-540, Environmental Stewardship Operations and Maintenance Policies, 15 Nov 1996 (with changes 4 Nov 2002, 31 Jul 2005, and 11 Aug 2008)
- D.3** ER 1130-2-550, Project Operations – Recreation Operations and Maintenance Guidance and Procedures, 15 Nov 1996 (with changes 1 Oct 1999, 1 Mar 2002, 15 Aug 2002, 30 Aug 2008, 30 Mar 2009, 30 Jan 2013, and 30 Sep 2013)
- D.4** ER 405-1-12, Chapter 8, Real Property Management, 30 September 1994
- D.5** EP 1130-2-550, Project Operations – Recreation Operations and Maintenance Guidance and Procedures, 15 Nov 1996 (with changes 1 Oct 1999, 1 Mar 2002, 15 Aug 2002, 30 Aug 2008, and 30 Jan 2013)
- D.6** EM 1110-1-400, Engineering and Design – Recreation Facility and Customer Service Standards, 1 Nov 2004
- D.7** EC 1165-2-220, Water Resource Policies and Authorities – Policy and Procedural Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to 33 U.S.C. 408, 10 Sep 2018