

Appendix A

Park Figures & Ecosystem Table

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Map Layer Credits

National Park Service. 2013. National Capital Region Boundary. GIS data. Updated December 5, 2014.

NatureServe. 2011. U.S. Terrestrial Ecological Systems Classification, NatureServe, Draft. GIS data. Received May 3, 2011

Virginia Department of Conservation and Recreation, Division of Natural Heritage (VDCRa). 2011. U.S. Terrestrial Ecological Systems Classification. GIS data. Draft. Received February 2, 2011.

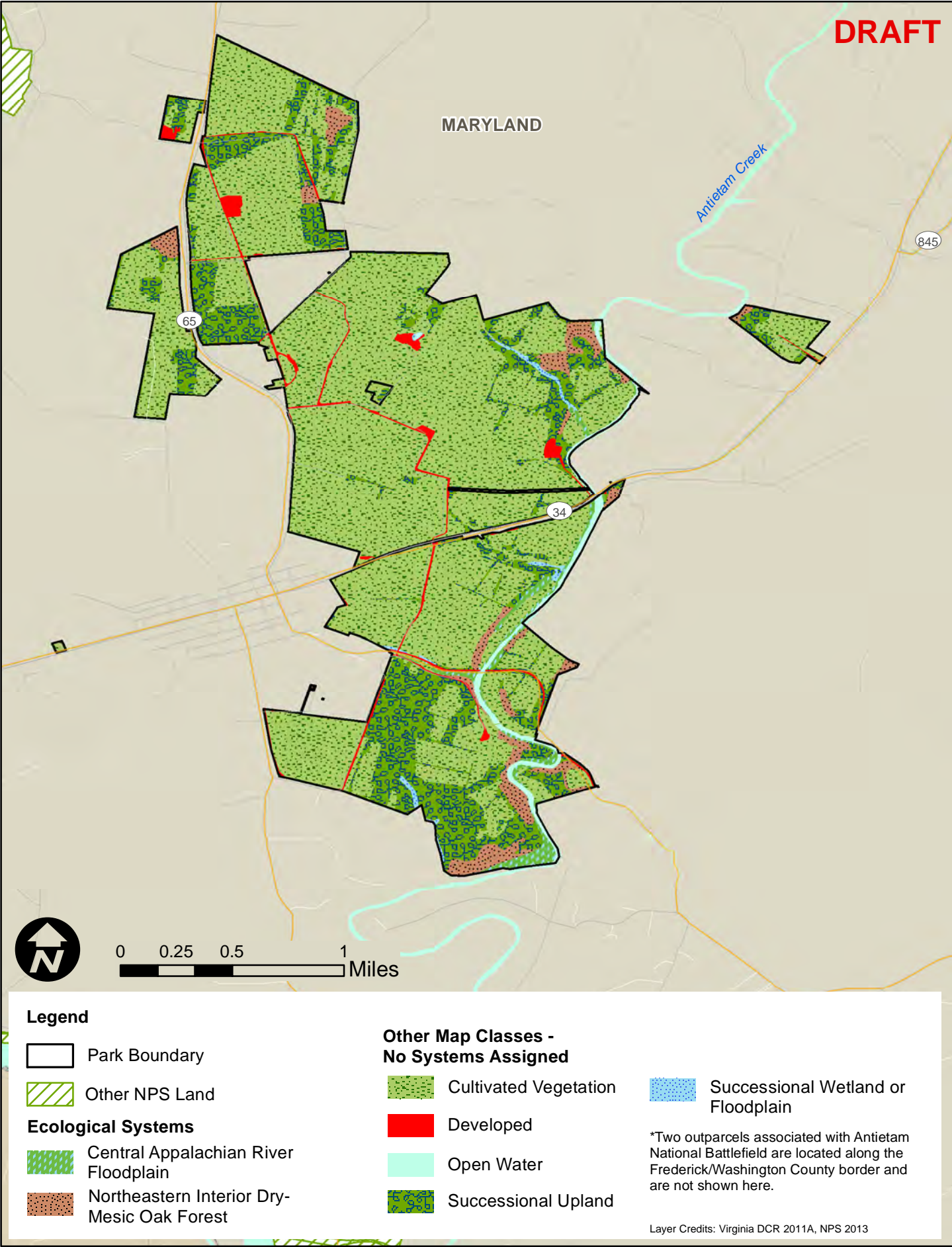
Virginia Department of Conservation and Recreation, Division of Natural Heritage (VDCRb). 2011. U.S. Terrestrial Ecological Systems Classification. GIS data. Draft. Received February 3, 2011.

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CEGL CODE EcolSystem	USNVC Ecological System Name	Topographic Position	ANTI	CATO	CHOH	GWMP	GREE	HAFE	MANA	MONO	NACE	PISC	PRWI	ROCR	WOTR
CES202.593	Appalachian (Hemlock)-Northern Hardwood Forest	Upland		X				X	X				X		
CES202.598	Appalachian Shale Barrens	Upland			X										
CES202.602	Central Appalachian Alkaline Glade and Woodland	Upland			X										
CES202.591	Central Appalachian Dry Oak- Pine Forest	Upland		X	X	X	X	X	X	X	X	X	X	X	X
CES202.600	Central Appalachian Pine-Oak Rocky Woodland	Upland		X	X	X		X							
CES202.608	Central Appalachian River Floodplain	Lowland	X		X	X	X	X	X	X	X	X			
CES202.609	Central Appalachian Stream and Riparian	Lowland		X	X	X			X					X	X
CES202.601	North-Central Appalachian Acidic Cliff and Talus	Upland		X	X			X		X					
CES202.603	North-Central Appalachian Circumneutral Cliff and Talus	Upland			X	X		X							
CES202.592	Northeastern Interior Dry-Mesic Oak Forest	Upland	X	X	X	X		X	X	X			X		
CES203.520	Northern Atlantic Coastal Plain Basin Swamp and Wet Hardwood Forest	Lowland			X	X	X					X	X		
CES203.069	Northern Atlantic Coastal Plain Calcareous Ravine	Upland										X			
CES203.516	Northern Atlantic Coastal Plain Fresh and Oligohaline Tidal Marsh	Lowland				X	X				X	X			
CES203.475	Northern Atlantic Coastal Plain Hardwood Forest	Upland			X						X	X	X	X	
CES203.269	Northern Atlantic Coastal Plain Pitch Pine Barrens	Upland					X								
CES203.374	Northern Atlantic Coastal Plain Pitch Pine Lowland	Lowland					X								
CES203.070	Northern Atlantic Coastal Plain Stream and River	Lowland				X	X				X	X	X		
CES203.282	Northern Atlantic Coastal Plain Tidal Swamp	Lowland				X	X				X	X			
CES202.268	Piedmont Hardpan Woodland and Forest	Upland			X	X			X						
CES202.336	Piedmont Upland Depression Swamp	Lowland			X	X			X				X		
CES202.373	Southern and Central Appalachian Cove Forest	Upland			X	X		X							
CES202.348	Southern and Central Appalachian Mafic Glade and Barrens	Upland		X	X			X							
CES203.242	Southern Atlantic Coastal Plain Mesic Hardwood Forest	Upland			X	X	X			X	X	X	X	X	X
Total USNVC Ecological Systems Present per Park			2	7	16	14	9	9	7	5	7	9	8	4	3

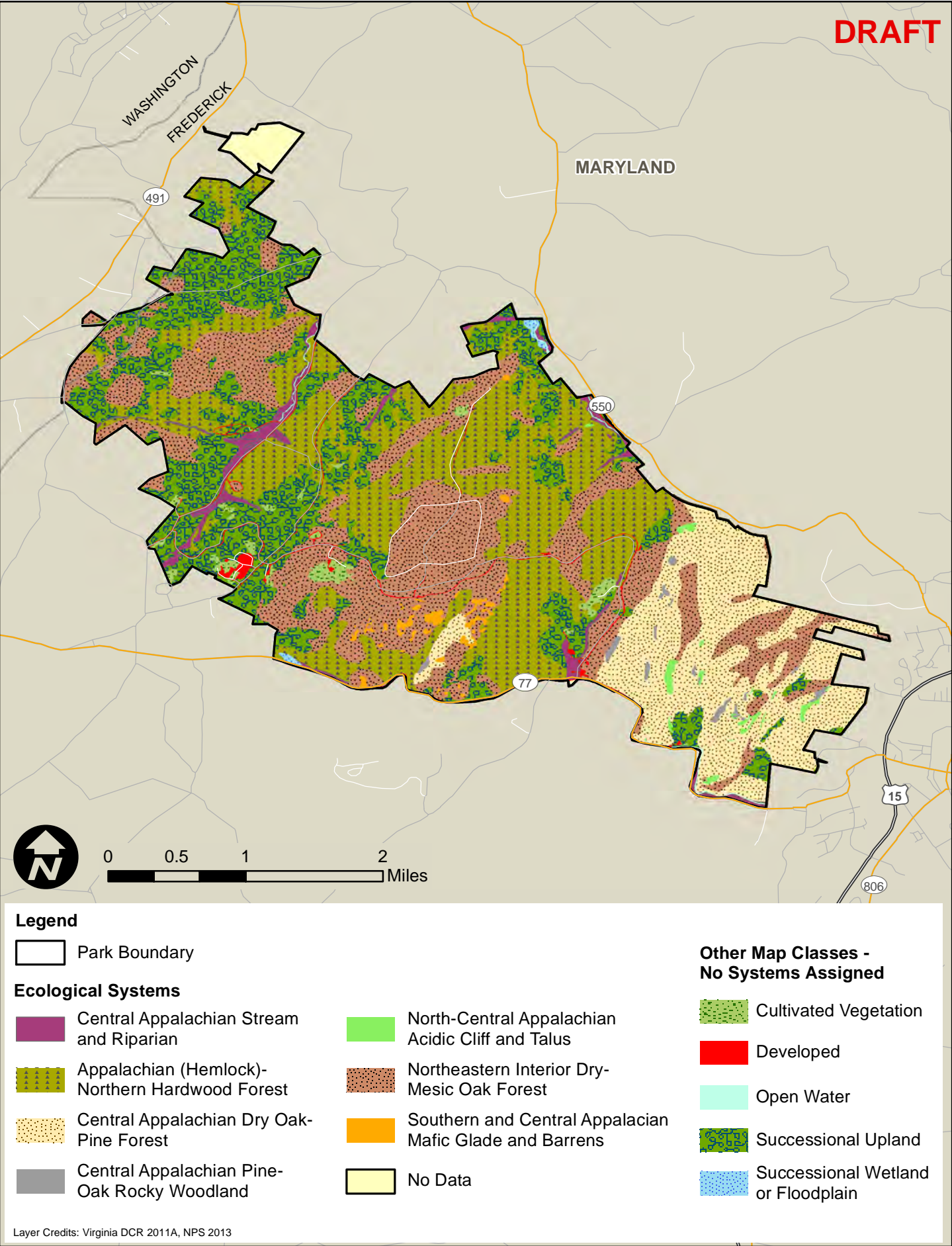
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Figure 1 - Antietam National Battlefield (ANTI)



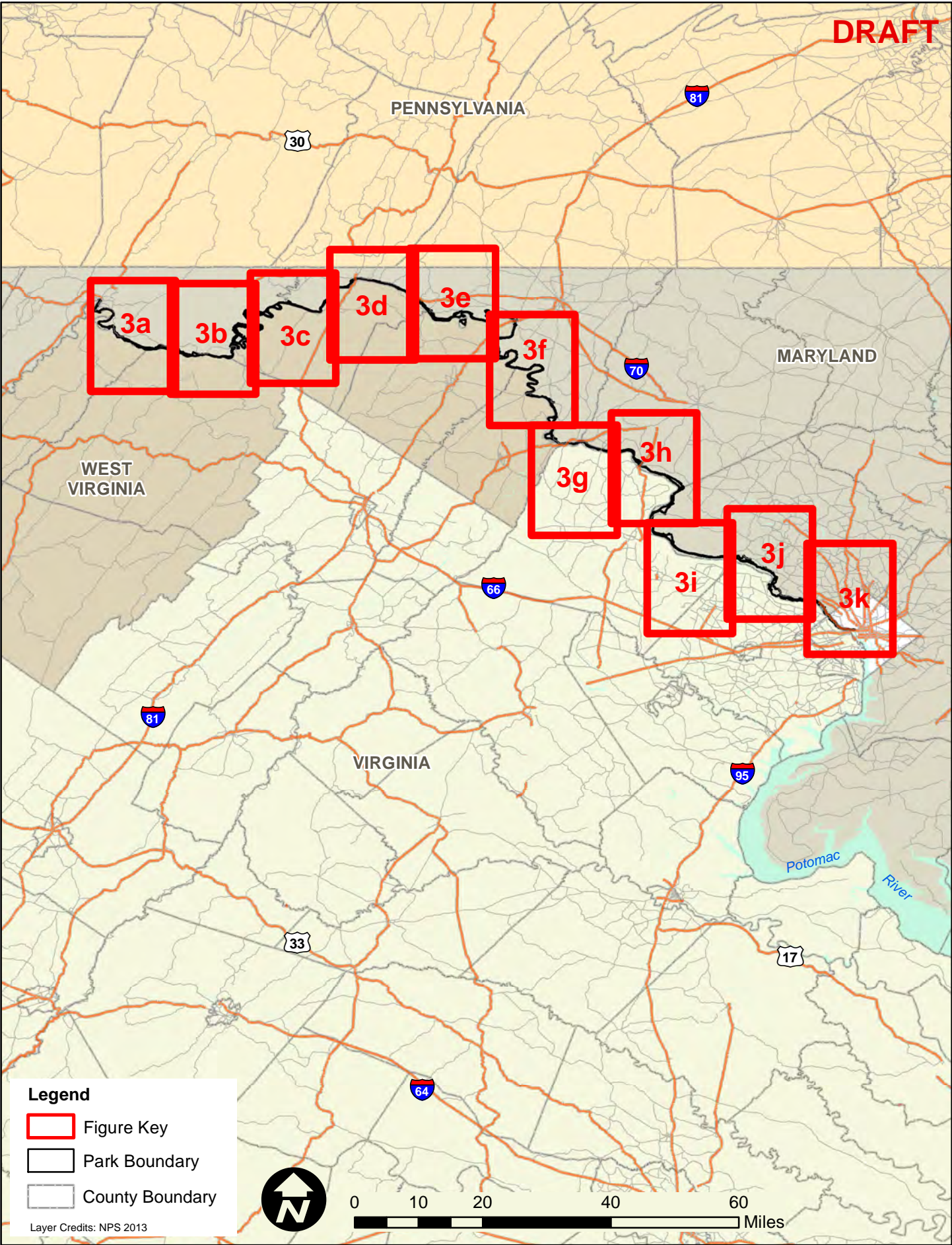
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Figure 2 - Catoctin Mountain Park (CATO)



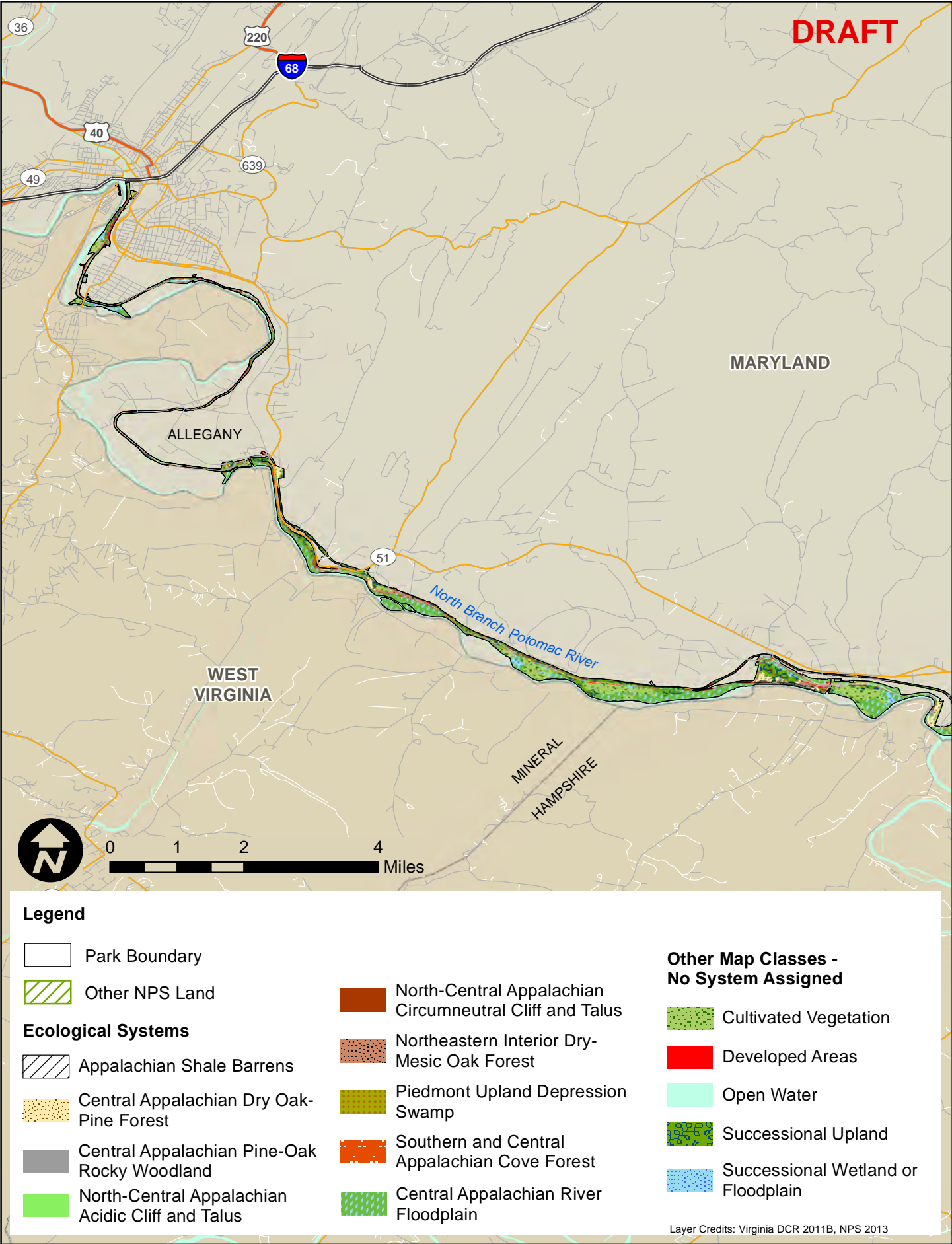
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Figure 3 - Chesapeake & Ohio Canal National Historic Park (CHOH)



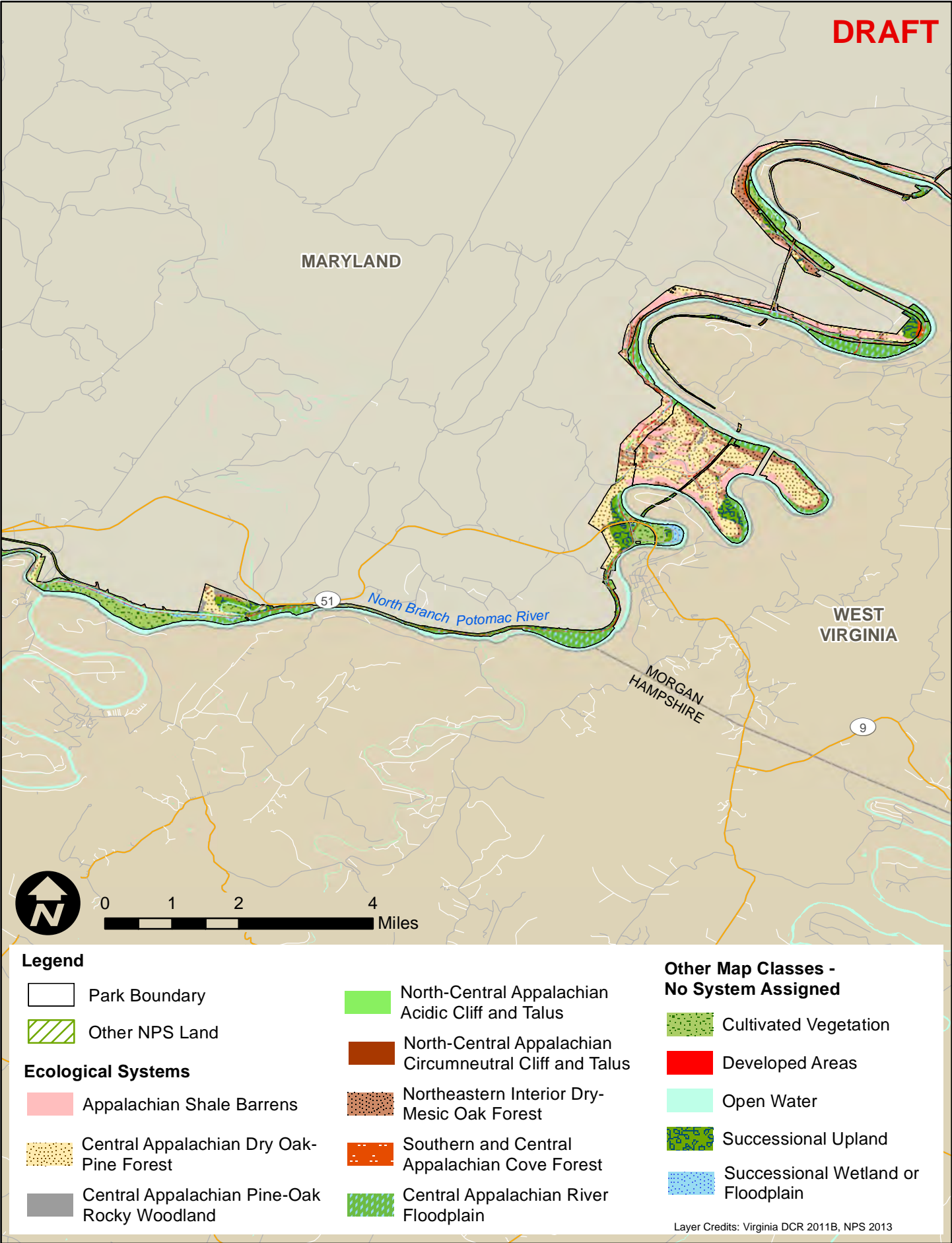
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Figure 3A - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 1 of 11



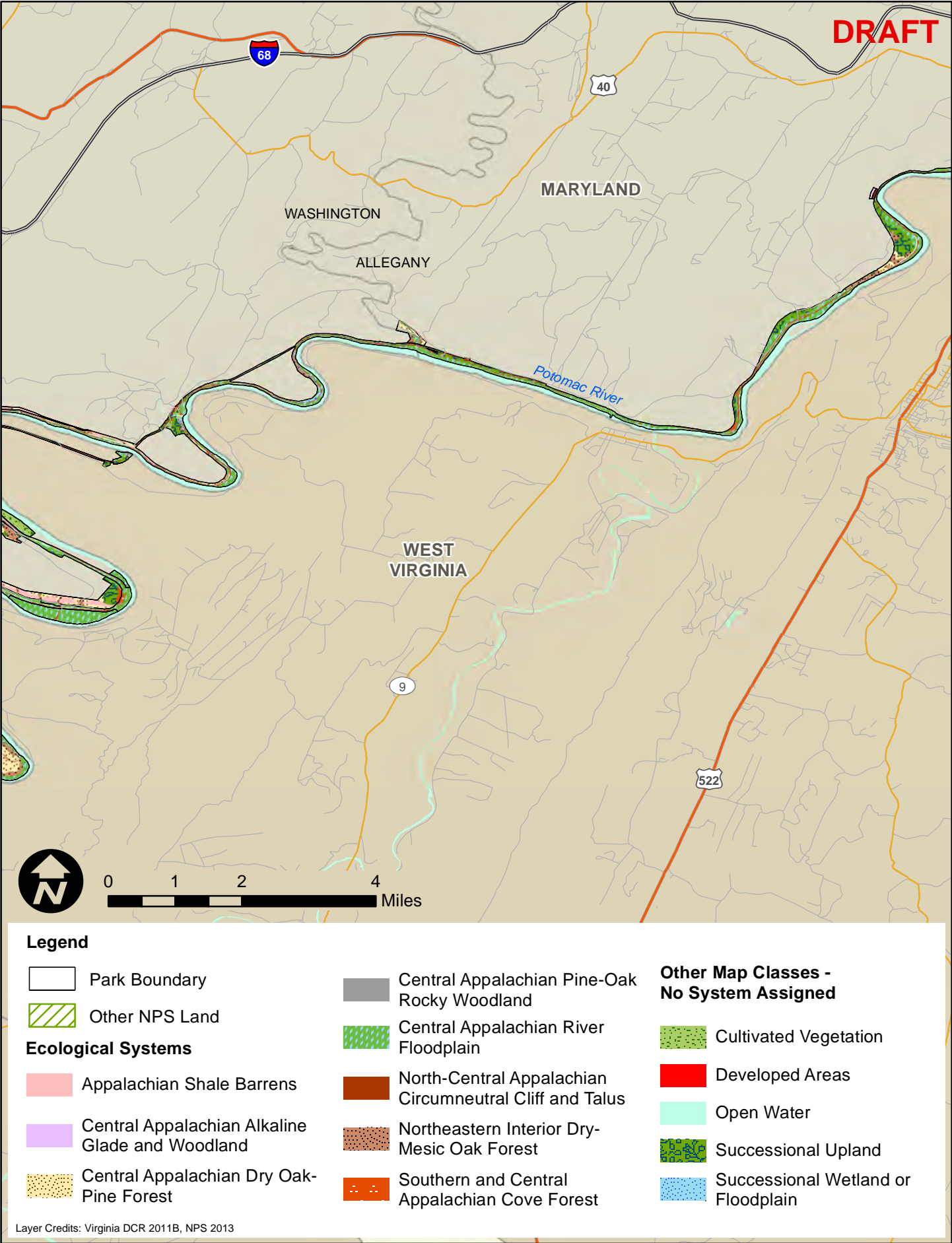
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Figure 3B - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 2 of 11



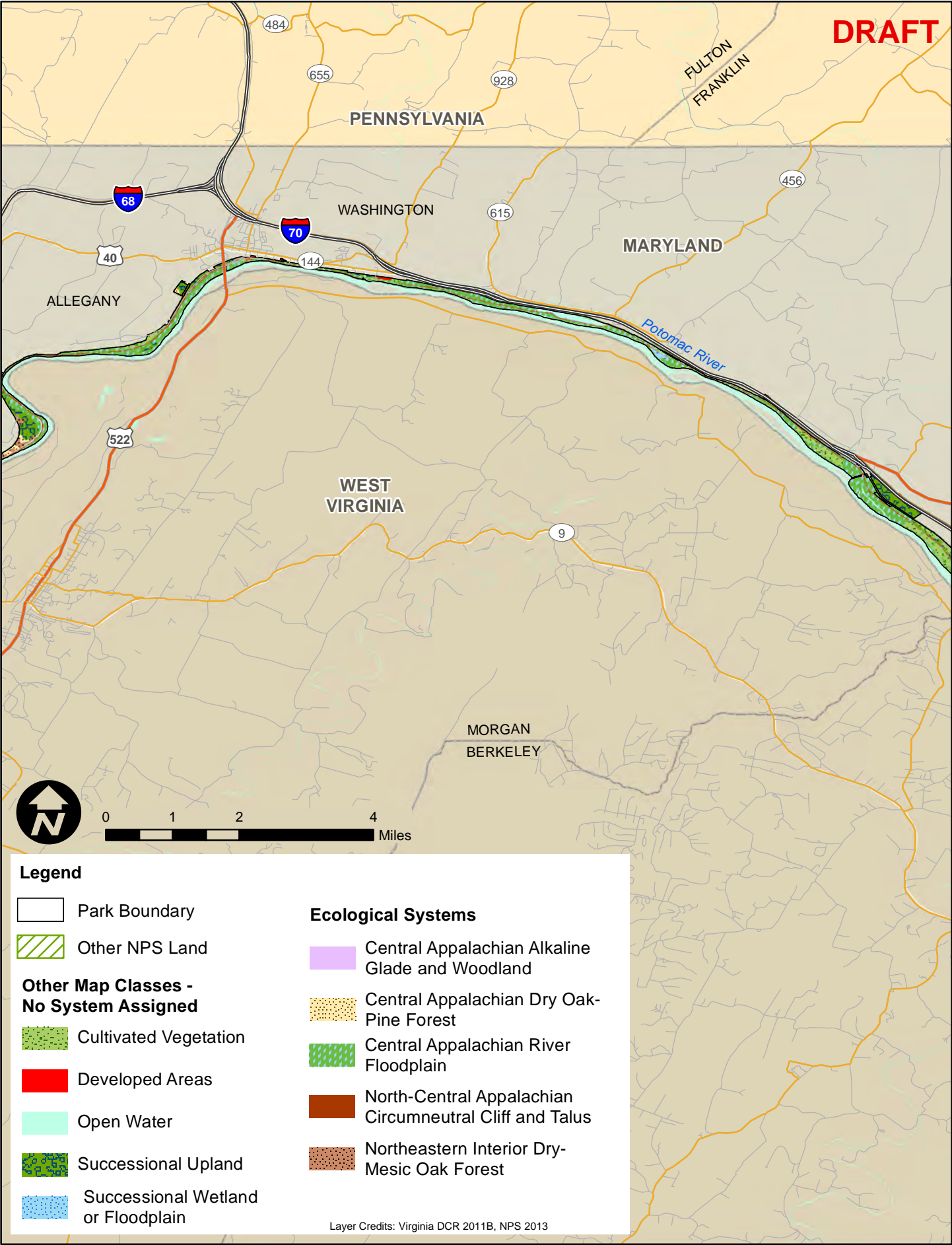
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Figure 3C - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 3 of 11



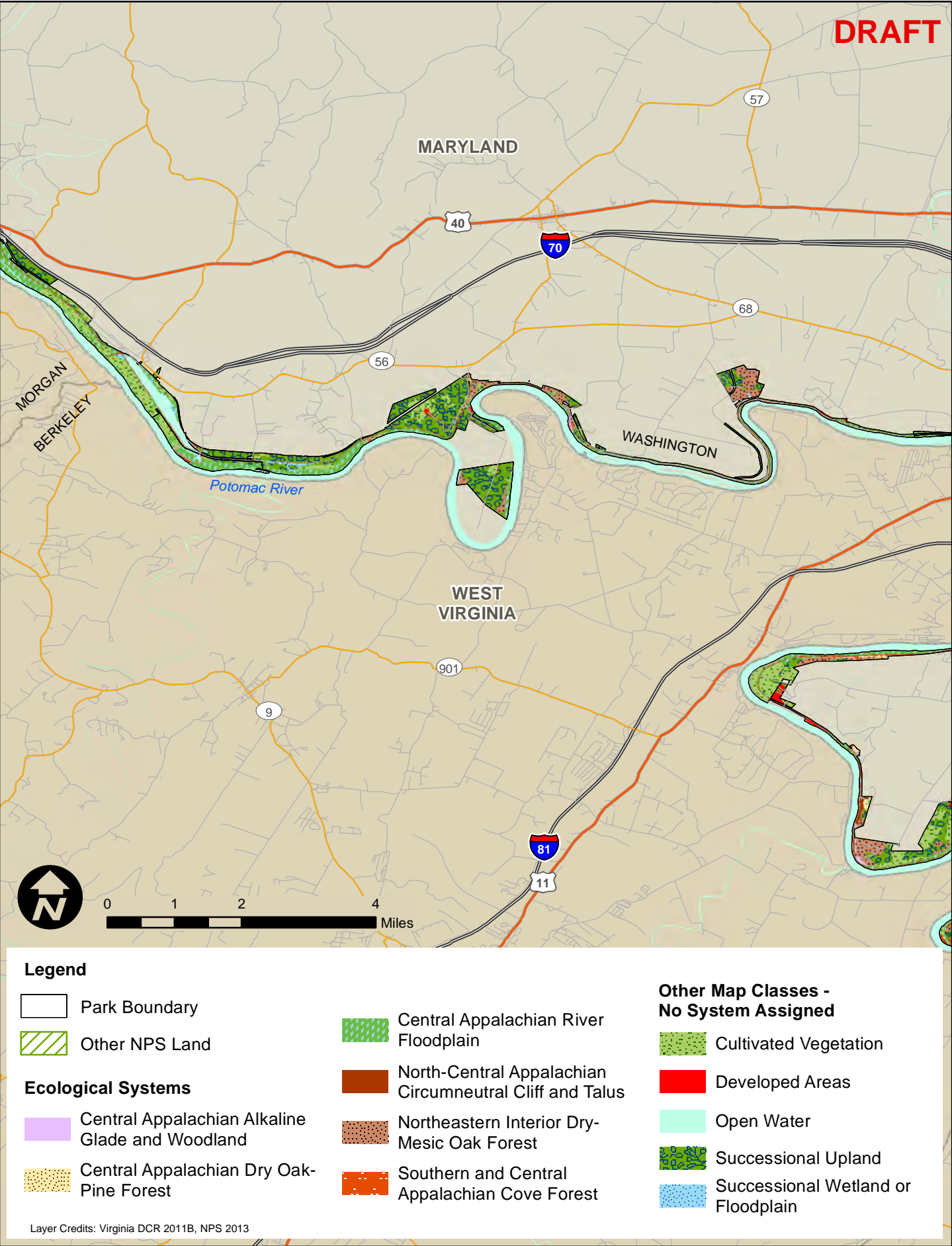
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Figure 3D - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 4 of 11



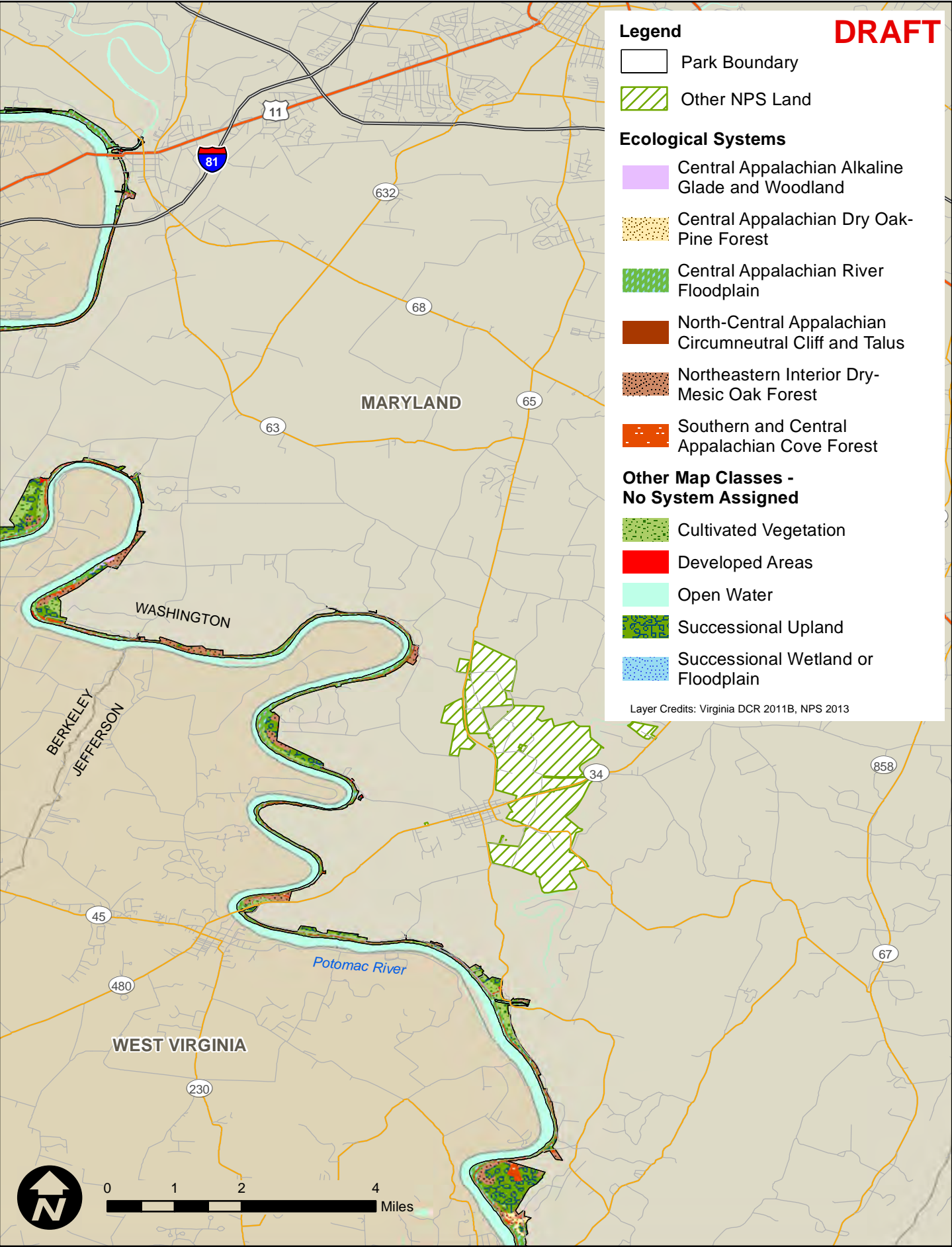
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Figure 3E - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 5 of 11



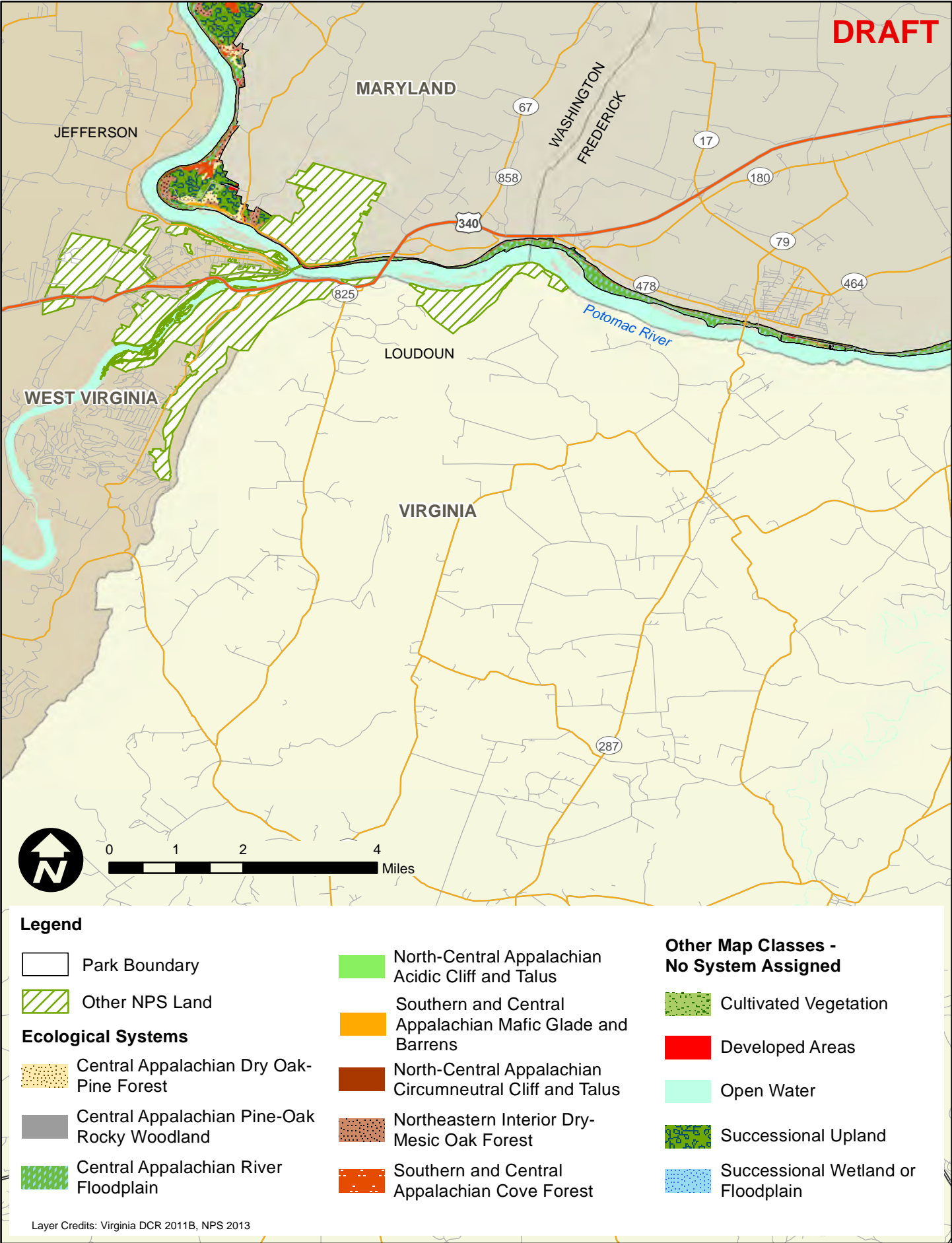
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Figure 3F - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 6 of 11



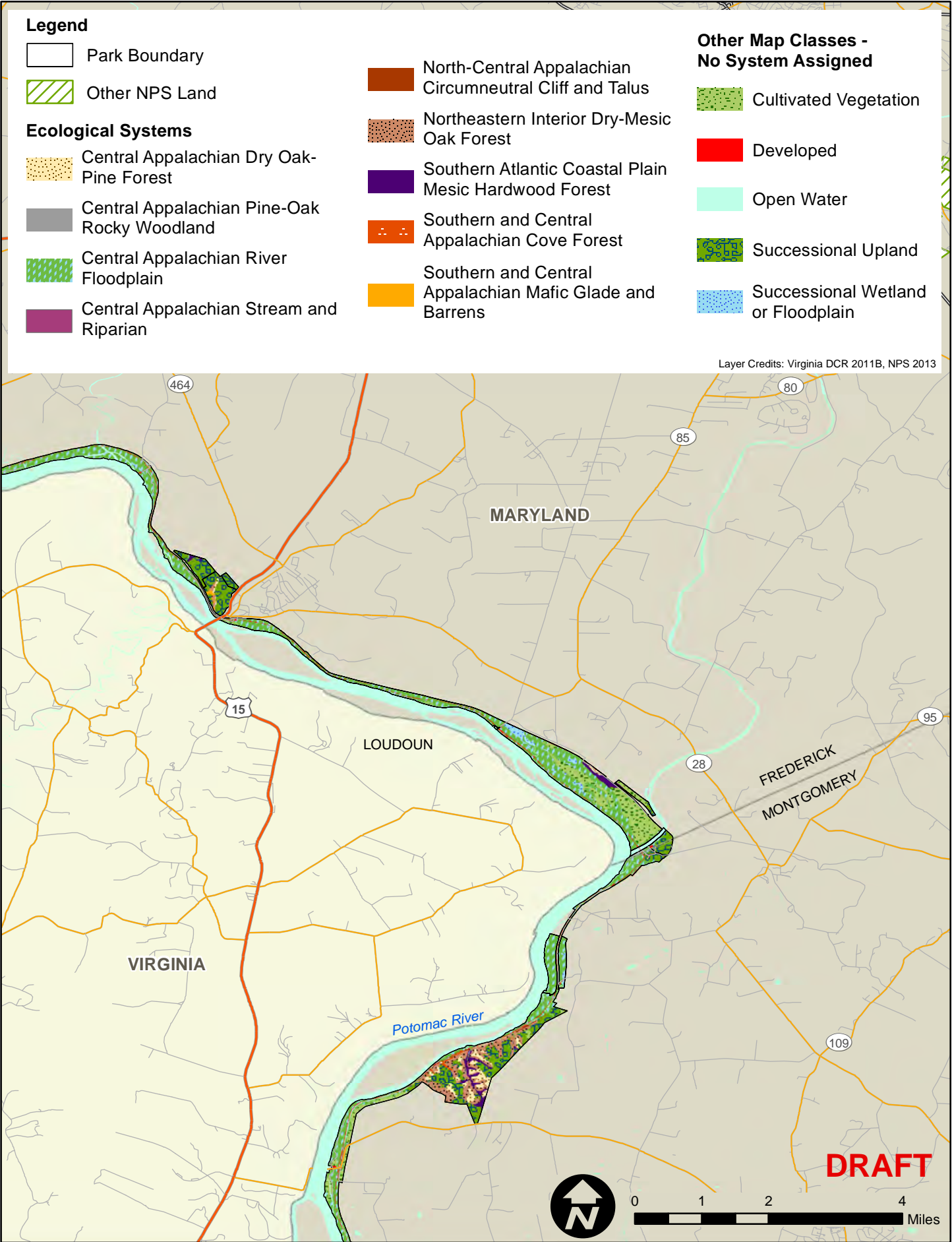
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Figure 3G - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 7 of 11



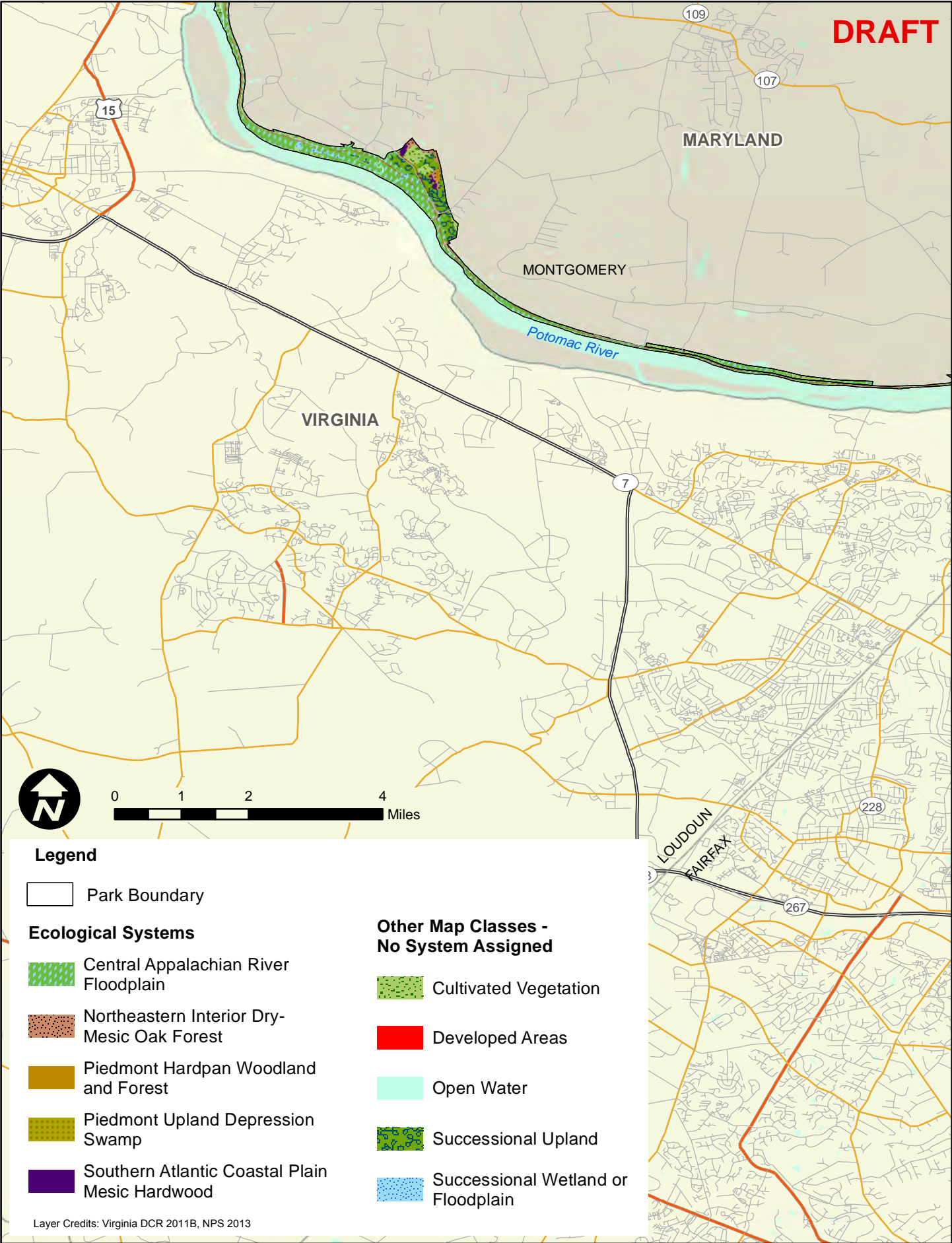
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Figure 3H - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 8 of 11



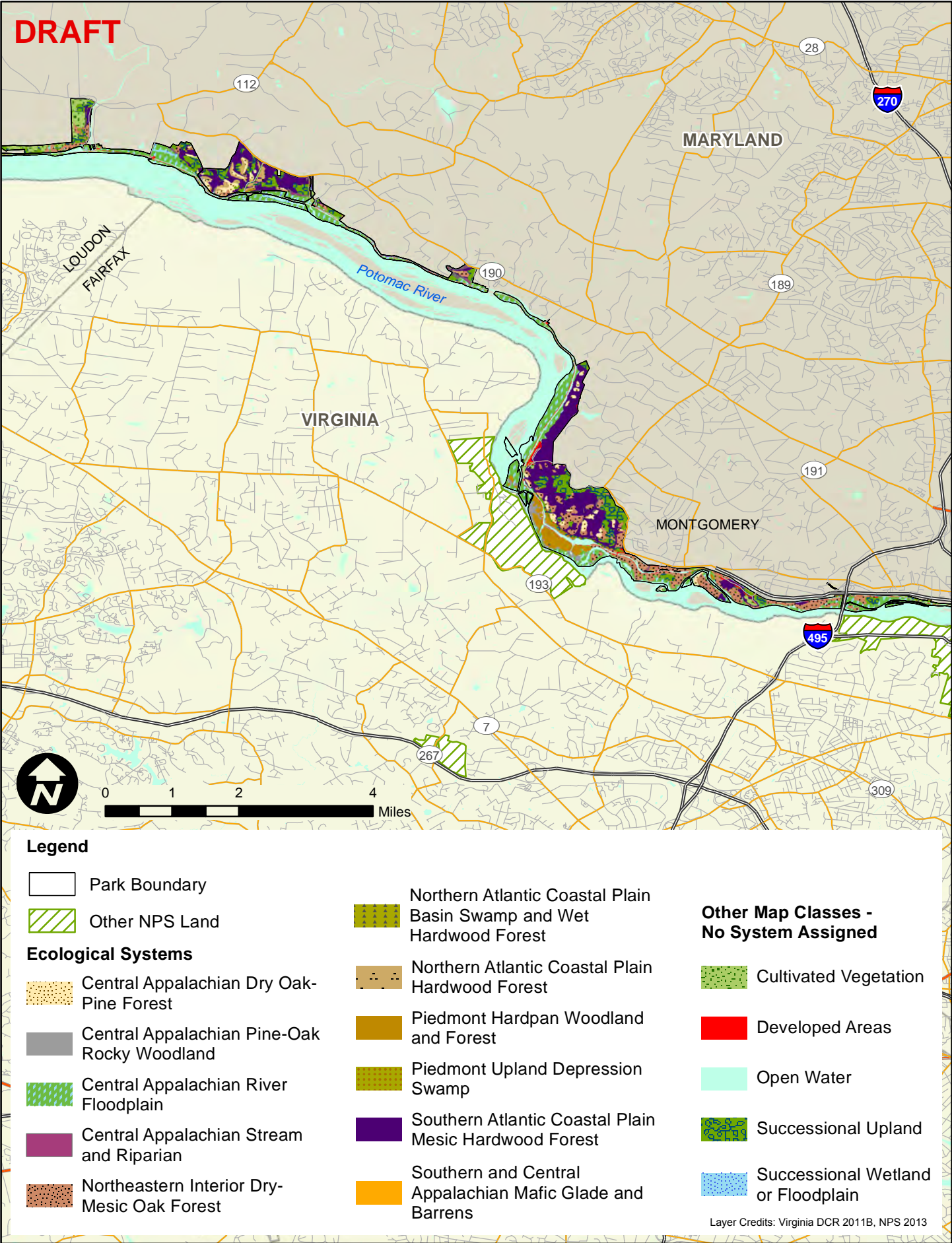
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Figure 3I - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 9 of 11



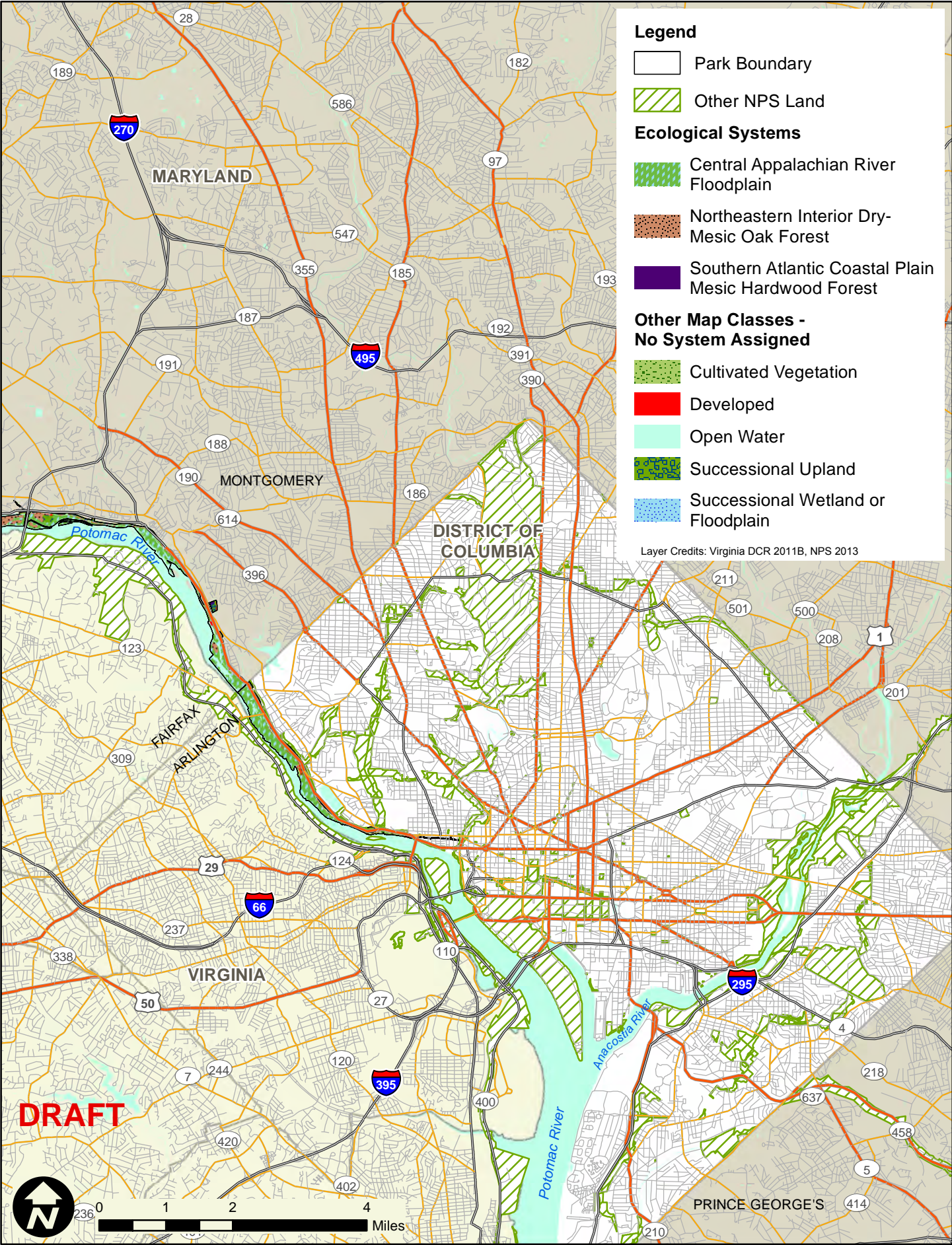
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Figure 3J - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 10 of 11



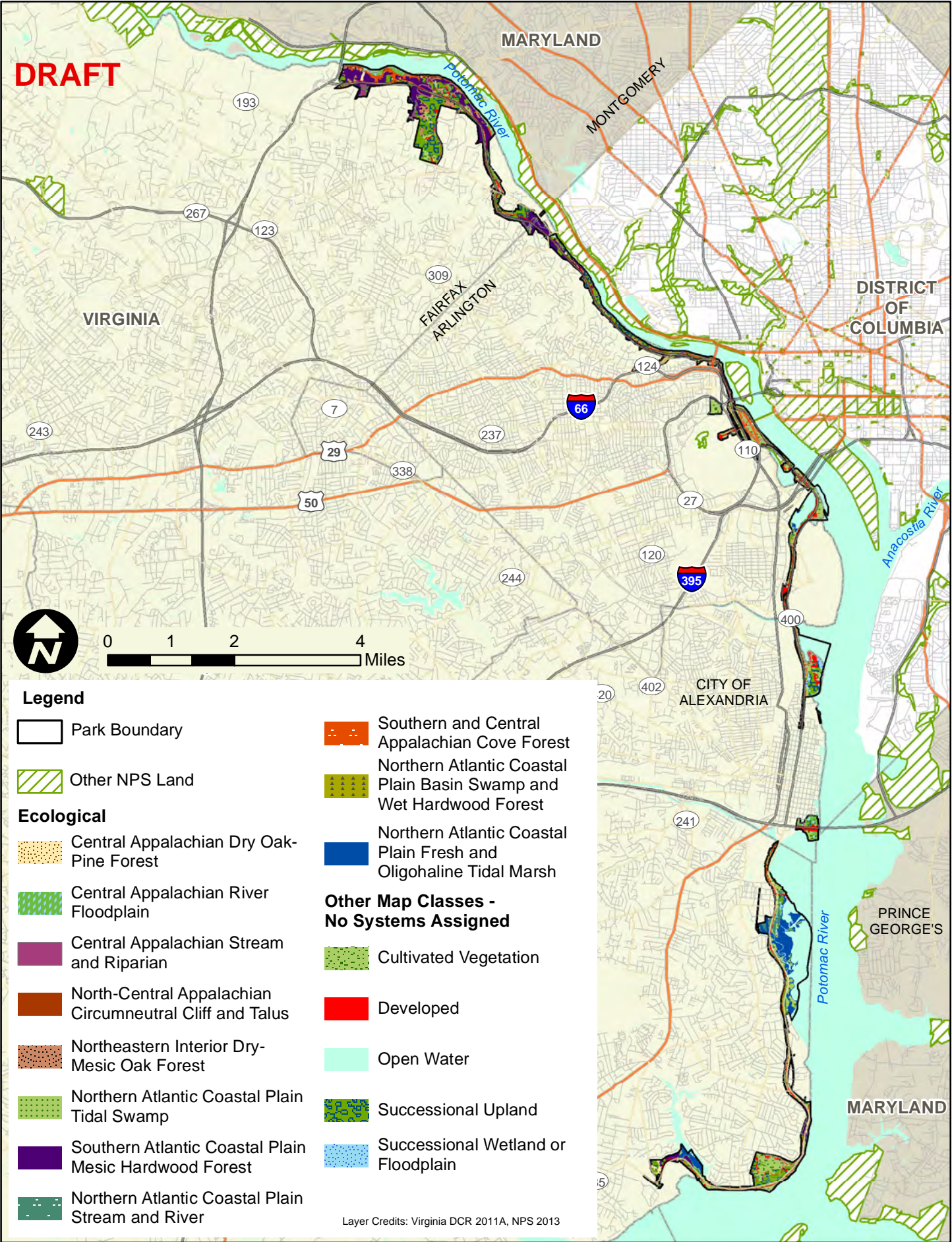
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Figure 3K - Chesapeake & Ohio Canal National Historic Park (CHOH) - Map 11 of 11



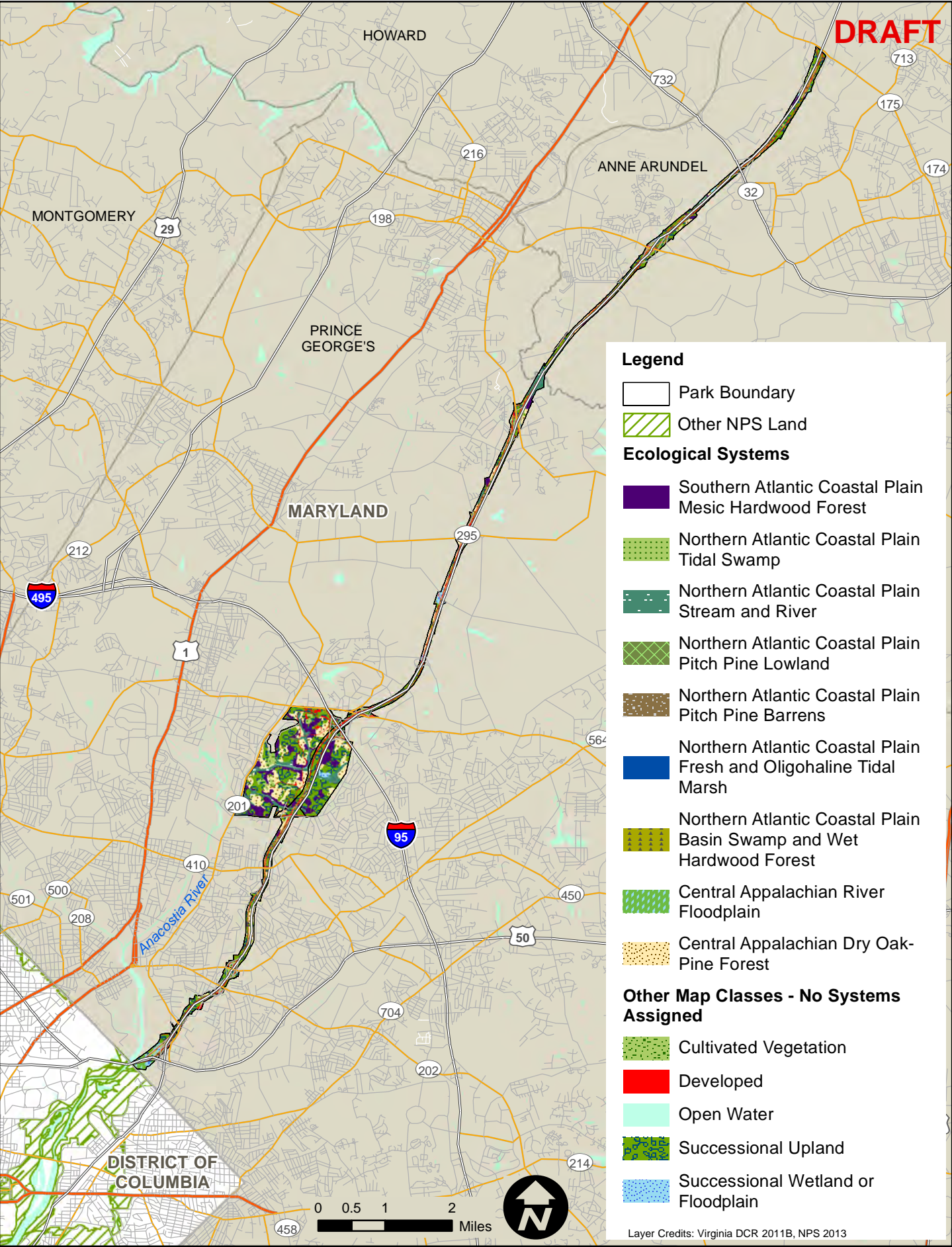
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Figure 4 - George Washington Memorial Parkway (GWMP)



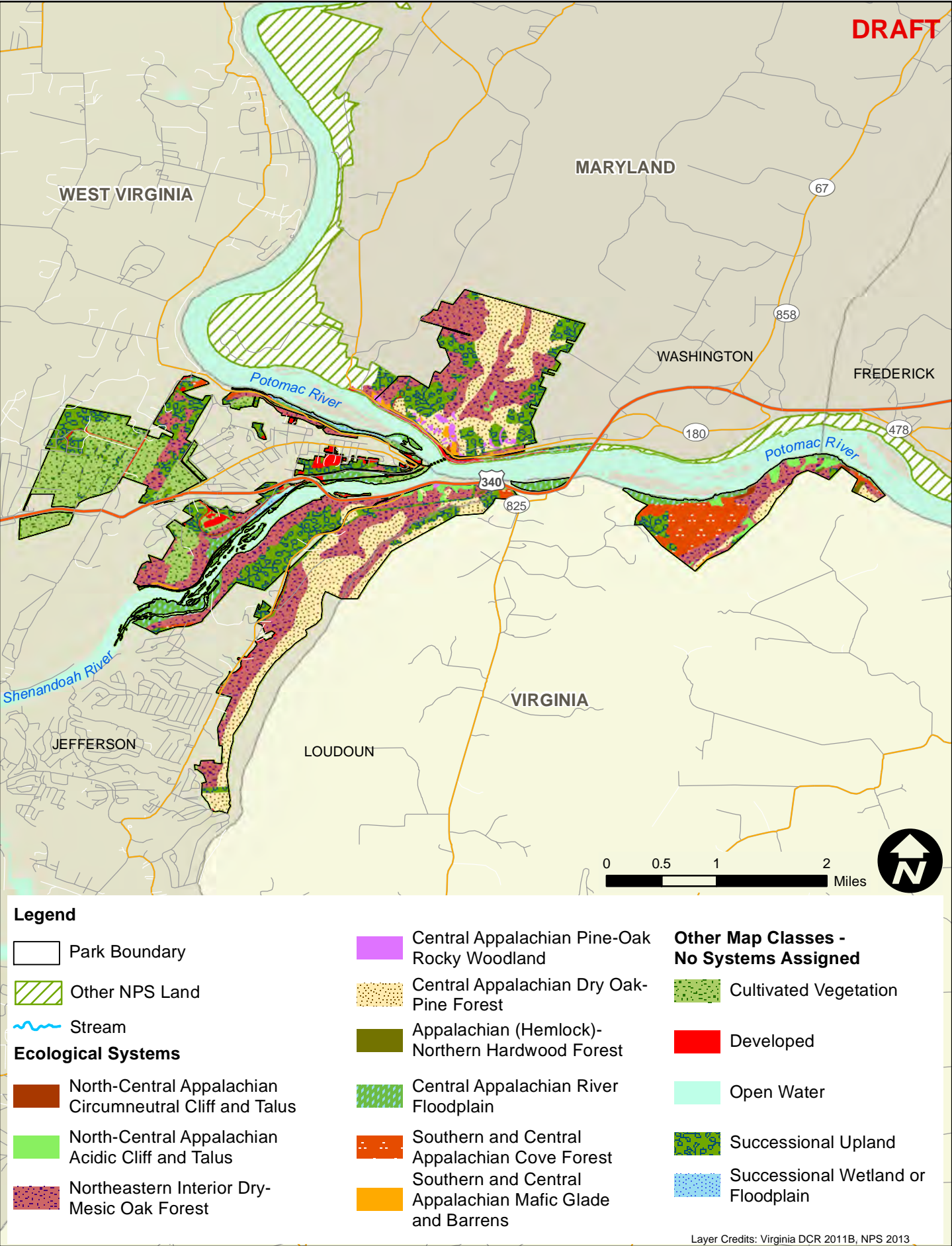
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Figure 5 - Greenbelt Park and Baltimore-Washington Parkway (GREE)



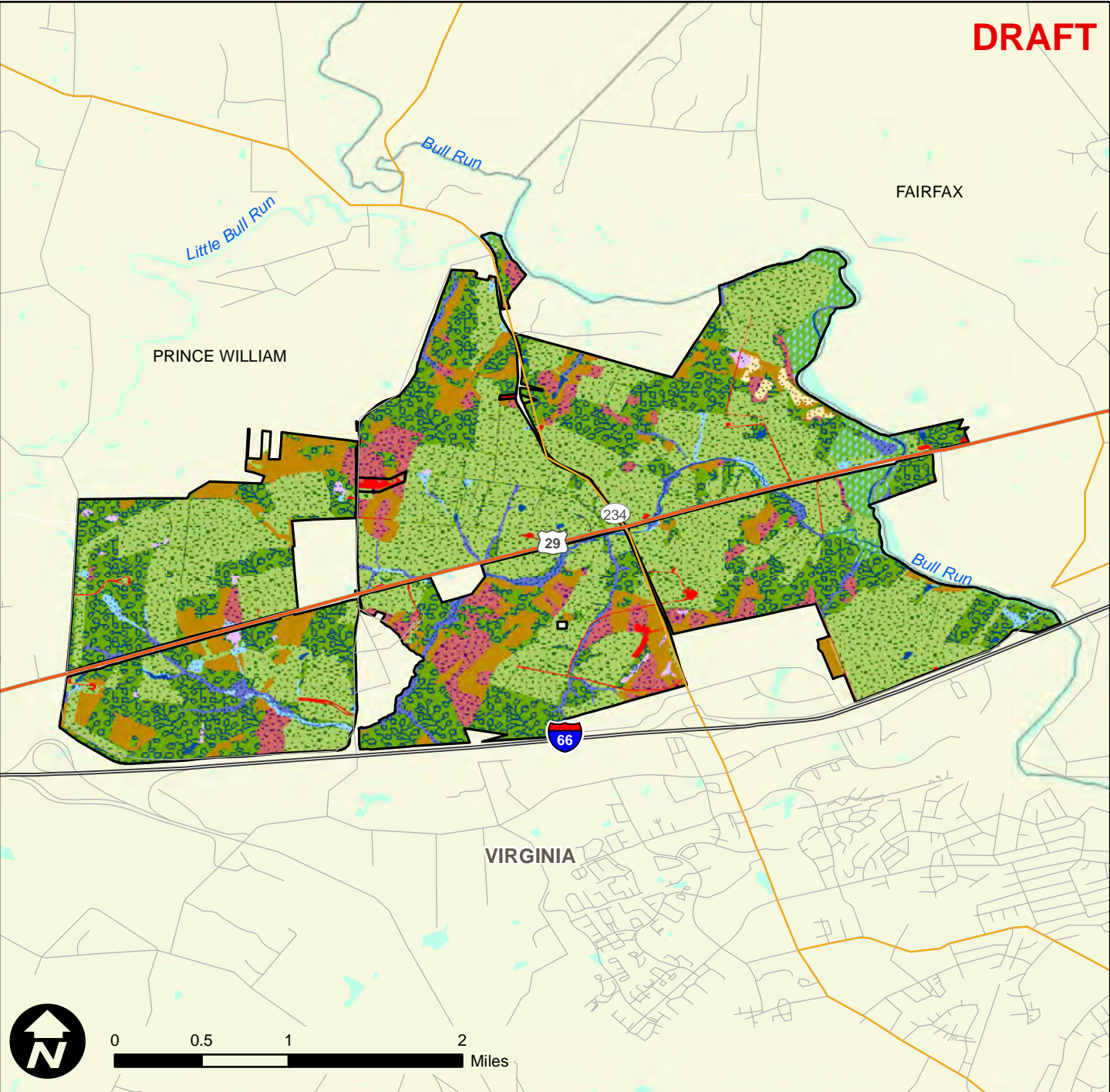
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Figure 6 - Harpers Ferry National Historical Park (HAFE)



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Figure 7 - Manassas National Battlefield Park (MANA)







Legend

 Park Boundary

Ecological Systems

-  Piedmont Upland Depression Swamp
-  Central Appalachian Stream and Riparian
-  Piedmont Hardpan Woodland and Forest

-  Appalachian (Hemlock)-Northern Hardwood Forest
-  Central Appalachian River Floodplain
-  Central Appalachian Dry Oak-Pine Forest
-  Northeastern Interior Dry-Mesic Oak Forest

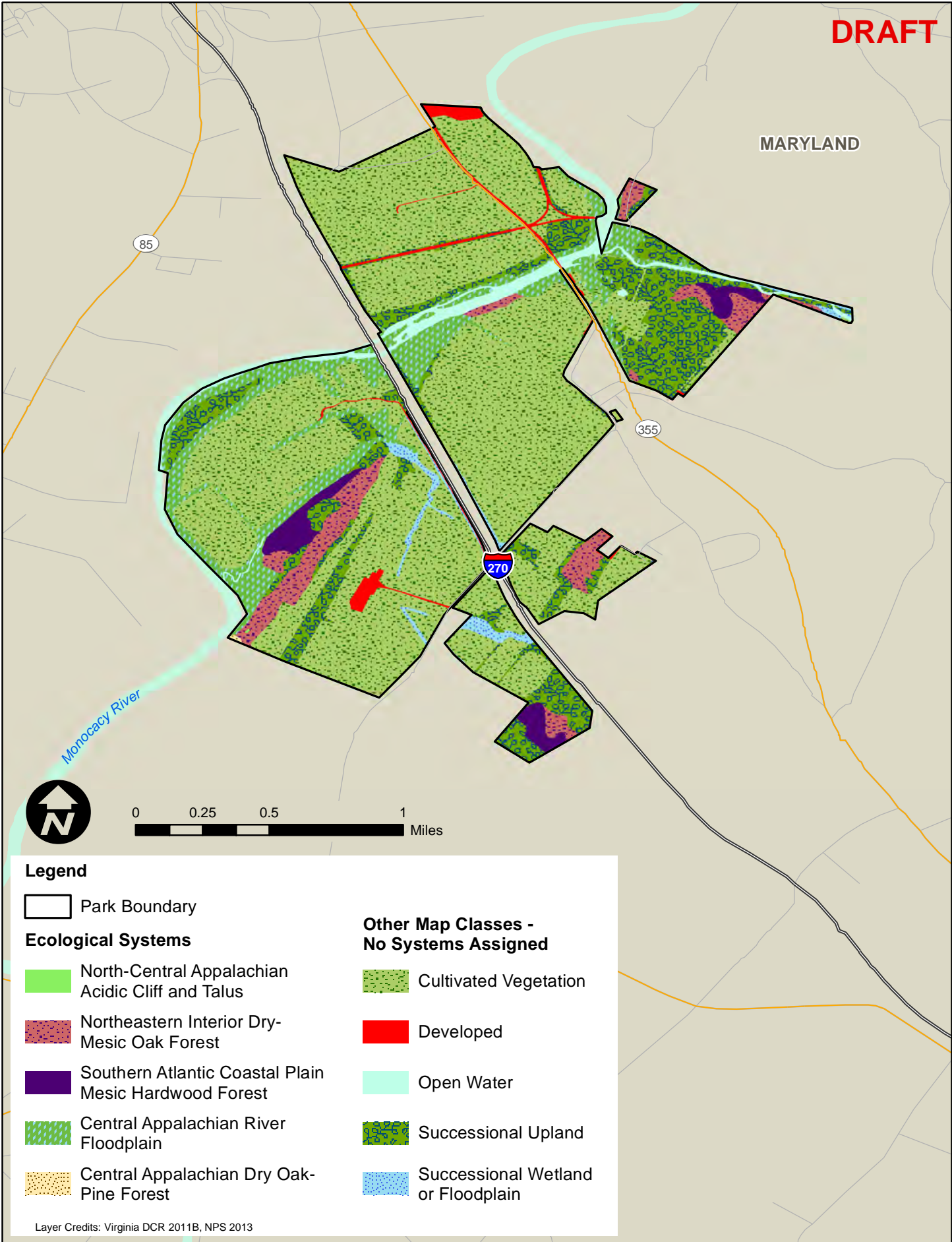
Other Map Classes - No Systems Assigned

-  Cultivated Vegetation
-  Developed
-  Open Water
-  Successional Upland
-  Successional Wetland or Floodplain

Layer Credits: Virginia DCR 2011A, NPS 2013

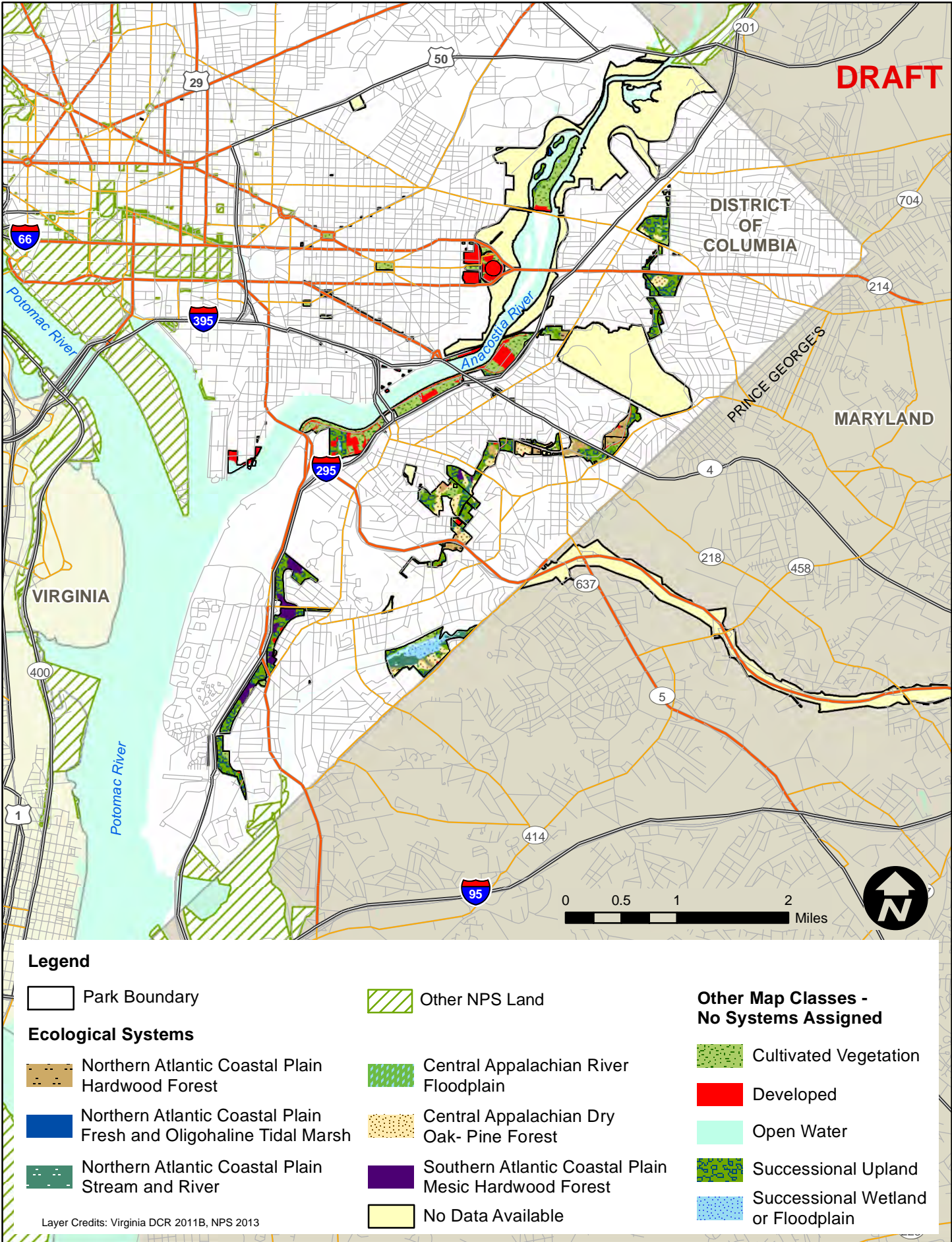
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Figure 8 - Monocacy National Battlefield (MONO)



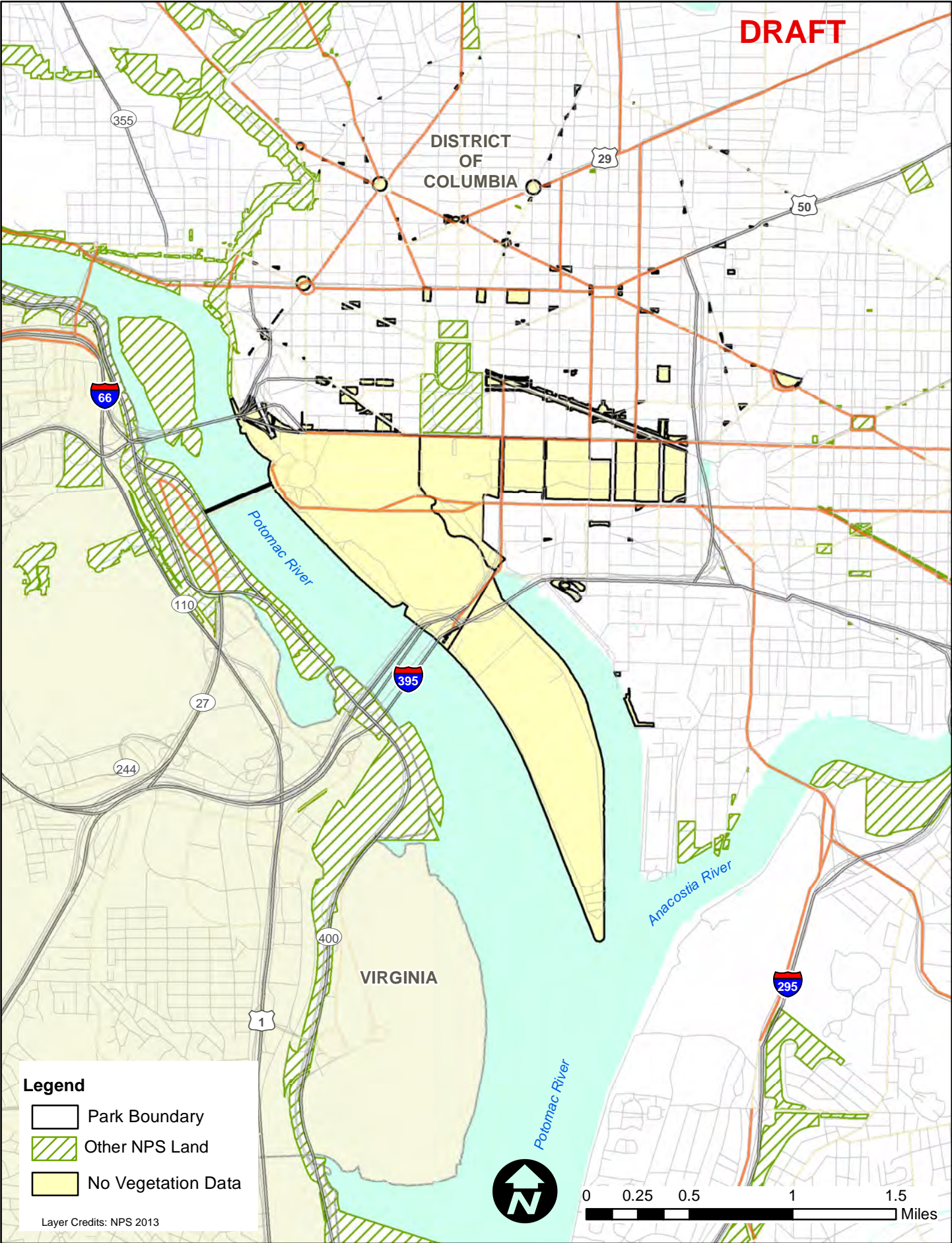
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Figure 9 - National Capital Parks-East (NACE)



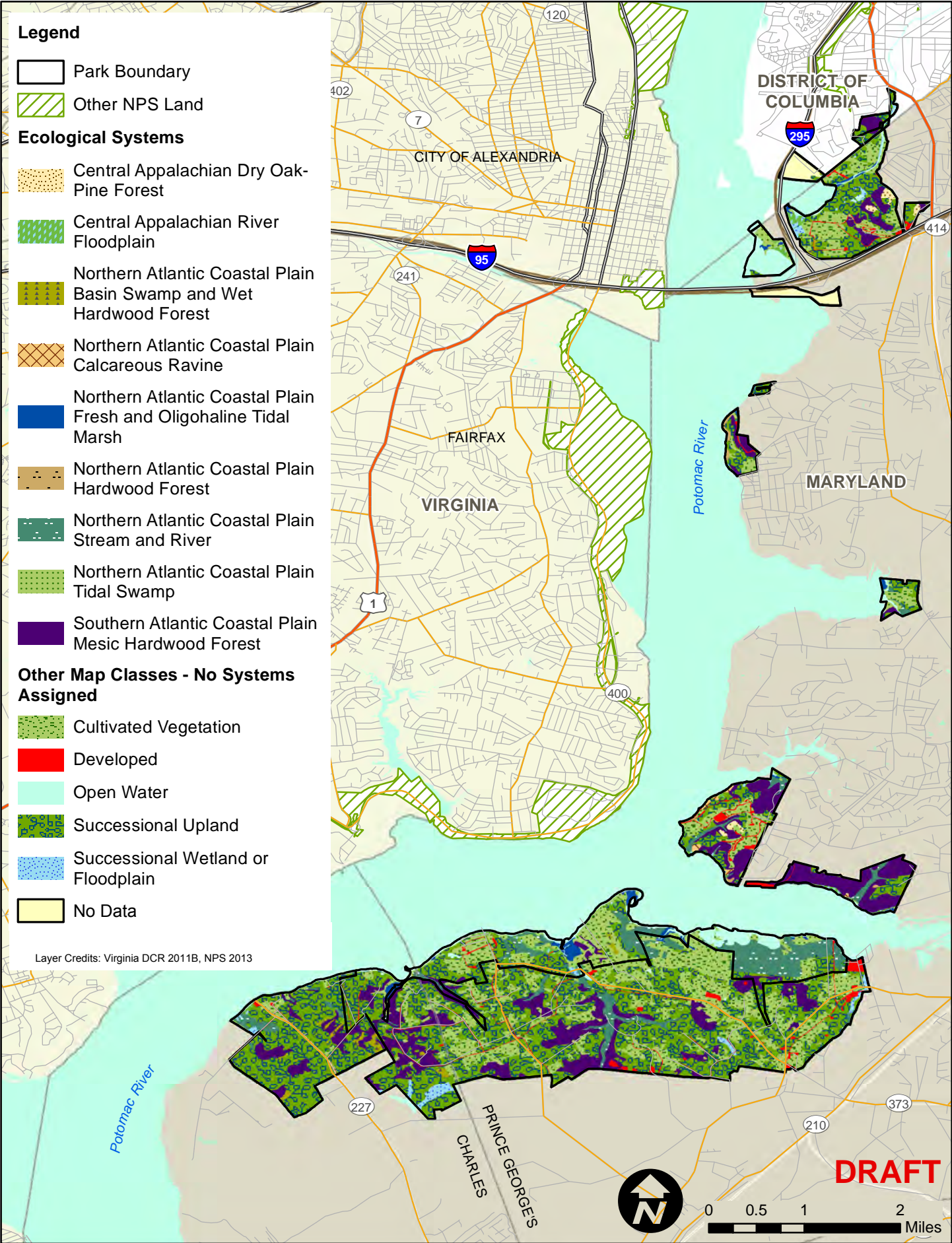
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Figure 10 - National Mall and Memorial Parks (NAMA)



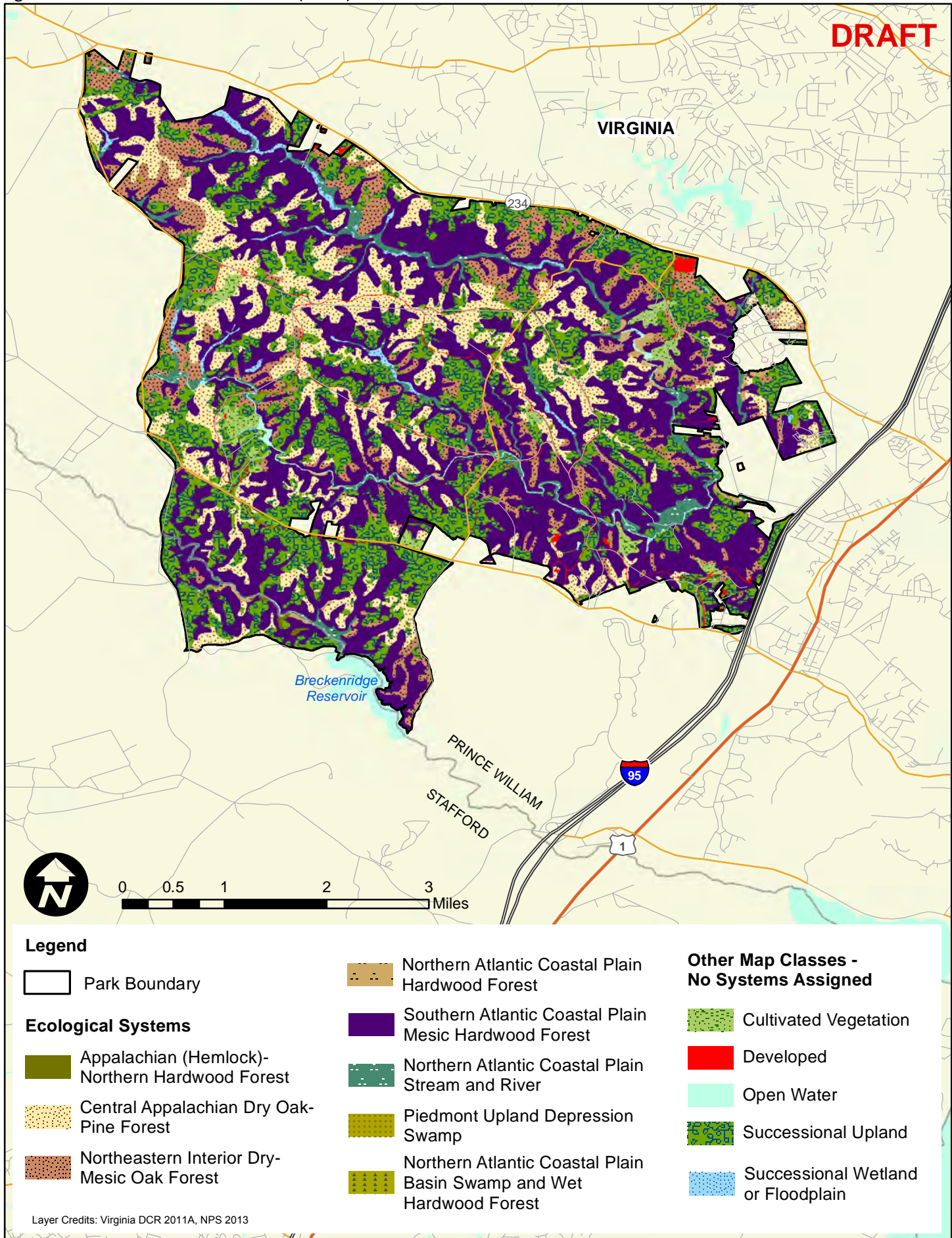
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Figure 11- Piscataway and Fort Washington Park (PISC)



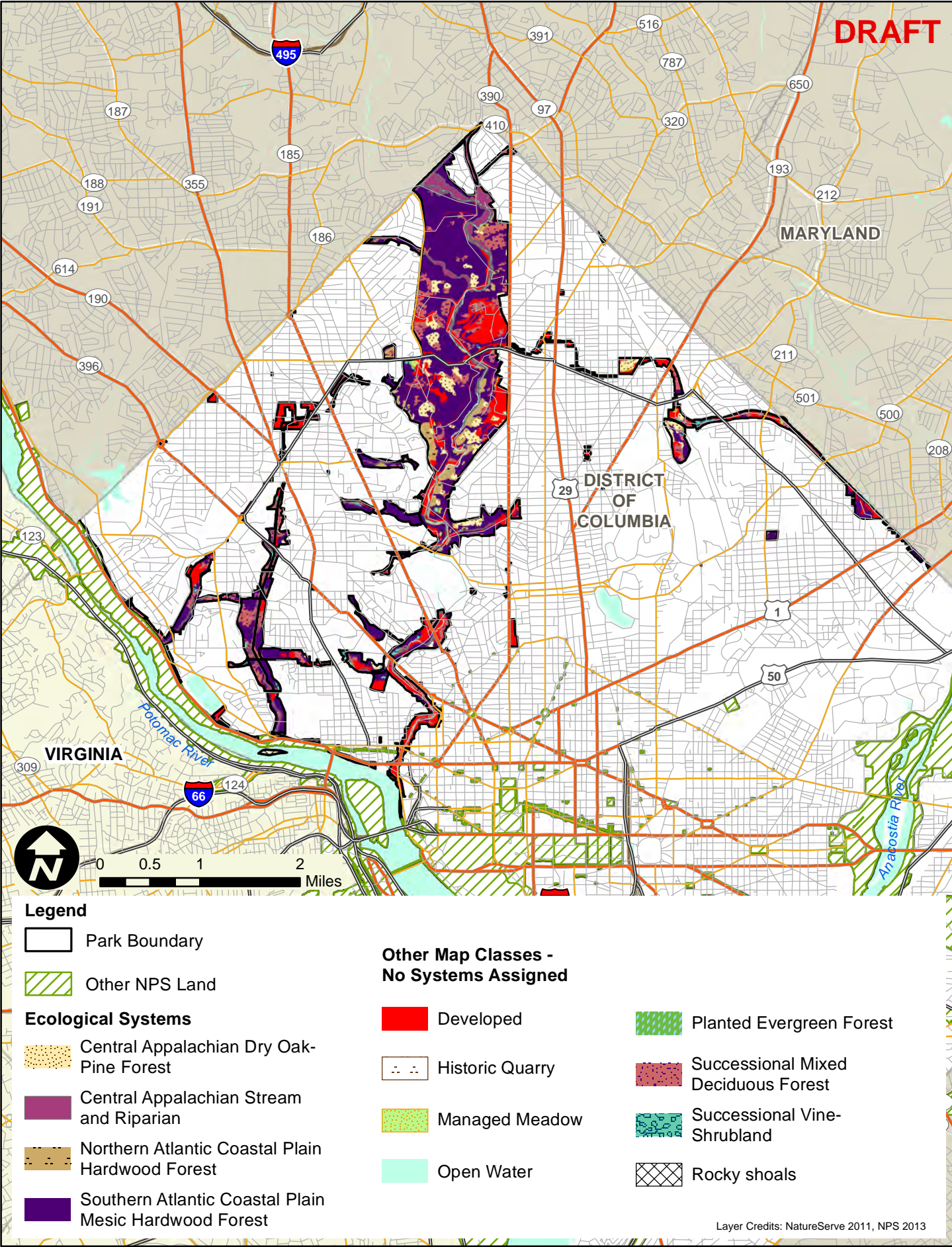
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Figure 12 - Prince William Forest Park (PRWI)



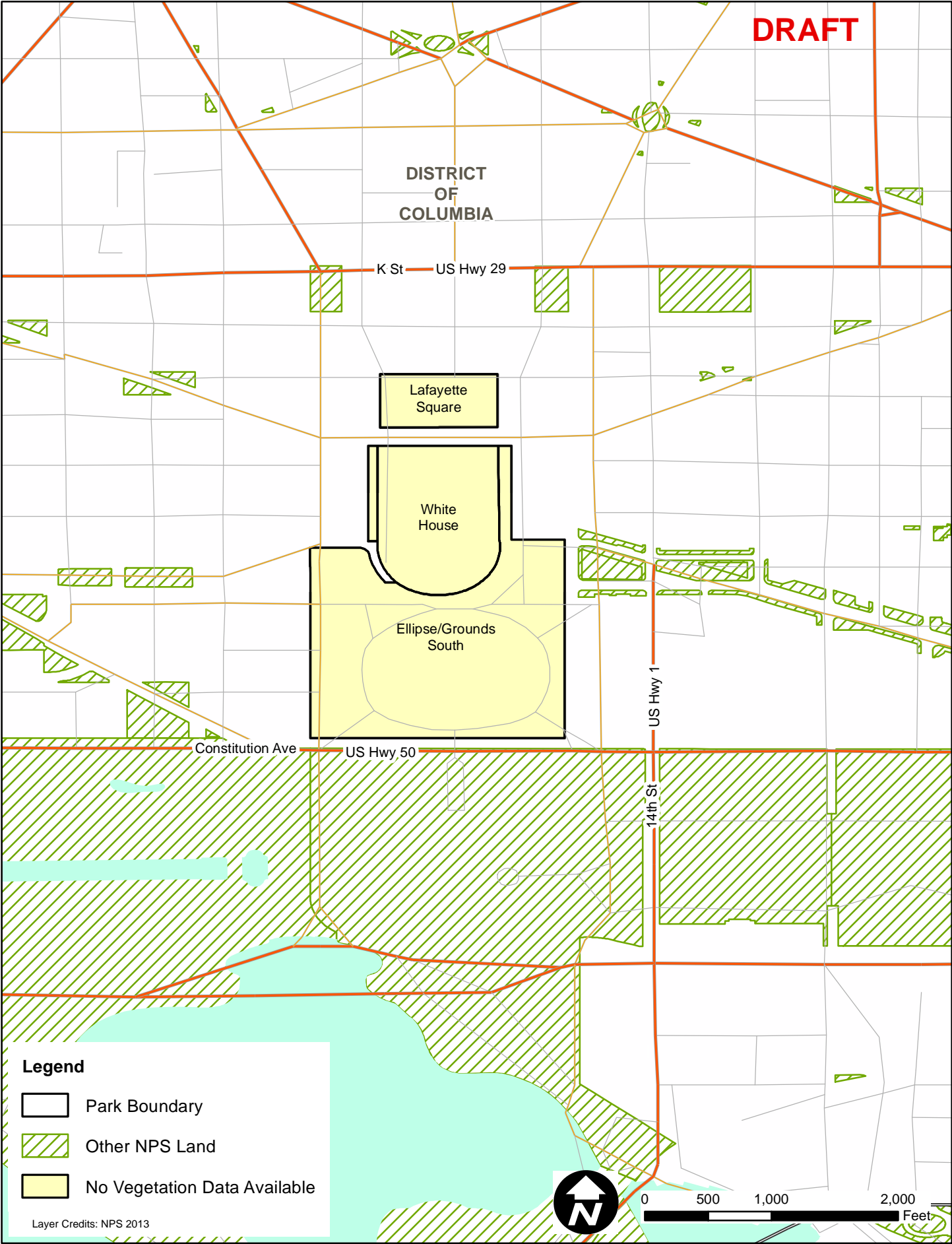
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Figure 13 - Rock Creek Park (ROCR)



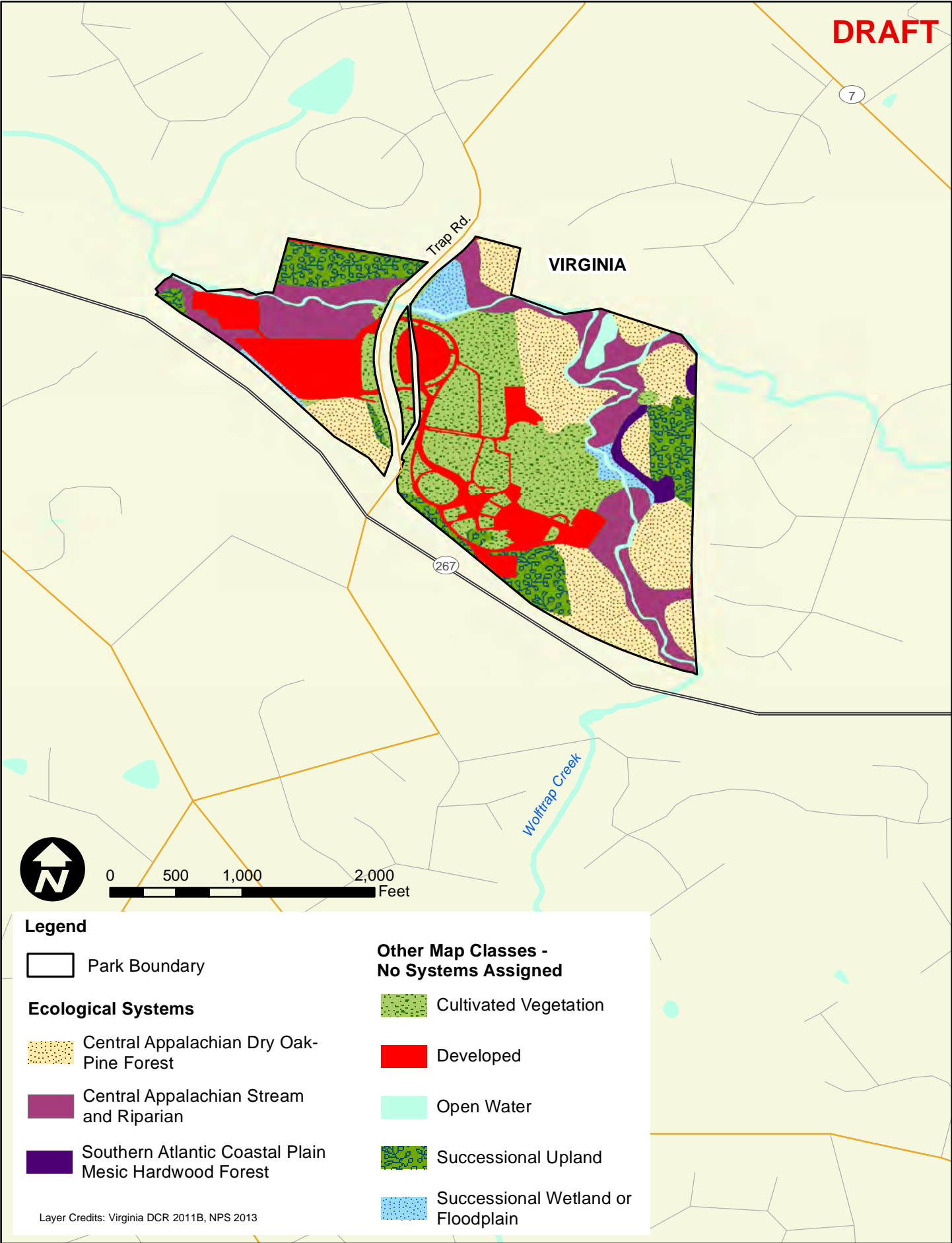
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Figure 14 - The White House/President's Park (PRPA)



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Figure 15 - Wolf Trap National Park for the Performing Arts (WOTR)



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Appendix B

Species List

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Common Name	Scientific Name	Native Status (NCR)	ESA Protected Status
Plants			
American beech	<i>Fagus grandifolia</i>	Native	n/a
American elm	<i>Ulmus americana</i>	Native	n/a
American holly	<i>Ilex opaca</i>	Native	n/a
American hornbeam	<i>Carpinus caroliniana</i>	Native	n/a
American sycamore	<i>Platanus occidentalis</i>	Native	n/a
amur maple	<i>Acer ginnala</i>	Non-native	n/a
arrow arum	<i>Peltandra virginica</i>	Native	n/a
Atlantic goldenrod	<i>Solidago arguta</i>	Native	n/a
autumn olive	<i>Elaeagnus umbellata</i>	Non-native	n/a
azalea	<i>Rhododendron spp.</i>	Native	n/a
baby's breath	<i>Gypsophila spp.</i>	Non-native	n/a
basswood	<i>Tilia americana</i>	Native	n/a
bent sedge	<i>Carex styloflexa</i>	Native	n/a
bitternut hickory	<i>Carya cordiformis</i>	Native	n/a
black birch	<i>Betula lenta</i>	Native	n/a
black bugbane	<i>Actaea racemosa</i>	Native	n/a
blackgum	<i>Nyssa sylvatica</i>	Native	n/a
black locust	<i>Robinia pseudoacacia</i>	Native	n/a
black swallow-wort	<i>Cynanchum louisea</i>	Non-native	n/a
black walnut	<i>Juglans nigra</i>	Native	n/a
black willow	<i>Salix nigra</i>	Native	n/a
black-eyed susan	<i>Rudbeckia hirta</i>	Native	n/a
blackgum	<i>Nyssa sylvatica</i>	Native	n/a
blackhaw	<i>Viburnum prunifolium</i>	Native	n/a
blisterwort	<i>Ranunculus recurvatus</i>	Native	n/a
blue Lyme grass	<i>Leymus arenarius</i>	Non-native	n/a
boxelder	<i>Acer negundo</i>	Native	n/a
bull thistle	<i>Cirsium vulgare</i>	Non-native	n/a
burning bush	<i>Euonymus alatus</i>	Non-native	n/a
buttonbush	<i>Cephalanthus occidentalis</i>	Native	n/a
Canada thistle	<i>Cirsium arvense</i>	Non-native	n/a
Canadian woodnettle	<i>Laportea canadensis</i>	Native	n/a
cardinal flower	<i>Lobelia cardinalis</i>	Native	n/a
chestnut oak	<i>Quercus prinus</i>	Native	n/a
chinquapin oak	<i>Quercus muehlenbergii</i>	Native	n/a
Christmas fern	<i>Polystichum acrostichoides</i>	Native	n/a
cinnamon fern	<i>Osmunda cinnamomea</i>	Native	n/a
common blue violet	<i>Viola sororia</i>	Native	n/a
common buckthorn	<i>Rhamnus cathartica</i>	Non-native	n/a
common cinquefoil	<i>Potentilla simplex</i>	Native	n/a
common elderberry	<i>Sambucus nigra</i>	Native	n/a
common greenbrier	<i>Smilax rotundifolia</i>	Native	n/a
common hackberry	<i>Celtis occidentalis</i>	Native	n/a
common milkweed	<i>Asclepias syriaca</i>	Native	n/a
common mullein	<i>Verbascum thapsus</i>	Non-native	n/a
common reed	<i>Phragmites australis</i>	Non-native	n/a
common tansy	<i>Tanacetum vulgare</i>	Non-native	n/a
common threesquare	<i>Schoenoplectus pungens</i>	Native	n/a
common woodrush	<i>Luzula multiflora</i>	Native	n/a
crown vetch	<i>Securigera varia</i>	Non-native	n/a
cypress spurge	<i>Euphorbia cyparissias</i>	Non-native	n/a
dame's rocket	<i>Hesperis matronalis</i>	Non-native	n/a
deerberry	<i>Vaccinium stamineum</i>	Native	n/a
dogtooth violet	<i>Erythronium americanum</i>	Native	n/a

Common Name	Scientific Name	Native Status (NCR)	ESA Protected Status
Plants - continued			
downy rattlesnake plantain	<i>Goodyera pubescens</i>	Native	n/a
eastern cottonwood	<i>Populus deltoides</i>	Native	n/a
eastern hemlock	<i>Tsuga canadensis</i>	Native	n/a
eastern poison ivy	<i>Toxicodendron radicans</i>	Native	n/a
eastern red cedar	<i>Juniperus virginiana</i>	Native	n/a
eastern redbud	<i>Cercis canadensis</i>	Native	n/a
eastern white pine	<i>Pinus strobus</i>	Native	n/a
English ivy	<i>Hedera helix</i>	Non-native	n/a
small false nettle	<i>Boehmeria cylindrica</i>	Native	n/a
fig buttercup	<i>Ranunculus ficaria</i>	Non-native	n/a
flowering dogwood	<i>Cornus florida</i>	Native	n/a
garlic mustard	<i>Alliaria petiolata</i>	Non-native	n/a
golden ragwort	<i>Packera aurea</i>	Native	n/a
goutweed	<i>Aegopodium podagraria</i>	Non-native	n/a
Grecian foxglove	<i>Digitalis lanata</i>	Non-native	n/a
green ash	<i>Fraxinus pennsylvanica</i>	Native	n/a
halberdleaf tearthumb	<i>Polygonum arifolium</i>	Native	n/a
invasive bush honeysuckle	<i>Lonicera spp.</i>	Non-native	n/a
hophornbeam	<i>Ostrya virginiana</i>	Native	n/a
horsetail	<i>Equisetum arvense</i>	Native	n/a
hybrid cattail	<i>Typha x glauca</i>	Native	n/a
Indiangrass	<i>Sorghastrum nutans</i>	Native	n/a
Indianhemp	<i>Apocynum cannabinum</i>	Native	n/a
Indian-tobacco	<i>Lobelia inflata</i>	Native	n/a
Jack-in-the-pulpit	<i>Arisaema triphyllum</i>	Native	n/a
Japanese barberry	<i>Berberis thunbergii</i>	Non-native	n/a
Japanese hedge parsley	<i>Torilis japonica</i>	Non-native	n/a
Japanese honeysuckle	<i>Lonicera japonica</i>	Non-native	n/a
Japanese knotweed	<i>Fallopia japonica</i>	Non-native	n/a
Japanese stiltgrass	<i>Microstegium vimineum</i>	Non-native	n/a
jewelweed	<i>Impatiens capensis</i>	Native	n/a
Johnsongrass	<i>Sorghum halepense</i>	Non-native	n/a
kudzu	<i>Pueraria montana</i>	Non-native	n/a
leafy spurge	<i>Euphorbia esula</i>	Non-native	n/a
little bluestem	<i>Schizachyrium scoparium</i>	Native	n/a
Lombardy poplar	<i>Populus nigra</i>	Non-native	n/a
lowbush blueberry	<i>Vaccinium angustifolium</i>	Native	n/a
mayapple	<i>Podophyllum peltatum</i>	Native	n/a
mountain laurel	<i>Kalmia latifolia</i>	Native	n/a
multiflora rose	<i>Rosa multiflora</i>	Non-native	n/a
musk thistle	<i>Carduus nutans</i>	Non-native	n/a
narrowleaf cattail	<i>Typha angustifolia</i>	Native	n/a
netted chainfern	<i>Woodwardia areolata</i>	Native	n/a
non-native thistles	<i>Carduus spp., Cirsium spp.</i>	Non-native	n/a
northeastern bulrush	<i>Scirpus ancistrochaetus</i>	Native	endangered
northern red oak	<i>Quercus rubra</i>	Native	n/a
northern spicebush	<i>Lindera benzoin</i>	Native	n/a
orange hawkweed	<i>Hieracium aurantiacum</i>	Non-native	n/a
Oriental bittersweet	<i>Celastrus orbiculatus</i>	Non-native	n/a
Oriental lady's thumb	<i>Polygonum cespitosum</i>	Non-native	n/a
pale swallow-wort	<i>Cynanchum rossicum</i>	Non-native	n/a
partridge-berry	<i>Mitchella repens</i>	Native	n/a
pawpaw	<i>Asimina triloba</i>	Native	n/a
periwinkle	<i>Vinca spp.</i>	Non-native	n/a

Common Name	Scientific Name	Native Status (NCR)	ESA Protected Status
Plants - continued			
pickerelweed	<i>Pontederia cordata</i>	Native	n/a
pignut hickory	<i>Carya glabra</i>	Native	n/a
pin oak	<i>Quercus palustris</i>	Native	n/a
pitch pine	<i>Pinus rigida</i>	Native	n/a
poison sumac	<i>Toxicodendron vernix</i>	Native	n/a
porcelainberry	<i>Ampelopsis brevipedunculata</i>	Non-native	n/a
possumhaw	<i>Ilex decidua</i>	Native	n/a
prickly ash	<i>Zanthoxylum americanum</i>	Native	n/a
purple loosestrife	<i>Lythrum salicaria</i>	Non-native	n/a
red maple	<i>Acer rubrum</i>	Native	n/a
reed canary grass	<i>Phalaris arundinacea</i>	Non-native	n/a
rice cutgrass	<i>Leersia oryzoides</i>	Native	n/a
river birch	<i>Betula nigra</i>	Native	n/a
river bulrush	<i>Schoenoplectus fluviatilis</i>	Native	n/a
sassafras	<i>Sassafras albidum</i>	Native	n/a
scarlet oak	<i>Quercus coccinea</i>	Native	n/a
Scotch thistle	<i>Onopordum acanthium</i>	Non-native	n/a
sensitive fern	<i>Onoclea sensibilis</i>	Native	n/a
Siberian pea shrub	<i>Caragana arborescens</i>	Non-native	n/a
silver maple	<i>Acer saccharinum</i>	Native	n/a
skunk cabbage	<i>Symplocarpus foetidus</i>	Native	n/a
small-flowered crowfoot	<i>Ranunculus abortivus</i>	Native	n/a
southern arrowwood	<i>Viburnum dentatum</i>	Native	n/a
spotted knapweed	<i>Centaura stoebe ssp. micranthos</i>	Non-native	n/a
sugar maple	<i>Acer saccharum</i>	Native	n/a
summer grape	<i>Vitis aestivalis</i>	Native	n/a
sweet birch	<i>Betula lenta</i>	Native	n/a
sweetbay	<i>Magnolia virginiana</i>	Native	n/a
sweetflag	<i>Acorus americanus</i>	Native	n/a
sweetgum	<i>Liquidambar styraciflua</i>	Native	n/a
tree-of-heaven	<i>Ailanthus altissima</i>	Non-native	n/a
tuliptree	<i>Liriodendron tulipifera</i>	Native	n/a
Virginia chain fern	<i>Woodwardia virginica</i>	Native	n/a
Virginia creeper	<i>Parthenocissus quinquefolia</i>	Native	n/a
Virginia heartleaf	<i>Hexastylis virginica</i>	Native	n/a
Virginia pine	<i>Pinus virginiana</i>	Native	n/a
white sweet clover	<i>Melilotus alba</i>	Non-native	n/a
white ash	<i>Fraxinus americana</i>	Native	n/a
white oak	<i>Quercus alba</i>	Native	n/a
white poplar	<i>Populus alba</i>	Non-native	n/a
white snakeroot	<i>Ageratina altissima</i>	Native	n/a
white vervain	<i>Verbena urticifolia</i>	Native	n/a
white wood aster	<i>Eurybia divaricata</i>	Native	n/a
wild hydrangea	<i>Hydrangea arborescens</i>	Native	n/a
wild parsnip	<i>Pastinaca sativa</i>	Non-native	n/a
wild rice	<i>Zizania aquatica</i>	Native	n/a
willow oak	<i>Quercus phellos</i>	Native	n/a
wineberry	<i>Rubus phoenicolasius</i>	Non-native	n/a
winged sumac	<i>Rhus copallinum</i>	Native	n/a
wingstem	<i>Verbesina alternifolia</i>	Native	n/a
witchhazel	<i>Hamamelis virginiana</i>	Native	n/a
woolgrass	<i>Scirpus cyperinus</i>	Native	n/a
yellow iris	<i>Iris pseudacorus</i>	Non-native	n/a
yellow sweet clover	<i>Melilotus officinalis</i>	Non-native	n/a

Common Name	Scientific Name	Native Status (NCR)	ESA Protected Status
Animals			
American robin	<i>Turdus migratorius</i>	native	n/a
bald eagle	<i>Haliaeetus leucocephalus</i>	native	delisted
beaver	<i>Castor canadensis</i>	native	n/a
black bear	<i>Ursus americanus</i>	native	n/a
burrowing crayfish	<i>Cambarus digenes</i>	native	n/a
Canada goose	<i>Branta canadensis</i>	native	n/a
Carolina chickadee	<i>Poecile carolinensis</i>	native	n/a
common grass shrimp	<i>Palaemonetes pugio</i>	native	n/a
American crow	<i>Corvus brachyrhynchos</i>	native	n/a
eastern garter snake	<i>Thamnophis sirtalis sirtalis</i>	native	n/a
eastern newt	<i>Notophthalmus viridescens</i>	native	n/a
eastern red-bellied turtle	<i>Pseudemys rubriventris</i>	native	n/a
gray squirrel	<i>Sciurus carolinensis</i>	native	n/a
green-winged teal	<i>Anas carolinensis</i>	native	n/a
Indiana bat	<i>Myotis sodalist</i>	native	endangered
largemouth bass	<i>Micropterus salmoides</i>	native	n/a
little brown bat	<i>Myotis lucifugus</i>	native	n/a
mallard	<i>Anas platyrhynchos</i>	native	n/a
Animals - continued			
meadow vole	<i>Microtus pennsylvanicus</i>	native	n/a
muskrat	<i>Ondatra zibethicus</i>	native	n/a
northern cardinal	<i>Cardinalis cardinalis</i>	native	n/a
northern long-eared bat	<i>Myotis septentrionalis</i>	native	threatened
northern red backed salamander	<i>Pseudotriton ruber</i>	native	n/a
northern water snake	<i>Nerodia sipedon</i>	native	n/a
osprey	<i>Pandion haliaetus</i>	native	n/a
raccoon	<i>Procyon lotor</i>	native	n/a
red fox	<i>Vulpes vulpes</i>	native	n/a
red winged blackbird	<i>Agelaius phoeniceus</i>	native	n/a
red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	native	n/a
red-shouldered hawk	<i>Buteo lineatus</i>	native	n/a
red-tailed hawk	<i>Buteo jamaicensis</i>	native	n/a
river otter	<i>Lontra canadensis</i>	native	n/a
solitary sandpiper	<i>Tringa solitaria</i>	native	n/a
spring peeper	<i>Pseudacris crucifer</i>	native	n/a
turkey vulture	<i>Carthartes aura</i>	native	n/a
white crappie	<i>Pomoxis annularis</i>	native	n/a
white-tailed deer	<i>Odocoileus virginianus</i>	native	n/a
wild turkey	<i>Meleagris gallopavo</i>	native	n/a
Biological Control Agents			
bipolaris	<i>Bipolaris spp.</i>	non-native	n/a
Canada thistle defoliating beetle	<i>Cassida rubiginosa</i>	non-native	n/a
Canada thistle seed head weevil	<i>Rhinocyllus conicus</i>	non-native	n/a
Canada thistle stem mining weevil	<i>Hadroplontus litura</i>	non-native	n/a
Canada thistle thistle stem gallfly	<i>Urophora cardui</i>	non-native	n/a
eriophyid mite	<i>Phyllocoptes fructiphilus</i>	non-native	n/a
flea beetles	<i>Aphthona spp.</i>	non-native	n/a
flower weevils	<i>Larinus minutus</i>	non-native	n/a
salvinia weevil	<i>Cyrtobagous salviniae</i>	non-native	n/a
swallowwort specific moth	<i>Hypena opulenta</i>	non-native	n/a
hydrilla specific semiaquatic weevil	<i>Bagous hydrillae</i>	non-native	n/a
knotweed sap sucking syllid	<i>Aphalaris itadori</i>	non-native	n/a
leaf beetle	<i>Galerucella spp.</i>	non-native	n/a
leafy spurge gall midge	<i>Spurgia esulae</i>	non-native	n/a

Common Name	Scientific Name	Native Status (NCR)	ESA Protected Status
Biological Control Agents - continued			
leafy spurge root-boring moth	<i>Chamaesphecia hungarica</i>	non-native	n/a
leafy spurge stem boring beetle	<i>Oberea erythrocephala</i>	non-native	n/a
mile-a-minute stem-boring weevil	<i>Rhinoncomimus latipes</i>	non-native	n/a
painted lady butterfly caterpillars	<i>Vanessa cardui</i>	non-native	n/a
purple loosestrife root weevils	<i>Cyphocleonus achates</i>	non-native	n/a
rose-seed chalcid	<i>Megastigmus aculeatus</i>	non-native	n/a
salvinia weevil	<i>Cyrtobagous salviniae</i>	non-native	n/a
swallowwort specific moth	<i>Hypena opulenta</i>	Non-native	n/a

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Appendix C

National Historic Preservation Act Section 106 Coordination

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Note: A copy of the figure shown on page C-3 was sent with all of the coordination letters included in this appendix.

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United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

1.A.2 (NCR-CUE)

March 31, 2015

Advisory Council on Historic Preservation
Attn.: Mr. Reid Nelson, Director
Office of Federal Agency Programs
1100 Pennsylvania Avenue, N.W., Suite 803
Washington, D.C. 20004

Subject: Invasive Plant Management Plan and Environmental Assessment—Section 106
Consultation

Dear Mr. Nelson:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for the 13 park units within the National Capital Region (NCR). In accordance with 36 CFR 800.3 of the regulations implementing Section 106 of the National Historic Preservation Act, the NPS has formally initiated consultation for this project with the State Historic Preservation Officers (SHPO) of Maryland, Virginia, West Virginia, and the District of Columbia for the park units within their respective jurisdictions.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act (NEPA). The IPMP/EA will address the issues concerning the management of invasive plant species, resulting in a comprehensive management strategy to be used throughout the 13 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the eradication, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

Specifically, the purpose of the IPMP/EA is to decrease the impacts of invasive plants to promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. The IPMP/EA is needed because natural and cultural resources are being adversely impacted, and ecological processes are being disrupted, by invasive species; the full range of potential treatment strategies are not currently being utilized throughout the 13 National Parks; standardized best management practices (BMPs) and guidance tools are needed to mitigate potential impacts associated with park and visitor activities, and to help prioritize management and compliance; and because the compliance approach is inconsistent among each park unit.

The NPS will develop an Assessment of Effects for this project separately from the EA. However, at this early stage, we are unable to propose either an area of potential effect or to make any determination of effect. We will continue consulting with the four SHPOs as we complete these steps. In addition, we are planning to consult with the public per 800.3(e) through our Planning, Environment, and Public Comment website (www.parkplanning.nps.gov). We anticipate that these outreach efforts will accommodate the requirements of both NEPA and the Section 106 process.

At this stage, we do not anticipate the need for the direct participation of the Council under the Council's regulations that trigger direct participation. However, we welcome your office's oversight and participation to the extent the Council deems warranted. A copy of the draft IPMP/EA will be provided to your office for review when it becomes available.

If you have any questions, please do not hesitate to contact Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or via email (perry_wheelock@nps.gov).

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert A. Vogel". The signature is fluid and cursive, with the first name "Robert" being more prominent.

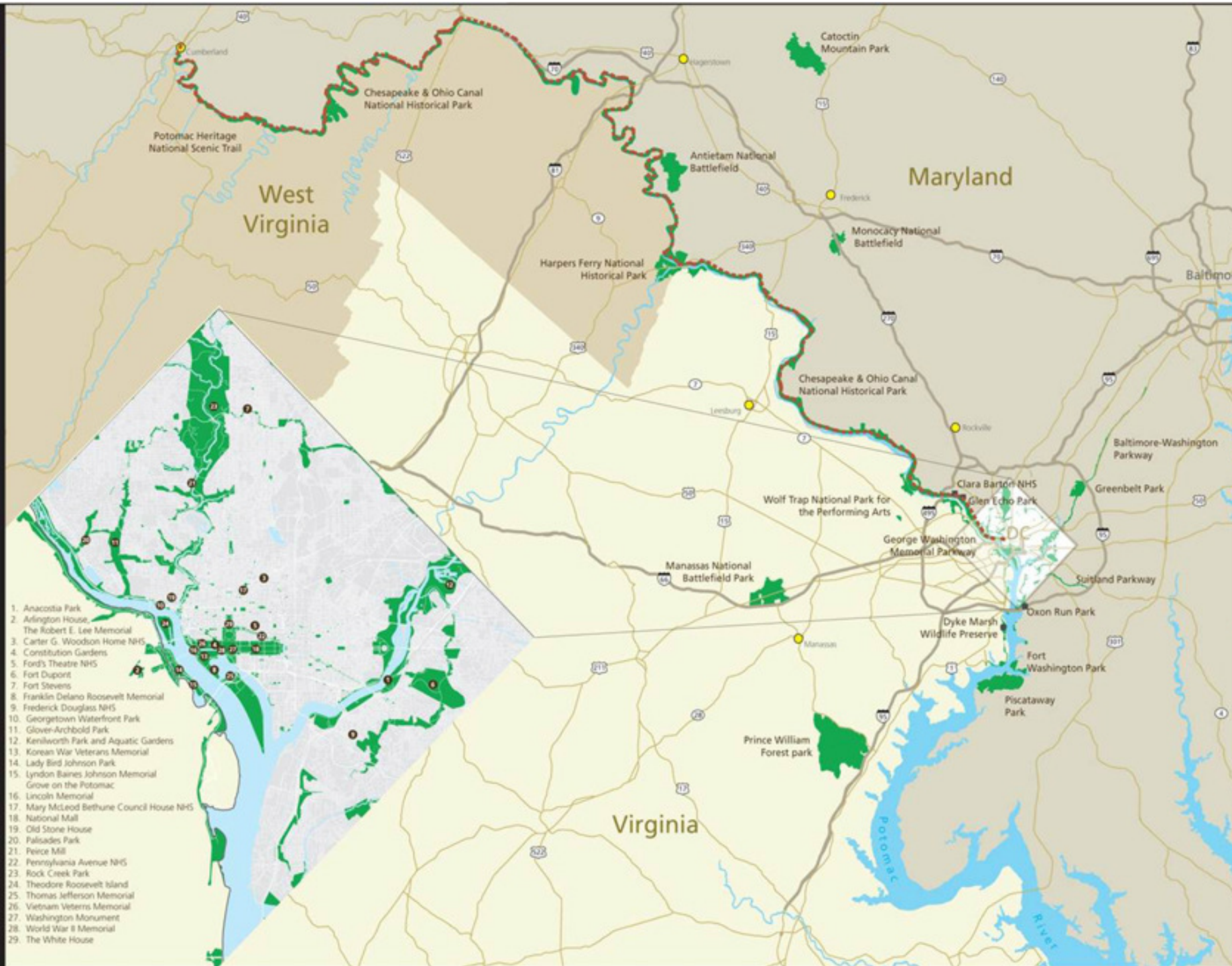
Robert A. Vogel
Regional Director

Enclosure: Proposed Project Area



National Park Service
US Department of the Interior

National Capital Region



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United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

1.A.2 (NCR-CUE)

March 31, 2015

Historic Preservation Office
Attn.: David Maloney
State Historic Preservation Officer
1100 4th Street, S.W., Suite 650 East
Washington, D.C. 20024

Subject: Invasive Plant Management Plan and Environmental Assessment—Section 106
Consultation

Dear Mr. Maloney:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for the 13 park units within the National Capital Region (NCR). The NPS is formally initiating consultation for this project with the District of Columbia State Historic Preservation Officer (SHPO), in accordance with 36 CFR 800.3 of the regulations implementing Section 106 of the National Historic Preservation Act.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act (NEPA). The IPMP/EA will address the issues concerning the management of invasive plant species, resulting in a comprehensive management strategy to be used throughout the 13 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the eradication, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

Specifically, the purpose of the IPMP/EA is to decrease the impacts of invasive plants to promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. The IPMP/EA is needed because natural and cultural resources are being adversely impacted, and ecological processes are being disrupted, by invasive species; the full range of potential treatment strategies are not currently being utilized throughout the 13 National Parks; standardized best management practices (BMPs) and guidance tools are needed to mitigate potential impacts associated with park and visitor activities, and to help prioritize management and compliance; and because the compliance approach is inconsistent among each park unit.

Of the 13 park units that will be addressed in the IPMP/EA, the following are located entirely within the District of Columbia:

- National Mall and Memorial Parks
- Rock Creek Park
- White House / President's Park

Additionally, the following park units have portions or park sites within the District:

- Chesapeake & Ohio Canal National Historical Park
- George Washington Memorial Parkway
- National Capital Parks – East

The NPS will develop an Assessment of Effects for this project separately from the EA. However, at this early stage, we are unable to propose either an area of potential effect or to make any determination of effect. We are planning to consult with the public per 800.3(e) through our Planning, Environment, and Public Comment website (www.parkplanning.nps.gov). We anticipate that these outreach efforts will accommodate the requirements of both NEPA and the Section 106 process.

A copy of the EA and the Assessment of Effect will be provided to your office for review when it becomes available, and we anticipate further consultation with your office as mandated by Section 106.

In addition to your office, we will also be consulting with the Maryland, Virginia and West Virginia SHPOs for the NCR park units within their respective jurisdictions. We look forward to working with you on this project. If you have any questions, please do not hesitate to contact Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or via email (perry_wheelock@nps.gov).

Sincerely,



Robert A. Vogel
Regional Director

Enclosure: Proposed Project Area

cc: J. Rodney Little, Maryland SHPO
Julie Langan, Virginia SHPO
Susan Pierce, West Virginia Deputy SHPO



United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

1.A.2 (NCR-CUE)

March 31, 2015

Maryland Historical Trust
Attn.: Mr. J. Rodney Little
State Historic Preservation Officer
100 Community Place, 3rd Floor
Crownsville, Maryland 21032-2023

Subject: Invasive Plant Management Plan and Environmental Assessment—Section 106
Consultation

Dear Mr. Little:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for the 13 park units within the National Capital Region (NCR). The NPS is formally initiating consultation for this project with the Maryland State Historic Preservation Officer (SHPO), in accordance with 36 CFR 800.3 of the regulations implementing Section 106 of the National Historic Preservation Act.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act (NEPA). The IPMP/EA will address the issues concerning the management of invasive plant species, resulting in a comprehensive management strategy to be used throughout the 13 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the eradication, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

Specifically, the purpose of the IPMP/EA is to decrease the impacts of invasive plants to promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. The IPMP/EA is needed because natural and cultural resources are being adversely impacted, and ecological processes are being disrupted, by invasive species; the full range of potential treatment strategies are not currently being utilized throughout the 13 National Parks; standardized best management practices (BMPs) and guidance tools are needed to mitigate potential impacts associated with park and visitor activities, and to help prioritize management and compliance; and because the compliance approach is inconsistent among each park unit.

Of the 13 park units that will be addressed in the IPMP/EA, the following are located entirely within Maryland:

- Antietam National Battlefield
- Catoctin Mountain Park
- Monocacy National Battlefield

Additionally, the following park units have portions or park sites within the state:

- Chesapeake & Ohio Canal National Historical Park
- George Washington Memorial Parkway
- Harpers Ferry National Historical Park
- National Capital Parks-East

The NPS will develop an Assessment of Effects for this project separately from the EA. However, at this early stage, we are unable to propose either an area of potential effect or to make any determination of effect. We are planning to consult with the public per 800.3(e) through our Planning, Environment, and Public Comment website (www.parkplanning.nps.gov). We anticipate that these outreach efforts will accommodate the requirements of both NEPA and the Section 106 process.

A copy of the EA and the Assessment of Effect will be provided to your office for review when it becomes available, and we anticipate further consultation with your office as mandated by Section 106.

In addition to your office, we will also be consulting with the District of Columbia, Virginia, and West Virginia SHPOs for the NCR park units within their respective jurisdictions. We look forward to working with you on this project. If you have any questions, please do not hesitate to contact Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or via email (perry_wheelock@nps.gov).

Sincerely,



Robert A. Vogel
Regional Director

Enclosure: Proposed Project Area

cc: David Maloney, District of Columbia SHPO
Julie Langan, Virginia SHPO
Susan Pierce, West Virginia Deputy SHPO



United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

1.A.2 (NCR-CUE)

March 31, 2015

Virginia Department of Historic Resources
Attn.: Julie Langan
State Historic Preservation Officer
Richmond Central Office
2801 Kensington Avenue
Richmond, Virginia 23221

Subject: Invasive Plant Management Plan and Environmental Assessment—Section 106
Consultation

Dear Ms. Langan:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for the 13 park units within the National Capital Region (NCR). The NPS is formally initiating consultation for this project with the Virginia State Historic Preservation Officer (SHPO), in accordance with 36 CFR 800.3 of the regulations implementing Section 106 of the National Historic Preservation Act.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act (NEPA). The IPMP/EA will address the issues concerning the management of invasive plant species, resulting in a comprehensive management strategy to be used throughout the 13 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the eradication, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

Specifically, the purpose of the IPMP/EA is to decrease the impacts of invasive plants to promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. The IPMP/EA is needed because natural and cultural resources are being adversely impacted, and ecological processes are being disrupted, by invasive species; the full range of potential treatment strategies are not currently being utilized throughout the 13 National Parks; standardized best management practices (BMPs) and guidance tools are needed to mitigate potential impacts associated with park and visitor activities, and to help prioritize management and compliance; and because the compliance approach is inconsistent among each park unit.

Of the 13 park units that will be addressed in the IPMP/EA, the following are located entirely within Virginia:

- Manassas National Battlefield Park
- Prince William Forest Park
- Wolf Trap National Park for the Performing Arts

Additionally, the following park units have portions or park sites within the state:

- George Washington Memorial Parkway
- Harpers Ferry National Battlefield Park

The NPS will develop an Assessment of Effects for this project separately from the EA. However, at this early stage, we are unable to propose either an area of potential effect or to make any determination of effect. We are planning to consult with the public per 800.3(e) through our Planning, Environment, and Public Comment website (www.parkplanning.nps.gov). We anticipate that these outreach efforts will accommodate the requirements of both NEPA and the Section 106 process.

A copy of the EA and the Assessment of Effect will be provided to your office for review when it becomes available, and we anticipate further consultation with your office as mandated by Section 106.

In addition to your office, we will also be consulting with the District of Columbia, West Virginia, and Maryland SHPOs for the NCR park units within their respective jurisdictions. We look forward to working with you on this project. If you have any questions, please do not hesitate to contact Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or via email (perry_wheelock@nps.gov).

Sincerely,



Robert A. Vogel
Regional Director

Enclosure: Proposed Project Area

cc: David Maloney, District of Columbia SHPO
Susan Pierce, West Virginia Deputy SHPO
J. Rodney Little, Maryland SHPO



United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

1.A.2 (NCR-CUE)

March 31, 2015

West Virginia Department of Culture and History
Attn.: Susan Pierce
Deputy State Historic Preservation Officer
The Culture Center
Capitol Complex
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0300

Subject: Invasive Plant Management Plan and Environmental Assessment—Section 106
Consultation

Dear Ms. Pierce:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for the 13 park units within the National Capital Region (NCR). The NPS is formally initiating consultation for this project with the West Virginia State Historic Preservation Officer (SHPO), in accordance with 36 CFR 800.3 of the regulations implementing Section 106 of the National Historic Preservation Act.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act (NEPA). The IPMP/EA will address the issues concerning the management of invasive plant species, resulting in a comprehensive management strategy to be used throughout the 13 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the eradication, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

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Of the 13 park units that will be addressed in the IPMP/EA, the following have portions or park sites within West Virginia:

- Chesapeake & Ohio Canal National Historical Park
- Harpers Ferry National Historical Park

The NPS will develop an Assessment of Effects for this project separately from the EA. However, at this early stage, we are unable to propose either an area of potential effect or to make any determination of effect. We are planning to consult with the public per 800.3(e) through our Planning, Environment, and Public Comment website (www.parkplanning.nps.gov). We anticipate that these outreach efforts will accommodate the requirements of both NEPA and the Section 106 process.

A copy of the EA and the Assessment of Effect will be provided to your office for review when it becomes available, and we anticipate further consultation with your office as mandated by Section 106.

In addition to your office, we will also be consulting with the District of Columbia, Virginia, and Maryland SHPOs for the NCR park units within their respective jurisdictions. We look forward to working with you on this project. If you have any questions, please do not hesitate to contact Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or via email (perry_wheelock@nps.gov).

Sincerely,



Robert A. Vogel
Regional Director

Enclosure: Proposed Project Area

cc: David Maloney, District of Columbia SHPO
 J. Rodney Little, Maryland SHPO
 Julie Langan, Virginia SHPO



COMMONWEALTH of VIRGINIA

Department of Historic Resources

Molly Joseph Ward
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

April 28, 2015

Robert A. Vogel, Regional Director
United States Department of the Interior
National Park Service
National Capitol Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

Re: Invasive Plant Management Plan and Environmental Assessment
DHR File No. 2015-0240

Dear Mr. Vogel:

Thank you for your letter of March 31, 2015 informing us that the National Park Service is preparing an Invasive Plant Management Plan for the 13 park units within the National Capitol Region. We understand that the purpose of your letter is to initiate consultation with our Department as Virginia's State Historic Preservation Office in accordance with 36 CFR Part 800.3 of the regulations implementing Section 106 of the National Historic Preservation Act, as amended.

We understand that invasive plants are currently adversely affecting both natural and cultural resources. We support the objectives of the plan: to identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least risk to people and park resources and to provide guidance, including best management practices, to address the effects of both park and visitor activities, as well as ensuring a consistent approach for each park unit.

We also understand that at present you consider it too early to determine an area of potential effects. We look forward to receiving a copy of the Environmental Assessment and the Assessment of Effect for our review once these are available. We appreciate your sharing

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6408
Fax: (804) 862-6196

Eastern Region Office
2801 Kensington Avenue
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

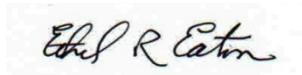
Western Region Office
962 Kime Lane
Salem, VA 24153
Tel: (540) 387-5443
Fax: (540) 387-5446

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

the plan to consult with the public through the Planning, Environment and Public Comment web site.

We look forward to working with you to bring the Section 106 process to a successful resolution. If you have any questions concerning our comments, or if we may provide any further assistance, please do not hesitate to contact me at (804) 482-6088; fax (804) 367-2391; e-mail ethel.eaton@dhr.virginia.gov .

Sincerely,



Ethel R. Eaton, Ph.D., Senior Policy Analyst
Division of Review and Compliance

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6408
Fax: (804) 862-6196

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Western Region Office
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Northern Region Office
5357 Main Street
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Tel: (540) 868-7029
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United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region

1100 Ohio Drive, S.W.

Washington, D.C. 20242

July 27, 2015

Delaware Nation

Attn.: Tamara Francis-Fourkiller

Cultural Preservation Director

PO Box 825

Anadarko, OK 73005

Subject: Invasive Plant Management Plan and Environmental Assessment—Section 106 Consultation

Dear Ms. Francis-Fourkiller:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for the 15 park units within National Capital Region (NCR). The NPS is formally initiating consultation for this project with the Delaware Nation, in accordance with 36 CFR 800.3 of Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act (NEPA). The IPMP/EA will address the issues concerning the management of invasive plant species, resulting in a comprehensive management strategy to be used throughout the 13 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the eradication, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

Specifically, the purpose of the IPMP/EA is to decrease the impacts of invasive plants to promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. The IPMP/EA is needed because natural and cultural resources are being adversely impacted, and ecological processes are being disrupted, by invasive species; the full range of potential treatment strategies are not currently being utilized throughout the 15 National Park units; standardized best management practices (BMPs) and guidance tools are needed to mitigate potential impacts associated with park and visitor activities, and to help prioritize management and compliance; and because the compliance approach is inconsistent among each park unit.

The 15 park units that will be addressed in the IPMP/EA include (see also attached map of NPS-NCR park units):

- Antietam National Battlefield (MD)
- Catoctin Mountain Park (MD)
- Chesapeake & Ohio Canal National Historical Park (DC, MD, WV)
- George Washington Memorial Parkway (DC, MD, VA)
- Greenbelt Park (MD)
- Harpers Ferry National Historical Park (WV, VA, MD)
- Manassas National Battlefield Park (VA)
- Monocacy National Battlefield (MD)
- National Capital Parks-East (DC, MD)
- National Mall and Memorial Parks (DC)
- Piscataway Park (MD)
- Prince William Forest Park (VA)
- Rock Creek Park (DC)
- President's Park (DC)
- Wolf Trap National Park for the Performing Arts (VA)

None of the NPS units include tribal lands; however the NPS seeks to join tribes in consultation regarding the identification and evaluation of cultural properties that may be of significance to the Delaware Nation. If you would like to consult further regarding this project, please contact project manager, Mark Frey at (202) 339-8319 or via email at mark_frey@nps.gov. We would appreciate your response by August 24, 2015.

Additionally, if you would like further information about the cultural properties within these NPS units of the National Capital Region, please contact, at your convenience, Regional Cultural Anthropologist, Jennifer Talken-Spaulding at (202) 619-7205 or via email at jennifer_talken-spaulding@nps.gov.

Concurrently, we are consulting with the public per 36 C.F.R. 800.3(e) through our Planning, Environment, and Public Comment website (www.parkplanning.nps.gov). You can access project information for "Invasive Plant Management Plan/ EA for NCR Parks" on that site by searching for **Keyword:** Invasive and **Region:** National Capital. We anticipate that these outreach efforts will accommodate the requirements of both NEPA and the NHPA. Based on the consultation process, the NPS will develop an Assessment of Effects for this project in coordination with the NEPA process, which will be incorporated into the EA. A copy of the EA and the Assessment of Effect will also be provided to your office for review and comment.

In addition to your office, we have also initiated consultation with the Absentee Shawnee Tribe of Oklahoma and State Historic Preservation Offices (SHPOs) of Virginia, District of Columbia, West Virginia, and Maryland for the NCR park units within their respective jurisdictions. We look forward to working with you on this project. If you have any questions, please do not hesitate to contact Mark Frey at (202) 339-8319 or via email (mark_frey@nps.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Bob Vogel", written in a cursive style.

Bob Vogel
Regional Director
National Capital Region

Enclosure: Proposed Project Area – Map of NPS-NCR Park Units

cc: Joseph H. Blanchard, Absentee Shawnee Tribe of Oklahoma
Julie Langan, Virginia SHPO
David Maloney, District of Columbia SHPO
Susan Pierce, West Virginia Deputy SHPO
J. Rodney Little, Maryland SHPO

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United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

July 27, 2015

Absentee Shawnee Tribe of Oklahoma
Attn.: Joseph H. Blanchard
Cultural Preservation Director/ Tribal Historic Preservation Officer
20205 S. Gordon Cooper Dr.
Shawnee, OK 74801

Subject: Invasive Plant Management Plan and Environmental Assessment—Section 106
Consultation

Dear Ms. Francis-Fourkiller:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for the 15 park units within National Capital Region (NCR). The NPS is formally initiating consultation for this project with the Absentee Shawnee Tribe of Oklahoma, in accordance with 36 CFR 800.3 of Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act (NEPA). The IPMP/EA will address the issues concerning the management of invasive plant species, resulting in a comprehensive management strategy to be used throughout the 13 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the eradication, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

Specifically, the purpose of the IPMP/EA is to decrease the impacts of invasive plants to promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. The IPMP/EA is needed because natural and cultural resources are being adversely impacted, and ecological processes are being disrupted, by invasive species; the full range of potential treatment strategies are not currently being utilized throughout the 15 National Park units; standardized best management practices (BMPs) and guidance tools are needed to mitigate potential impacts associated with park and visitor activities, and to help prioritize management and compliance; and because the compliance approach is inconsistent among each park unit.

The 15 park units that will be addressed in the IPMP/EA include (see also attached map of NPS-NCR park units):

- Antietam National Battlefield (MD)
- Catoctin Mountain Park (MD)
- Chesapeake & Ohio Canal National Historical Park (DC, MD, WV)
- George Washington Memorial Parkway (DC, MD, VA)
- Greenbelt Park (MD)
- Harpers Ferry National Historical Park (WV, VA, MD)
- Manassas National Battlefield Park (VA)
- Monocacy National Battlefield (MD)
- National Capital Parks-East (DC, MD)
- National Mall and Memorial Parks (DC)
- Piscataway Park (MD)
- Prince William Forest Park (VA)
- Rock Creek Park (DC)
- President's Park (DC)
- Wolf Trap National Park for the Performing Arts (VA)

None of the NPS units include tribal lands; however the NPS seeks to join tribes in consultation regarding the identification and evaluation of cultural properties that may be of significance to the Absentee Shawnee Tribe. If you would like to consult further regarding this project, please contact project manager, Mark Frey at (202) 339-8319 or via email at mark_frey@nps.gov. We would appreciate your response by August 24, 2015.

Additionally, if you would like further information about the cultural properties within these NPS units of the National Capital Region, please contact, at your convenience, Regional Cultural Anthropologist, Jennifer Talken-Spaulding at (202) 619-7205 or via email at jennifer_talken-spaulding@nps.gov.

Concurrently, we are consulting with the public per 36 C.F.R. 800.3(e) through our Planning, Environment, and Public Comment website (www.parkplanning.nps.gov). You can access project information for "Invasive Plant Management Plan/ EA for NCR Parks" on that site by searching for **Keyword:** Invasive and **Region:** National Capital. We anticipate that these outreach efforts will accommodate the requirements of both NEPA and the NHPA. Based on the consultation process, the NPS will develop an Assessment of Effects for this project in coordination with the NEPA process, which will be incorporated into the EA. A copy of the EA and the Assessment of Effect will also be provided to your office for review and comment.

In addition to your office, we have also initiated consultation with the Delaware Nation and State Historic Preservation Offices (SHPOs) of Virginia, District of Columbia, West Virginia, and Maryland for the NCR park units within their respective jurisdictions. We look forward to working with you on this project. If you have any questions, please do not hesitate to contact Mark Frey at (202) 339-8319 or via email (mark_frey@nps.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Bob Vogel", written over the printed name.

Bob Vogel
Regional Director
National Capital Region

Enclosure: Proposed Project Area – Map of NPS-NCR Park Units

cc: Tamara Francis-Fourkiller, Delaware Nation
Julie Langan, Virginia SHPO
David Maloney, District of Columbia SHPO
Susan Pierce, West Virginia Deputy SHPO
J. Rodney Little, Maryland SHPO

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Frey, Mark <mark_frey@nps.gov>

Invasive Plant Management Plan and Environmental Assessment - Section 106 Consultation

Nekole Alligood <NAlligood@delawarenation.com>
To: "mark_frey@nps.gov" <mark_frey@nps.gov>
Cc: Corey Smith <CSmith@delawarenation.com>

Wed, Sep 23, 2015 at 11:25 AM

Good morning, Mr. Frey, I hope this email finds you well.

I have reviewed your letter of July 27, 2015. Unfortunately it did not arrive at our office until August 26. On behalf of the Delaware Nation, we have no concerns regarding this project. If you require a formal letter please let me know and we will send one along in a few days, but hopefully this email suffice.

Thank you.

Nekole Alligood

Director of Cultural Preservation

Delaware Nation

31064 HWY 281

PO Box 281

Anadarko, OK 73005

Phone: 405-247-2448

Fax: 405-247-8905

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United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

IN REPLY REFER TO:

1.A.2.(NCR-RESS)

APR 07 2016

Mr. David Maloney
State Historic Preservation Officer
D.C. Historic Preservation Office
1100 4th Street, S.W., Suite 650 East
Washington, D.C. 20024

Subject: Invasive Plant Management Plan/Programmatic Environmental Assessment —
Section 106 Consultation

Dear Mr. Maloney:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan/Programmatic Environmental Assessment (IPMP/EA) for the 15 park units of the National Capital Region (NCR). The IPMP/EA would ensure that all NCR parks have access to the suite of methodologies currently used for the removal of widespread exotic non-native invasive plant species. Such methodologies consist of chemical, biological, manual, mechanical, physical, and cultural treatment methods. The IPMP/EA is intended to promote a consistent management and compliance approach throughout the 15 NCR parks by providing them with a range of tools, strategies and best management practices from which to choose. The IPMP/EA is expected to become the primary guidance for invasive plant management in the NCR parks. A description of the treatment methods included in the IPMP/EA is enclosed as an attachment to this letter (Attachment A).

As a federal undertaking, the proposed IPMP/EA requires review under Section 106 of the National Historic Preservation Act of 1966 as amended (NHPA). By letter dated March 31, 2015, we formally initiated consultation with your office under Section 106 for those NCR park units located entirely or partially within the District of Columbia:

- National Mall and Memorial Parks (entirely in the District of Columbia)
- Rock Creek Park (entirely in the District of Columbia)
- White House / President's Park (entirely in the District of Columbia)
- Chesapeake & Ohio Canal National Historical Park (partially in the District of Columbia)
- National Capital Parks-East (partially in the District of Columbia)
- Fort Washington and Oxon Hill Farms Parks (partially in the District of Columbia)
- George Washington Memorial Parkway (partially in the District of Columbia)

We are also conducting consultation with the State Historic Preservation Offices of Virginia, Maryland, and West Virginia for those park units or portions of park units that are located within their respective jurisdictions. The NPS also initiated consultation with the Delaware Nation and Absentee Shawnee Tribe of Oklahoma, and invited the Advisory Council on Historic Preservation to participate in the process. To date, only the Virginia SHPO and the Delaware Nation responded. The Delaware Nation expressed no concern regarding the project.

Following up on our March 31, 2015 letter to your office, this letter presents the area of potential effects (APE) and a programmatic assessment of the potential effects on Historic Properties that would result from adopting the proposed IPMP/EA.

Note that in addition to the programmatic assessment presented in this letter, each individual, park-level treatment action that would be conducted under the proposed IPMP/EA would be reviewed under the Programmatic Agreement executed on November 14, 2008 among the NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008 PA). The 2008 PA established a program for Section 106 compliance for the operation, management, and administration of the National Park System. The PA establishes two processes for Section 106 review: a “streamlined” review process for designated undertakings that meet established criteria and a “standard” review process for all other undertakings.

It is anticipated that a majority of the actions proposed to be conducted under the IPMP/EA would meet the conditions for streamlined review under the criteria defined in Section III.C.5 – Routine Grounds Maintenance, Section III.C.6 – Battlefield Preservation and Management, and Section III.C.7 - Hazardous Fuel and Fire Management of the 2008 PA. Those actions that do not meet the PA’s criteria for streamlined review would be subject to the standard Section 106 review process as stated in the 2008 PA. A copy of the 2008 PA is enclosed with this letter (Attachment B).

Overall and District of Columbia Area of Potential Effects

The overall APE for the proposed IPMP/EA consists of the 15 NCR parks to which it would apply. The 15 NCR parks contain multiple historic structures and districts, cultural landscapes, and archeological resources that could be affected by the proposed undertaking. The IPMP/EA has no potential to affect historic properties outside the parks. Therefore, the District of Columbia APE consists of the park units or portions of park units listed above.

Programmatic Assessment of Effects

The following paragraphs broadly describe the potential effects of each method treatment. More detailed assessments would be conducted, as applicable, during project-level review under the 2008 PA.

Chemical treatment methods

The primary adverse effect on cultural resources potentially resulting from chemical treatment methods conducted under the IPMP/EA would be overspray. Overspray could affect the integrity

of cultural resources by unintentionally damaging or destroying native vegetation in cultural landscapes or staining, discoloring, or otherwise damaging the structural or aesthetic integrity of a built resource. The NPS and/or contractors would minimize the potential for such effects by delineating cultural resources that could be affected prior to conducting chemical treatments and/or applying chemical treatments directly to target species. Aerial spraying would not be used in areas where the risk of affecting cultural resources is determined to be too great. This would minimize the risk for potential adverse effects.

Biological treatment methods

Biological treatment methods would pose low risks to cultural resources, such as cultural landscapes, because biological agents are highly host specific and would only affect targeted non-native invasive plants. Biological agents are only approved for release if testing indicates a very low likelihood of non-target effects, as determined by the Technical Advisory Group, a panel of experts who report to the Animal Plant Inspection Service. As such, biological treatment methods would have minimal potential for adverse effects on cultural resources.

Manual treatment methods

Manual treatment methods would be small in scale and would target specific specimens of non-native invasive plant species singly or in small groups, leaving any adjacent elements contributing to the integrity of a cultural resource undamaged. Thus, manual treatment methods would have minimal potential for adverse effects on cultural resources.

Mechanical treatment methods

Like manual treatment methods, mechanical methods would be used to target specific individual specimens or small groups of non-native invasive plants. Such precision would leave any adjacent contributing resources undamaged. Furthermore, the boundaries of treatment areas would be clearly delineated with high-visibility fencing or other markers to prevent damage to or the destruction of adjacent contributing elements. All temporary fencing and markers would be removed following the completion of treatment activities and temporarily affected cultural resources would be restored to a pre-treatment condition. In cases where motorized and/or heavy equipment is used, ground-disturbance could occur, with potential effects to archaeological resources. However, ground-disturbing activities would be limited as much as possible and the potential for below ground resources would be reviewed prior to the implementation of the treatment. Any resources present would be avoided, for instance by adopting an alternative treatment method that would not disturb the resources. For these reasons, the potential for adverse effects from mechanical treatment methods is minimal.

Physical treatment methods

Physical treatment methods, such as solar sterilization and smothering, would be used in discrete areas where non-native invasive plants are predominant. While some native vegetation contributing to the integrity of a cultural resource may also be destroyed within these areas, such vegetation would be restored in the entirety of the treated area following the completion of the

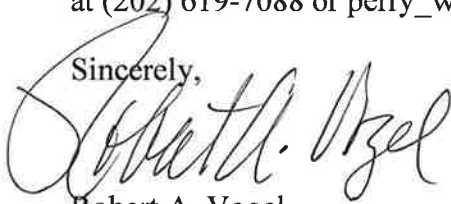
treatment and would resume contributing to the resource's integrity. The effects of physical treatment methods would cease upon the completion of the technique and the removal of the smothering material, and effects would not persist. Thus physical treatment methods have minimal potential for adverse effects on cultural resources.

Conclusion

As described above, the potential of the IPMP/EA to result in adverse effects on cultural resources is minimal. Additionally, as previously noted, all invasive plant species control actions to be conducted by the individual NCR parks under the proposed IPMP/EA would be further reviewed on a case-by-case basis for potential effects on historic properties in accordance with the terms of the 2008 PA. Under these conditions, the NPS finds that adopting the proposed IPMP/EA would not result in an adverse effect to historic properties under Section 106 of the NHPA.

Please provide your concurrence with this finding or any comments you may have within 30 days of receiving this letter. If you have any questions or require more information, do not hesitate to contact Ms. Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or perry_wheelock@nps.gov.

Sincerely,



Robert A. Vogel
Regional Director

Enclosures: Attachment A: Summary Description of Proposed Invasive Plant Treatment Methods.

Attachment B: Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008).

cc. Reid Nelson, Director of Federal Agency Programs, ACHP
Julie Langan, SHPO, Virginia
Elizabeth Hughes, SHPO, Maryland
Susan Pierce, Deputy SHPO, West Virginia
Nekole Alligood, Director of Cultural Preservation, Delaware Nation
Leonard Longhorn, THPO, Absentee Shawnee Tribe of Oklahoma



United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

IN REPLY REFER TO:

1.A.2.(NCR-RESS)

APR 07 2016

Ms. Elizabeth Hughes
State Historic Preservation Officer
Maryland Historical Trust
100 Community Place, 3rd Floor
Crownsville, Maryland 21032-2023

Subject: Invasive Plant Management Plan/Programmatic Environmental Assessment —Section
106 Consultation

Dear Ms. Hughes:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan/Programmatic Environmental Assessment (IPMP/EA) for the 15 park units of the National Capital Region (NCR). The IPMP/EA would ensure that all NCR parks have access to the suite of methodologies currently used for the removal of widespread exotic non-native invasive plant species. Such methodologies consist of chemical, biological, manual, mechanical, physical, and cultural treatment methods. The IPMP/EA is intended to promote a consistent management and compliance approach throughout the 15 NCR parks by providing them with a range of tools, strategies and best management practices from which to choose. The IPMP/EA is expected to become the primary guidance for invasive plant management in the NCR parks. A description of the treatment methods included in the IPMP/EA is enclosed as an attachment to this letter (Attachment A).

As a federal undertaking, the proposed IPMP/EA requires review under Section 106 of the National Historic Preservation Act of 1966 as amended (NHPA). By letter dated March 31, 2015, we formally initiated consultation with your office under Section 106 for those NCR park units located entirely or partially within Maryland:

- Antietam National Battlefield (entirely in Maryland)
- Catocin Mountain Park (entirely in Maryland)
- Monocacy National Battlefield (entirely in Maryland)
- Greenbelt Park and Baltimore-Washington Parkway (entirely in Maryland)
- Fort Washington and Oxon Hill Farm Parks (partially in Maryland)
- Chesapeake & Ohio Canal National Historical Park (partially in Maryland)
- George Washington Memorial Parkway (partially in Maryland)
- Harpers Ferry National Historical Park (partially in Maryland)
- National Capital Parks-East (partially in Maryland)

We are also conducting consultation with the State Historic Preservation Offices of Virginia, West Virginia, and the District of Columbia for those park units or portions of park units that are located within their respective jurisdictions. The NPS also initiated consultation with the Delaware Nation and Absentee

Shawnee Tribe of Oklahoma, and invited the Advisory Council on Historic Preservation to participate in the process. To date, only the Virginia SHPO and the Delaware Nation responded. The Delaware Nation expressed no concern regarding the project.

Following up on our March 31, 2015 letter to your office, this letter presents the area of potential effects (APE) and a programmatic assessment of the potential effects on Historic Properties that would result from adopting the proposed IPMP/EA.

Note that in addition to the programmatic assessment presented in this letter, each individual, park-level treatment action that would be conducted under the proposed IPMP/EA would be reviewed under the Programmatic Agreement executed on November 14, 2008 among the NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008 PA). The 2008 PA established a program for Section 106 compliance for the operation, management, and administration of the National Park System. The PA establishes two processes for Section 106 review: a “streamlined” review process for designated undertakings that meet established criteria and a “standard” review process for all other undertakings.

It is anticipated that a majority of the actions proposed to be conducted under the IPMP/EA would meet the conditions for streamlined review under the criteria defined in Section III.C.5 – Routine Grounds Maintenance, Section III.C.6 – Battlefield Preservation and Management, and Section III.C.7 - Hazardous Fuel and Fire Management of the 2008 PA. Those actions that do not meet the PA’s criteria for streamlined review would be subject to the standard Section 106 review process as stated in the 2008 PA. A copy of the 2008 PA is enclosed with this letter (Attachment B).

Overall and Maryland Area of Potential Effects

The overall APE for the proposed IPMP/EA consists of the 15 NCR parks to which it would apply. The 15 NCR parks contain multiple historic structures and districts, cultural landscapes, and archeological resources that could be affected by the proposed undertaking. The IPMP/EA has no potential to affect historic properties outside the parks. Therefore, the Maryland APE consists of the park units or portions of park units listed above.

Programmatic Assessment of Effects

The following paragraphs broadly describe the potential effects of each method treatment. More detailed assessments would be conducted, as applicable, during project-level review under the 2008 PA.

Chemical treatment methods

The primary adverse effect on cultural resources potentially resulting from chemical treatment methods conducted under the IPMP/EA would be overspray. Overspray could affect the integrity of cultural resources by unintentionally damaging or destroying native vegetation in cultural landscapes or staining, discoloring, or otherwise damaging the structural or aesthetic integrity of a built resource. The NPS and/or contractors would minimize the potential for such effects by delineating cultural resources that could be affected prior to conducting chemical treatments and/or applying chemical treatments directly to target species. Aerial spraying would not be used in areas where the risk of affecting cultural resources is determined to be too great. This would minimize the risk for potential adverse effects.

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Manual treatment methods would be small in scale and would target specific specimens of non-native invasive plant species singly or in small groups, leaving any adjacent elements contributing to the integrity of a cultural resource undamaged. Thus, manual treatment methods would have minimal potential for adverse effects on cultural resources.

Mechanical treatment methods

Like manual treatment methods, mechanical methods would be used to target specific individual specimens or small groups of non-native invasive plants. Such precision would leave any adjacent contributing resources undamaged. Furthermore, the boundaries of treatment areas would be clearly delineated with high-visibility fencing or other markers to prevent damage to or the destruction of adjacent contributing elements. All temporary fencing and markers would be removed following the completion of treatment activities and temporarily affected cultural resources would be restored to a pre-treatment condition. In cases where motorized and/or heavy equipment is used, ground-disturbance could occur, with potential effects to archaeological resources. However, ground-disturbing activities would be limited as much as possible and the potential for below ground resources would be reviewed prior to the implementation of the treatment. Any resources present would be avoided, for instance by adopting an alternative treatment method that would not disturb the resources. For these reasons, the potential for adverse effects from mechanical treatment methods is minimal.

Physical treatment methods

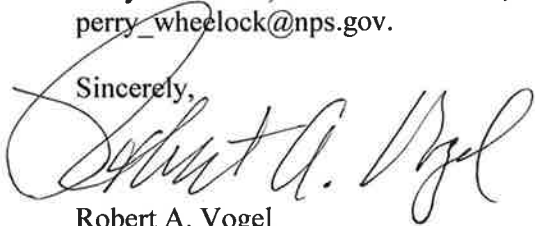
Physical treatment methods, such as solar sterilization and smothering, would be used in discrete areas where non-native invasive plants are predominant. While some native vegetation contributing to the integrity of a cultural resource may also be destroyed within these areas, such vegetation would be restored in the entirety of the treated area following the completion of the treatment and would resume contributing to the resource's integrity. The effects of physical treatment methods would cease upon the completion of the technique and the removal of the smothering material, and effects would not persist. Thus physical treatment methods have minimal potential for adverse effects on cultural resources.

Conclusion

As described above, the potential of the IPMP/EA to result in adverse effects on cultural resources is minimal. Additionally, as previously noted, all invasive plant species control actions to be conducted by the individual NCR parks under the proposed IPMP/EA would be further reviewed on a case-by-case basis for potential effects on historic properties in accordance with the terms of the 2008 PA. Under these conditions, the NPS finds that adopting the proposed IPMP/EA would not result in an adverse effect to historic properties under Section 106 of the NHPA.

Please provide your concurrence with this finding or any comments you may have within 30 days of receiving this letter. If you have any questions or require more information, do not hesitate to contact Ms. Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or perry_wheelock@nps.gov.

Sincerely,



Robert A. Vogel
Regional Director

Enclosures: Attachment A: Summary Description of Proposed Invasive Plant Treatment Methods.

Attachment B: Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008).

cc. Reid Nelson, Director of Federal Agency Programs, ACHP
Julie Langan, SHPO, Virginia
David Maloney, SHPO, District of Columbia
Susan Pierce, Deputy SHPO, West Virginia
Nekole Alligood, Director of Cultural Preservation, Delaware Nation
Leonard Longhorn, THPO, Absentee Shawnee Tribe of Oklahoma



United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

IN REPLY REFER TO:

1.A.2.(NCR-RESS)

APR 07 2016

Ms. Julie Langan
State Historic Preservation Officer
Virginia Department of Historic Resources
Richmond Central Office
2801 Kensington Avenue
Richmond, Virginia 23221

Subject: Invasive Plant Management Plan/Programmatic Environmental Assessment —
Section 106 Consultation
DHR File No. 2015-0240

Dear Ms. Langan:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan/Programmatic Environmental Assessment (IPMP/EA) for the 15 park units of the National Capital Region (NCR). The IPMP/EA would ensure that all NCR parks have access to the suite of methodologies currently used for the removal of widespread exotic non-native invasive plant species. Such methodologies consist of chemical, biological, manual, mechanical, physical, and cultural treatment methods. The IPMP/EA is intended to promote a consistent management and compliance approach throughout the 15 NCR parks by providing them with a range of tools, strategies and best management practices from which to choose. The IPMP/EA is expected to become the primary guidance for invasive plant management in the NCR parks. A description of the treatment methods included in the IPMP/EA is enclosed as an attachment to this letter (Attachment A).

As a federal undertaking, the proposed IPMP/EA requires review under Section 106 of the National Historic Preservation Act of 1966 as amended (NHPA). By letter dated March 31, 2015, we formally initiated consultation with your office under Section 106 for those NCR park units located entirely or partially within Virginia:

- Manassas National Battlefield Park (entirely in Virginia)
- Prince William Forest Park (entirely in Virginia)
- Wolf Trap National Park for the Performing Arts (entirely in Virginia)
- George Washington Memorial Parkway (partly in Virginia)
- Harpers Ferry National Historical Park (partly in Virginia)

We are also conducting consultation with the State Historic Preservation Offices of Maryland, West Virginia, and the District of Columbia for those park units or portions of park units that are located within their respective jurisdictions. The NPS also initiated consultation with the Delaware Nation and Absentee Shawnee Tribe of Oklahoma, and invited the Advisory Council on Historic Preservation to participate in the process. To date, only your office and the Delaware Nation responded. The Delaware Nation expressed no concern regarding the project.

Following up on our March 31, 2015 letter to your office, this letter presents the area of potential effects (APE) and a programmatic assessment of the potential effects on Historic Properties that would result from adopting the proposed IPMP/EA.

Note that in addition to the programmatic assessment presented in this letter, each individual, park-level treatment action that would be conducted under the proposed IPMP/EA would be reviewed under the Programmatic Agreement executed on November 14, 2008 among the NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008 PA). The 2008 PA established a program for Section 106 compliance for the operation, management, and administration of the National Park System. The PA establishes two processes for Section 106 review: a “streamlined” review process for designated undertakings that meet established criteria and a “standard” review process for all other undertakings.

It is anticipated that a majority of the actions proposed to be conducted under the IPMP/EA would meet the conditions for streamlined review under the criteria defined in Section III.C.5 – Routine Grounds Maintenance, Section III.C.6 – Battlefield Preservation and Management, and Section III.C.7 - Hazardous Fuel and Fire Management of the 2008 PA. Those actions that do not meet the PA’s criteria for streamlined review would be subject to the standard Section 106 review process as stated in the 2008 PA. A copy of the 2008 PA is enclosed with this letter (Attachment B).

Overall and Virginia Area of Potential Effects

The overall APE for the proposed IPMP/EA consists of the 15 NCR parks to which it would apply. The 15 NCR parks contain multiple historic structures and districts, cultural landscapes, and archeological resources that could be affected by the proposed undertaking. The IPMP/EA has no potential to affect historic properties outside the parks. Therefore, the Virginia APE consists of the park units or portions of park units listed above.

Programmatic Assessment of Effects

The following paragraphs broadly describe the potential effects of each method treatment. More detailed assessments would be conducted, as applicable, during project-level review under the 2008 PA.

Chemical treatment methods

The primary adverse effect on cultural resources potentially resulting from chemical treatment methods conducted under the IPMP/EA would be overspray. Overspray could affect the integrity

of cultural resources by unintentionally damaging or destroying native vegetation in cultural landscapes or staining, discoloring, or otherwise damaging the structural or aesthetic integrity of a built resource. The NPS and/or contractors would minimize the potential for such effects by delineating cultural resources that could be affected prior to conducting chemical treatments and/or applying chemical treatments directly to target species. Aerial spraying would not be used in areas where the risk of affecting cultural resources is determined to be too great. This would minimize the risk for potential adverse effects.

Biological treatment methods

Biological treatment methods would pose low risks to cultural resources, such as cultural landscapes, because biological agents are highly host specific and would only affect targeted non-native invasive plants. Biological agents are only approved for release if testing indicates a very low likelihood of non-target effects, as determined by the Technical Advisory Group, a panel of experts who report to the Animal Plant Inspection Service. As such, biological treatment methods would have minimal potential for adverse effects on cultural resources.

Manual treatment methods

Manual treatment methods would be small in scale and would target specific specimens of non-native invasive plant species singly or in small groups, leaving any adjacent elements contributing to the integrity of a cultural resource undamaged. Thus, manual treatment methods would have minimal potential for adverse effects on cultural resources.

Mechanical treatment methods

Like manual treatment methods, mechanical methods would be used to target specific individual specimens or small groups of non-native invasive plants. Such precision would leave any adjacent contributing resources undamaged. Furthermore, the boundaries of treatment areas would be clearly delineated with high-visibility fencing or other markers to prevent damage to or the destruction of adjacent contributing elements. All temporary fencing and markers would be removed following the completion of treatment activities and temporarily affected cultural resources would be restored to a pre-treatment condition. In cases where motorized and/or heavy equipment is used, ground-disturbance could occur, with potential effects to archaeological resources. However, ground-disturbing activities would be limited as much as possible and the potential for below ground resources would be reviewed prior to the implementation of the treatment. Any resources present would be avoided, for instance by adopting an alternative treatment method that would not disturb the resources. For these reasons, the potential for adverse effects from mechanical treatment methods is minimal.

Physical treatment methods

Physical treatment methods, such as solar sterilization and smothering, would be used in discrete areas where non-native invasive plants are predominant. While some native vegetation contributing to the integrity of a cultural resource may also be destroyed within these areas, such vegetation would be restored in the entirety of the treated area following the completion of the

treatment and would resume contributing to the resource's integrity. The effects of physical treatment methods would cease upon the completion of the technique and the removal of the smothering material, and effects would not persist. Thus physical treatment methods have minimal potential for adverse effects on cultural resources.

Conclusion

As described above, the potential of the IPMP/EA to result in adverse effects on cultural resources is minimal. Additionally, as previously noted, all invasive plant species control actions to be conducted by the individual NCR parks under the proposed IPMP/EA would be further reviewed on a case-by-case basis for potential effects on historic properties in accordance with the terms of the 2008 PA. Under these conditions, the NPS finds that adopting the proposed IPMP/EA would not result in an adverse effect to historic properties under Section 106 of the NHPA.

Please provide your concurrence with this finding or any comments you may have within 30 days of receiving this letter. If you have any questions or require more information, do not hesitate to contact Ms. Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or perry_wheelock@nps.gov.

Sincerely,



Robert A. Vogel
Regional Director

Enclosures: Attachment A: Summary Description of Proposed Invasive Plant Treatment Methods.

Attachment B: Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008).

cc. Reid Nelson, Director of Federal Agency Programs, ACHP
Elizabeth Hughes, SHPO, Maryland
David Maloney, SHPO, District of Columbia
Susan Pierce, Deputy SHPO, West Virginia
Nekole Alligood, Director of Cultural Preservation, Delaware Nation
Leonard Longhorn, THPO, Absentee Shawnee Tribe of Oklahoma



United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region

1100 Ohio Drive, S.W.

Washington, D.C. 20242

IN REPLY REFER TO:

1.A.2.(NCR-RESS)

APR 07 2016

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Department of Culture and History
The Culture Center
Capitol Complex
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0300

Subject: Invasive Plant Management Plan/Programmatic Environmental Assessment —
Section 106 Consultation

Dear Ms. Pierce:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan/Programmatic Environmental Assessment (IPMP/EA) for the 15 park units of the National Capital Region (NCR). The IPMP/EA would ensure that all NCR parks have access to the suite of methodologies currently used for the removal of widespread exotic non-native invasive plant species. Such methodologies consist of chemical, biological, manual, mechanical, physical, and cultural treatment methods. The IPMP/EA is intended to promote a consistent management and compliance approach throughout the 15 NCR parks by providing them with a range of tools, strategies and best management practices from which to choose. The IPMP/EA is expected to become the primary guidance for invasive plant management in the NCR parks. A description of the treatment methods included in the IPMP/EA is enclosed as an attachment to this letter (Attachment A).

As a federal undertaking, the proposed IPMP/EA requires review under Section 106 of the National Historic Preservation Act of 1966 as amended (NHPA). By letter dated March 31, 2015, we formally initiated consultation with your office under Section 106 for the following NCR park units, which are partially located in West Virginia:

- Chesapeake & Ohio Canal National Historical Park
- Harpers Ferry National Historical Park

We are also conducting consultation with the State Historic Preservation Offices of Virginia, Maryland, and the District of Columbia for those park units or portions of park units that are located within their respective jurisdictions. The NPS also initiated consultation with the Delaware Nation and Absentee Shawnee Tribe of Oklahoma, and invited the Advisory Council

on Historic Preservation to participate in the process. To date, only the Virginia SHPO and the Delaware Nation responded. The Delaware Nation expressed no concern regarding the project.

Following up on our March 31, 2015 letter to your office, this letter presents the area of potential effects (APE) and a programmatic assessment of the potential effects on Historic Properties that would result from adopting the proposed IPMP/EA.

Note that in addition to the programmatic assessment presented in this letter, each individual, park-level treatment action that would be conducted under the proposed IPMP/EA would be reviewed under the Programmatic Agreement executed on November 14, 2008 among the NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008 PA). The 2008 PA established a program for Section 106 compliance for the operation, management, and administration of the National Park System. The PA establishes two processes for Section 106 review: a “streamlined” review process for designated undertakings that meet established criteria and a “standard” review process for all other undertakings.

It is anticipated that a majority of the actions proposed to be conducted under the IPMP/EA would meet the conditions for streamlined review under the criteria defined in Section III.C.5 – Routine Grounds Maintenance, Section III.C.6 – Battlefield Preservation and Management, and Section III.C.7 - Hazardous Fuel and Fire Management of the 2008 PA. Those actions that do not meet the PA’s criteria for streamlined review would be subject to the standard Section 106 review process as stated in the 2008 PA. A copy of the 2008 PA is enclosed with this letter (Attachment B).

Overall and West Virginia Area of Potential Effects

The overall APE for the proposed IPMP/EA consists of the 15 NCR parks to which it would apply. The 15 NCR parks contain multiple historic structures and districts, cultural landscapes, and archeological resources that could be affected by the proposed undertaking. The IPMP/EA has no potential to affect historic properties outside the parks. Therefore, the West Virginia APE consists of the portions of park units located in West Virginia listed above.

Programmatic Assessment of Effects

The following paragraphs broadly describe the potential effects of each method treatment. More detailed assessments would be conducted, as applicable, during project-level review under the 2008 PA.

Chemical treatment methods

The primary adverse effect on cultural resources potentially resulting from chemical treatment methods conducted under the IPMP/EA would be overspray. Overspray could affect the integrity of cultural resources by unintentionally damaging or destroying native vegetation in cultural landscapes or staining, discoloring, or otherwise damaging the structural or aesthetic integrity of a built resource. The NPS and/or contractors would minimize the potential for such effects by

delineating cultural resources that could be affected prior to conducting chemical treatments and/or applying chemical treatments directly to target species. Aerial spraying would not be used in areas where the risk of affecting cultural resources is determined to be too great. This would minimize the risk for potential adverse effects.

Biological treatment methods

Biological treatment methods would pose low risks to cultural resources, such as cultural landscapes, because biological agents are highly host specific and would only affect targeted non-native invasive plants. Biological agents are only approved for release if testing indicates a very low likelihood of non-target effects, as determined by the Technical Advisory Group, a panel of experts who report to the Animal Plant Inspection Service. As such, biological treatment methods would have minimal potential for adverse effects on cultural resources.

Manual treatment methods

Manual treatment methods would be small in scale and would target specific specimens of non-native invasive plant species singly or in small groups, leaving any adjacent elements contributing to the integrity of a cultural resource undamaged. Thus, manual treatment methods would have minimal potential for adverse effects on cultural resources.

Mechanical treatment methods

Like manual treatment methods, mechanical methods would be used to target specific individual specimens or small groups of non-native invasive plants. Such precision would leave any adjacent contributing resources undamaged. Furthermore, the boundaries of treatment areas would be clearly delineated with high-visibility fencing or other markers to prevent damage to or the destruction of adjacent contributing elements. All temporary fencing and markers would be removed following the completion of treatment activities and temporarily affected cultural resources would be restored to a pre-treatment condition. In cases where motorized and/or heavy equipment is used, ground-disturbance could occur, with potential effects to archaeological resources. However, ground-disturbing activities would be limited as much as possible and the potential for below ground resources would be reviewed prior to the implementation of the treatment. Any resources present would be avoided, for instance by adopting an alternative treatment method that would not disturb the resources. For these reasons, the potential for adverse effects from mechanical treatment methods is minimal.

Physical treatment methods

Physical treatment methods, such as solar sterilization and smothering, would be used in discrete areas where non-native invasive plants are predominant. While some native vegetation contributing to the integrity of a cultural resource may also be destroyed within these areas, such vegetation would be restored in the entirety of the treated area following the completion of the treatment and would resume contributing to the resource's integrity. The effects of physical treatment methods would cease upon the completion of the technique and the removal of the

smothering material, and effects would not persist. Thus physical treatment methods have minimal potential for adverse effects on cultural resources.

Conclusion

As described above, the potential of the IPMP/EA to result in adverse effects on cultural resources is minimal. Additionally, as previously noted, all invasive plant species control actions to be conducted by the individual NCR parks under the proposed IPMP/EA would be further reviewed on a case-by-case basis for potential effects on historic properties in accordance with the terms of the 2008 PA. Under these conditions, the NPS finds that adopting the proposed IPMP/EA would not result in an adverse effect to historic properties under Section 106 of the NHPA.

Please provide your concurrence with this finding or any comments you may have within 30 days of receiving this letter. If you have any questions or require more information, do not hesitate to contact Ms. Perry Wheelock, Associate Director, Resource, Stewardship and Science at (202) 619-7088 or perry_wheelock@nps.gov.

Sincerely,



Robert A. Vogel
Regional Director

Enclosures: Attachment A: Summary Description of Proposed Invasive Plant Treatment Methods.

Attachment B: Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008).

cc. Reid Nelson, Director of Federal Agency Programs, ACHP
Julie Langan, SHPO, Virginia
Elizabeth Hughes, SHPO, Maryland
David Maloney, SHPO, District of Columbia
Nekole Alligood, Director of Cultural Preservation, Delaware Nation
Leonard Longhorn, THPO, Absentee Shawnee Tribe of Oklahoma

GOVERNMENT OF THE DISTRICT OF COLUMBIA
STATE HISTORIC PRESERVATION OFFICE



DC STATE HISTORIC PRESERVATION OFFICE
SECTION 106 REVIEW FORM

TO: Robert A. Vogel, Regional Director, National Park Service, National Capital Region

PROJECT NAME/DESCRIPTION: Invasive Plant Management Plan / Programmatic Environmental Assessment for 15 units of the National Capital Region including NAMA, Rock Creek, White House, President's Park, C&O Canal, Nat Cap Parks East, Oxon Hill Farm and GW Parkway

PROJECT ADDRESS/LOCATION DESCRIPTION: Park Units of the National Capital Region within the District of Columbia: National Mall and Memorial Parks, Rock Creek Park, White House/ President's Park, Chesapeake & Ohio Canal National Historical Park, National Capital Parks-East, Fort Washington and Oxon Hill Farms Parks, George Washington Memorial Parkway

DC SHPO PROJECT NUMBER: 16-0350

The DC State Historic Preservation Office (DC SHPO) has reviewed the above-referenced federal undertaking(s) in accordance with Section 106 of the National Historic Preservation Act and has determined that:

<input type="checkbox"/>	This project will have no effect on historic properties. No further DC SHPO review or comment will be necessary.
<input type="checkbox"/>	There are no historic properties that will be affected by this project. No further DC SHPO review or comment will be necessary.
<input checked="" type="checkbox"/>	This project will have no adverse effect on historic properties. No further DC SHPO review or comment will be necessary.
<input type="checkbox"/>	This project will have no adverse effect on historic properties conditioned upon fulfillment of the measures stipulated below.
<input checked="" type="checkbox"/>	Other Comments / Additional Comments (see below):

The DC SHPO concurs with the finding of No Adverse Effect and the use of the streamlined review process for appropriate projects. Should unanticipated archaeological discoveries be encountered during this undertaking please contact Dr. Troccoli at 202-442-8836 or ruth.troccoli@dc.gov.

BY: _____
Ruth Troccoli, Ph.D.
Archaeologist, State Historic Preservation Office

DATE: 27 April 2016

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Appendix D

Endangered Species Act Section 7 Coordination

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241



Pittsburgh District - No Effect/Not Likely to Adversely Affect Concurrence Form

Contact Name: Mark Frey, National Park Service

Email Address or Fax Number: Mark_Frey@nps.gov

Project Name & Location: NCR Invasive Plant Management Plan, Jefferson and Morgan County

Date of Letter Request: March 31, 2015

This is in response to your letter requesting threatened and endangered species information in regard to the proposed project listed above. These comments are provided pursuant to the Endangered Species Act (ESA, 87 Stat. 884, as amended; 16 U. S. C. 1531 *et seq.*).


We have made a determination that the project _____ will have no effect/~~XXX~~ is not likely to adversely affect Federally-listed endangered or threatened species. Therefore no biological assessment or further section 7 consultation under the ESA is required with the Fish and Wildlife Service. Should project plans change, or if additional information on listed and proposed species become available, this determination may be reconsidered.

Definitive determinations of the presences of waters of the United States, including wetlands, in the project area and the need for permits, if any, are made by the U.S. Army Corps of Engineers. They may be contacted at: Pittsburgh District, Regulatory Branch, William S. Moorhead Federal Building, 1000 Liberty Avenue, Pittsburgh, Pennsylvania 15222-4188, telephone (412) 395-7152.



Reviewer's signature and date

APR 14, 2015



Field Supervisor's signature and date

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United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region
Natural Resources & Science
4598 MacArthur Boulevard, N.W.
Washington, D.C. 20007-1582

March 17, 2016

Genevieve LaRouche, Supervisor
Chesapeake Bay Field Office
U.S. Fish & Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

RE: Invasive Plant Management Plan/Programmatic Environmental Assessment — Informal Section 7 consultation for northern long-eared bat (*Myotis septentrionalis*), Indiana bat (*Myotis sodalis*), Hay's Spring amphipod (*Stygobromus hayi*), Kenk's amphipod (*Stygobromus kenki*), Harperella (*Harperella nodosum*, syn. *Ptilimnium nodosum*), and Dwarf wedgemussel (*Alasmidonta heterodon*)

Dear Ms. LaRouche:

The National Park Service (NPS) is continuing informal Section 7 of the Endangered Species Act (ESA) consultation with the US Fish and Wildlife Service (USFWS) on five federally listed species and one candidate species for the implementation of the Invasive Plant Management Plan and Programmatic Environmental Assessment (IPMP/EA) for the 15 park units within National Capital Region (NCR). For each park-level action to be undertaken under the proposed IPMP/EA, if federally listed or candidate species occur in the project action area, each park would review the potential of the action to affect these species and would further consult with the USFWS as needed. NCR parks have not been assigned critical habitat for these species.

Figures showing the geographic extent of the action area for the IPMP/EA within the District of Columbia and the State of Maryland are included as Attachment A. The project as well as threatened and endangered species best management practices are described below.

Of the 15 parks addressed in the IPMP/EA, the following are located entirely within the District of Columbia:

- Rock Creek Park
- National Mall and Memorial Parks
- White House / President's Park

Additionally, the following parks have portions or park sites within the District:

- Chesapeake & Ohio Canal National Historical Park
- George Washington Memorial Parkway
- National Capital Parks-East

- Piscataway and Fort Washington

Of the 15 NCR parks, the following are located entirely within Maryland:

- Antietam National Battlefield
- Catoctin Mountain Park
- Greenbelt Park and Baltimore-Washington Parkway
- Monocacy National Battlefield

Additionally, the following parks have portions or park sites within Maryland:

- Chesapeake & Ohio Canal National Historical Park
- George Washington Memorial Parkway
- Harpers Ferry National Historical Park
- Piscataway and Fort Washington
- National Capital Parks-East

This informal consultation covers the following species known to occur within the boundaries of the aforementioned NPS parks:

- Northern long-eared bat (*Myotis septentrionalis*) (NLEB)
- Indiana bat (*Myotis sodalis*)
- Hay's Spring amphipod (*Stygobromus hayi*)
- Kenk's amphipod (*Stygobromus kenki*) (candidate)
- Harperella (*Harperella nodosum* syn. *Ptilimnium nodosum*)
- Dwarf wedgemussel (*Alasmidonta heterodon*) (historic)

The following species were identified by the USFWS's Environmental Conservation Online System (ECOS) search tool as potentially occurring within the Maryland portion of the project area, but have not been observed in NPS parks:

- Puritan tiger beetle (*Cicindela puritan*)
- Northeastern bulrush (*Scirpus ancistrochaetus*)
- Sensitive joint-vetch (*Aeschynomene virginica*)
- Swamp pink (*Helonias bullata*)

Project Description

The NPS proposes to implement an IPMP/EA at the 15 parks of the NCR. The IPMP/EA would ensure that all NCR parks have access to a range of methods used for the treatment of non-native invasive plant species. Such methodologies consist of chemical, biological, manual, mechanical, physical, and cultural treatment methods.

The purpose of the IPMP/EA is to protect and restore natural and cultural resources in the 15 NCR parks by controlling, containing, or substantially minimizing populations of non-native invasive plant species through targeted treatment. The IPMP/EA would provide guidance to the individual NCR parks on non-native invasive plant management. To achieve this, the proposed

IPMP/EA identifies and would implement environmentally sound, cost-effective invasive plant management strategies using an integrated pest management framework that poses the least possible risk to people and park resources.

The IPMP/EA is needed because non-native invasive plants in the 15 NCR parks disrupt ecosystems, degrade cultural resources, and diminish visitor use and experience. Invasive plants inhibit the growth of native plants, reduce habitat quality for native wildlife, and compromise cultural landscapes and historic structures. The full range of available treatment strategies is not currently being used throughout the 15 NCR parks, necessitating the development and adoption of standardized best management practices and guidance tools to mitigate impacts on park and visitor activities potentially resulting from the implementation of those strategies. Such impacts include the inadvertent effects of particular treatment methods on non-targeted species of plants and animals, as well as the health and safety of park visitors and employees. The IPMP/EA would promote a consistent management and compliance approach throughout the 15 NCR parks by providing the parks with a suite of tools, strategies and best management practices from which to choose. The IPMP/EA is expected to be the primary guidance for invasive plant management in the aforementioned parks.

Coordination to Date

The NPS has been conducting inquiries for species of special concern under Section 7 of the ESA using the USFWS's ECOS search tool. Inquiries are being conducted on a quarterly basis, with the first inquiries conducted in January 2015. In each quarter, separate inquiries are conducted for select counties of the three states – Virginia, West Virginia, and Maryland – and the District of Columbia where the 15 NCR parks are located. Results from these inquiries are reviewed against current NPS information regarding species of special concern in the 15 NCR parks. The most recent inquiry for Maryland, dated February 18, 2016, can found in Attachment B.

Of the three USFWS field offices that have jurisdiction within the NCR, only the West Virginia Field Office requested additional information through the ECOS process. On March 31, 2015, the NPS submitted a letter with additional information describing the IPMP/EA to the West Virginia Field Office. A copy of this letter is included in Attachment C. In a letter dated April 14, 2015, the West Virginia Field Office responded that the project is not likely to adversely affect federally-listed endangered or threatened species, and that no biological assessment or further Section 7 consultation is required. A copy of the letter is included in Attachment C. To date, no other requests for additional information or other responses have been received from USFWS field offices with jurisdiction in the NCR following the successive ECOS inquiries.

Non-native Invasive Plant Treatment Methods Proposed

The implementation of the IPMP/EA would increase the options available to staff at individual parks. Specifically, the IPMP/EA would:

- Establish priorities for the treatment of non-native invasive plants.
- Standardize and streamline the decision-making process regarding the treatment of non-native invasive plants across all 15 NCR parks.

The IPMP/EA would prioritize treatment of non-native invasive plants at each park by both species and location. Each park within the NCR would develop an annual non-native invasive plant treatment strategy based on the IPMP/EA that reflects the current needs and funding resources of the 15 NCR parks. An adaptive management approach would be used to improve outcomes during both the year planned and future planning years. The focus would be on removing the most destructive non-native invasive plants at the highest priority places. Removing non-native invasive plants would improve the habitat for listed species. Invasive treatment methods that would be available to park managers under IPMP/EA include chemical, biological, manual, mechanical, and physical methods:

- **Chemical**

Chemical treatment methods include multiple types of herbicides that could be used to control non-native invasive plant species. Selective herbicides control certain target plants while limiting effects to non-target plants. Non-selective herbicides can be effective for treating invasive plants in areas where desirable plants are scarce or absent. Herbicides can also be used to treat small patches of invasive plants where hand pulling or cutting is not feasible. The use of chemical treatment methods consists of applying herbicides as prescribed by their labels, using a variety of application methods.

When herbicides are used, best management practices would be followed to ensure that the overall effectiveness is maximized and the potential for impacts on threatened, endangered and candidate species is minimized. All contractors would comply with NPS policies when applying herbicides.

Application methods include:

- Foliar spray
- Aerial spraying
- Cut surface
- Basal Bark
- Hand wicking and swiping

- **Biological**

Biological treatment methods, also known as biological control or biocontrol, involve the importation and release of host-specific natural enemies (or “agents”) to aid in the management of non-native invasive plants. This method can be used to manage invasive non-native plants that lack effective natural enemies in areas where such plants occur.

To avoid damaging non-target species, biological control agents must be highly host specific. Agents are tested for host specificity initially in their native range and then in quarantine conditions in the United States. Agents are only approved for release if testing indicates a very low likelihood of non-target effects, as determined by the Technical Advisory Group for Biological Control Agents of Weeds (TAG), a group of experts that report to the USDA’s Animal and Plant Health Inspection Service (APHIS). For the protection of threatened and endangered species, permission for release must be secured from the USFWS before release;

therefore, no listed threatened, endangered or candidate species in NCR parks would be at risk from biological treatment.

- **Manual**

Manual treatment methods refer to pulling or otherwise removing non-native invasive plants by hand, or with the use of simple non-motorized tools such as hand-held pruners and clippers. This method can be used in any area. Manual treatment is most effective for pulling shallow-rooted species. Manual pulling of deep-rooted species may require repeated treatment to effectively deplete the root system, as portions of roots can break off, remain in the soil, and regenerate. Hand pulling is conducted by removing as much of the root as possible while minimizing soil disturbance. However, it should be noted that disturbance of the soil can stimulate the seed germination of both native and non-native species. Manual treatment methods could be used to treat individual plants or larger areas encompassing multiple plants.

- **Mechanical**

Mechanical treatment methods involve the use of cutting tools, pulling tools, power tools, and/or heavy equipment to inflict physical damage on or remove part or all of one or more non-native invasive plants. Hand-cutting tools are a treatment option for removing the aboveground portions of annual or biennial plants. The use of hand tools, like trowels, shovels, and pulaskis, is a simple form of mechanical treatment. These tools can be used to remove a larger portion of the root system or to sever the plant's taproot below the point where nutrients are stored. Efforts would be made to collect and dispose of viable seeds from plants that are cut or to cut plants when seeds are not viable. Pulling tools (e.g., Weed Wrenches™) are a treatment option for removing individual plants that are deep-rooted. Pulling tools could be used to control small infestations, such as when an invasive plant is first identified in an area. Such tools grip the plant stem and remove the root by providing leverage.

- **Physical**

Physical treatment methods proposed in the IPMP/EA involve controlling invasive species with environmental alterations such as smothering, solar sterilization, thermal controls methods, and prescribed fire.

Smothering and Solar Sterilization

Infestations of non-native invasive plants can be smothered in smaller areas by covering the area with thick woven geotextile shade cloth, cardboard, plastic sheeting, or mulch. Shading the area with the cloth will generally kill all vegetation under the cloth if it is left in place for an extended period of time. The cloth is typically held to the ground using stakes, staples, or heavy weights.

Solar soil sterilization (also referred to as soil solarization) is a technique used to control vegetation and/or soil-borne pathogens. Clear plastic is spread over the soil surface and secured tightly around the edges. The plastic is left in place during the growing season for

extended periods (weeks or months). Heat builds up between the soil and plastic on sunny days. Solar sterilization, as the term implies, is non-selective. It is an aggressive technique and should only be used where the intent is to kill everything under the plastic. A benefit of this technique is that the seed banks of unwanted plants are largely destroyed within a few inches of the soil surface.

Thermal Control

Treating non-native invasive plants with heat destroys plant cells and causes plant proteins to coagulate, disabling normal plant function and weakening the plant. Sources of thermal action can include open flame, hot water, steam, hot foam, or radiant heat. Non-native invasive plants vary in their response to thermal control. Newly emerged, small, or non-native invasive plants with small root reserves are more susceptible to thermal control methods. The consistent, repeated application of thermal control treatments is often necessary to substantially reduce the quantity of non-native invasive plants in a particular area.

Prescribed Fire

Prescribed fire treatments consist of applying fire to a predetermined area to reduce the growth of invasive plants and to increase the growth of desirable plants. The success of prescribed fire differs substantially among species. Prescribed fire is typically most effective when the invasive plant is more susceptible to the effects of fire than the intermingled native plants. Prescribed fire may also be used to control invasive cool-season plants or for fuel reduction following large-scale mechanical treatment (e.g., removal of burn piles).

It is likely that the use of prescribed fire would be subject to additional compliance requirements that are not included in the scope of the IPMP/EA, such as a burn management plan or additional review under the National Environmental Policy Act (NEPA) or ESA.

• Cultural

Cultural treatments are practices that promote the growth of desirable plants and reduce the opportunities for invasive plants to grow. Examples include irrigation and seeding of native plant species. Cultural treatment methods involve manipulating treatment areas to present invasive plants with effective native competitors. Examples of cultural treatments that could be implemented by parks include:

- Prevention
- Seeding/planting
- Cover crops and nurse crops
- Livestock grazing

Conservation Measures to Protect Threatened and Endangered Species during the Project

Under the IPMP/EA, parks would implement several species-specific best management practices designed to prevent non-target impacts of invasive plant treatments on listed or candidate native plants, wildlife, and fish species. These measures are described below. However, as new

protective conservation measures for federally listed or candidate species are developed by the USFWS, those measures would also be implemented, as applicable. Similarly, as new species are listed under the ESA and critical habitats are defined, parks would be responsible for consulting and implementing protective measures for those newly listed species prior to invasive plant treatment actions, as appropriate.

Threatened and Endangered Species Best Management Practices

Under the IPMP/EA, parks would employ the following best management practices to avoid or minimize potential effects on federally listed threatened, endangered, or candidate species:

- Field personnel would be trained to recognize and avoid known and potentially present threatened, endangered, and candidate species in their work sites and travel routes, and would be provided information on locations of known habitats for listed or candidate species.
- Before working at a site, staff would be instructed on any known or potentially present listed threatened or endangered and candidate species. No-spray zones (buffer) would be used around all federally listed threatened, endangered and candidate species.
- Where chemical treatment is needed near threatened or endangered plants, hand spraying or hand wicking would be prioritized.
- If boom treatments are used to apply herbicides, a large no-spray zone would be implemented and defined by species and site conditions.
- Plowing, harrowing, or other forms of tilling would not be used in areas where such activities would have an adverse impact on known populations of threatened or endangered plants.
- Utility task vehicles (UTVs) or off-road vehicles would not be used in areas where they would have an adverse impact on known populations of threatened or endangered plants.
- No alteration of the environment, including tree removal, would occur within 1/4 mile of known NLEB hibernacula.
- Trees would not be removed within 150 feet of any known NLEB maternity roost tree during the pup-rearing season (June 1 through July 31).
- Between February 15 and October 15, known NLEB or Indiana bat roost trees would not be removed unless necessary to address a direct threat to human life and property (i.e. hazard trees).
- Within the geographic summer range of the Indiana bat, the clearing of highly suitable roost trees would be minimized; this includes snags (dead trees), shagbark hickories (*Carya ovata*), other trees with shaggy or exfoliating bark, and trees of any species over 26 inches in diameter.

Conclusion

In general, implementation of the IPMP/EA is anticipated to result in a long-term beneficial effect on federally listed or candidate species through the removal or reduction of non-native invasive plant species in the 15 NCR parks and the resulting promotion of native plants and habitats that support all native species, including those protected under the ESA. For each action, implementation of the appropriate conservation measures and best management practices as well

as further coordination with USFWS when applicable would avoid or minimize short-term adverse effects.

Therefore, the NPS finds that implementation of the IPMP/EA and associated conservation measures and best management practices, may affect, but is not likely to adversely affect ESA-listed or candidate species.

The NPS is requesting your review of, and concurrence with, this finding. Should you need more information, do not hesitate to contact me at 202-339-8317 or NCR threatened and endangered species coordinator Diane Pavek at 202-339-8309.

Sincerely,

A handwritten signature in black ink, appearing to be 'Mark Frey', written in a cursive style.

Mark Frey
Exotic Plant Management Team Liaison

Attachments:

- Attachment A – Figures
- Attachment B – USFWS ECOS List of Threatened and Endangered Species
- Attachment C – WV Field Office – No Effect/Not Likely to Adversely Affect Concurrence Form



United States Department of the Interior

NATIONAL PARK SERVICE

National Capital Region
Natural Resources & Science
4598 MacArthur Boulevard, N.W.
Washington, D.C. 20007-1582

March 17, 2016

Cynthia A. Schulz, Supervisor
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, Virginia 23061-4410

**RE: Invasive Plant Management Plan/Programmatic Environmental Assessment—
Informal Section 7 consultation for small whorled pogonia (*Isotria medeoloides*) and
northern long-eared bat (*Myotis septentrionalis*)**

Dear Ms. Schulz:

The National Park Service (NPS) is continuing informal Section 7 of the Endangered Species Act (ESA) consultation with the US Fish and Wildlife Service (USFWS) on two federally listed species for the implementation of the Invasive Plant Management Plan and Programmatic Environmental Assessment (IPMP/EA) for the 15 park units within National Capital Region (NCR). For each park-level action to be undertaken under the proposed IPMP/EA, if federally listed or candidate species occur in the project action area, each park would review the potential of the action to affect these species and would further consult with the USFWS as needed. NCR parks have not been assigned critical habitat for these species.

Figures showing the geographic extent of the action area for the IPMP/EA within the Commonwealth of Virginia are included as Attachment A. The project as well as threatened and endangered species best management practices are described below.

Of the 15 parks addressed in the IPMP/EA, the following are located entirely within Virginia:

- Manassas National Battlefield Park
- Prince William Forest Park
- Wolf Trap National Park for the Performing Arts

Additionally, the following parks have portions or park sites within Virginia:

- George Washington Memorial Parkway
- Harpers Ferry National Historical Park

This informal consultation covers the following species known to occur within the boundaries of the aforementioned NPS parks:

- Small whorled pogonia (*Isotria medeoloides*)

- Northern long-eared bat (*Myotis septentrionalis*) (NLEB)

The following species were identified by the USFWS's Environmental Conservation Online System (ECOS) search tool as potentially occurring within the Virginia portion of the project area, but have not been observed in NPS parks:

- Sensitive joint-vetch (*Aeschynomene virginica*)
- Dwarf wedgemussel (*Alasmidonta heterodon*)
- Harperella (*Harperella nodosum*, syn. *Ptilimnium nodosum*)

Project Description

The NPS proposes to implement an IPMP/EA at the 15 parks of the NCR. The IPMP/EA would ensure that all NCR parks have access to a range of methods used for the treatment of non-native invasive plant species. Such methods consist of chemical, biological, manual, mechanical, physical, and cultural treatment methods.

The purpose of the IPMP/EA is to protect and restore natural and cultural resources in the 15 NCR parks by controlling, containing, or substantially minimizing populations of non-native invasive plant species through targeted treatment. The IPMP/EA would provide guidance to the individual NCR parks on non-native invasive plant management. To achieve this, the IPMP/EA identifies and would implement environmentally sound, cost-effective invasive plant management strategies using an integrated pest management framework that poses the least possible risk to people and park resources.

The IPMP/EA is needed because non-native invasive plants in the 15 NCR parks disrupt ecosystems, degrade cultural resources, and diminish visitor use and experience. Invasive plants inhibit the growth of native plants, reduce habitat quality for native wildlife and compromise cultural landscapes and historic structures. The full range of available treatment strategies is not currently being used throughout the 15 NCR parks, necessitating the development and adoption of standardized best management practices and guidance tools to mitigate impacts on park and visitor activities potentially resulting from the implementation of those strategies. Such impacts include the inadvertent effects of particular treatment methods on non-targeted species of plants and animals, as well as the health and safety of park visitors and employees. The IPMP/EA would promote a consistent management and compliance approach throughout the 15 NCR parks by providing the parks with a suite of tools, strategies and best management practices from which to choose. The IPMP/EA is expected to be the primary guidance for invasive plant management in the aforementioned parks.

Coordination to Date

The NPS has been conducting inquiries for species of special concern under Section 7 of the ESA using the USFWS's ECOS search tool. Inquiries are being conducted on a quarterly basis, with the first inquiries conducted in January 2015. In each quarter, separate inquiries are conducted for select counties of the three states – Virginia, West Virginia, and Maryland – and the District of Columbia where the 15 NCR parks are located. Results from these inquiries are reviewed against current NPS information regarding species of special concern in the 15 NCR

parks. The most recent inquiry for Virginia, dated January 6, 2016, can be found in Attachment B.

Of the three USFWS field offices that have jurisdiction within the NCR, only the West Virginia Field Office requested additional information through the ECOS process. On March 31, 2015, the NPS submitted a letter with additional information describing the IPMP/EA to the West Virginia Field Office. A copy of this letter is included in Attachment C. In a letter dated April 14, 2015, the West Virginia Field Office responded that the project is not likely to adversely affect federally-listed endangered or threatened species, and that no biological assessment or further Section 7 consultation is required. A copy of the letter is included in Attachment C. To date, no other requests for additional information or other responses have been received from USFWS field offices with jurisdiction in the NCR following the successive ECOS inquiries.

Non-native Invasive Plant Treatment Methods Proposed

The implementation of the IPMP/EA would increase the options available to staff at individual parks. Specifically, the IPMP/EA would:

- Establish priorities for the treatment of non-native invasive plants.
- Standardize and streamline the decision-making process regarding the treatment of non-native invasive plants across all 15 NCR parks.

The IPMP/EA would prioritize treatment of non-native invasive plants at each park by both species and location. Each park within the NCR would develop an annual non-native invasive plant treatment strategy based on the IPMP/EA that reflects the current needs and funding resources of the 15 NCR parks. An adaptive management approach would be used to improve outcomes during both the year planned and future planning years. The focus would be on removing the most destructive non-native invasive plants at the highest priority places. Removing non-native invasive plants would improve the habitat for listed species. Invasive treatment methods that would be available to park managers under the IPMP/EA include chemical, biological, manual, mechanical, and physical methods.

- **Chemical**

Chemical treatment methods include multiple types of herbicides that could be used to control non-native invasive plant species. Selective herbicides control certain target plants while limiting effects to non-target plants. Non-selective herbicides can be effective for treating invasive plants in areas where desirable plants are scarce or absent. Herbicides can also be used to treat small patches of invasive plants where hand pulling or cutting is not feasible. The use of chemical treatment methods consists of applying herbicides as prescribed by their labels, using a variety of application methods.

When herbicides are used, best management practices would be followed to ensure that the overall effectiveness is maximized and the potential for impacts on threatened, endangered and candidate species is minimized. All contractors would comply with NPS policies when applying herbicides.

Application methods include:

- Foliar spray
- Aerial spraying
- Cut surface
- Basal Bark
- Hand wicking and swiping

- **Biological**

Biological treatment methods, also known as biological control or biocontrol, involve the importation and release of host-specific natural enemies (or “agents”) to aid in the management of non-native invasive plants. This method can be used to manage invasive non-native plants that lack effective natural enemies in areas where such plants occur.

To avoid damaging non-target species, biological control agents must be highly host specific. Agents are tested for host specificity initially in their native range and then in quarantine conditions in the United States. Agents are only approved for release if testing indicates a very low likelihood of non-target effects, as determined by the Technical Advisory Group for Biological Control Agents of Weeds (TAG), a group of experts that report to the USDA’s Animal and Plant Health Inspection Service (APHIS). For the protection of threatened and endangered species, permission for release must be secured from the USFWS before release; therefore, no listed threatened, endangered or candidate species in NCR parks would be at risk from biological treatment.

- **Manual**

Manual treatment methods refer to pulling or otherwise removing non-native invasive plants by hand, or with the use of simple non-motorized tools such as hand-held pruners and clippers. This method can be used in any area. Manual treatment is most effective for pulling shallow-rooted species. Manual pulling of deep-rooted species may require repeated treatment to effectively deplete the root system, as portions of roots can break off, remain in the soil, and regenerate. Hand pulling is conducted by removing as much of the root as possible while minimizing soil disturbance. However, it should be noted that disturbance of the soil can stimulate the seed germination of both native and non-native species. Manual treatment methods could be used to treat individual plants or larger areas encompassing multiple plants.

- **Mechanical**

Mechanical treatment methods involve the use of cutting tools, pulling tools, power tools, and/or heavy equipment to inflict physical damage on or remove part or all of one or more non-native invasive plants. Hand-cutting tools are a treatment option for removing the aboveground portions of annual or biennial plants. The use of hand tools, like trowels, shovels, and pulaskis, is a simple form of mechanical treatment. These tools can be used to remove a larger portion of the root system or to sever the plant’s taproot below the point where nutrients are stored. Efforts would be made to collect and dispose of viable seeds from plants that are cut or to cut plants when seeds are not viable. Pulling tools (e.g., Weed Wrenches™) are a treatment option for removing individual plants that are deep-rooted. Pulling tools could be used to control small infestations, such as when an invasive plant is

first identified in an area. Such tools grip the plant stem and remove the root by providing leverage.

- **Physical**

Physical treatment methods proposed in the IPMP/EA involve controlling invasive species with environmental alterations such as smothering, solar sterilization, thermal controls methods, and prescribed fire.

Smothering and Solar Sterilization

Infestations of non-native invasive plants can be smothered in smaller areas by covering the area with thick woven geotextile shade cloth, cardboard, plastic sheeting, or mulch. Shading the area with the cloth will generally kill all vegetation under the cloth if it is left in place for an extended period of time. The cloth is typically held to the ground using stakes, staples, or heavy weights.

Solar soil sterilization (also referred to as soil solarization) is a technique used to control vegetation and/or soil-borne pathogens. Clear plastic is spread over the soil surface and secured tightly around the edges. The plastic is left in place during the growing season for extended periods (weeks or months). Heat builds up between the soil and plastic on sunny days. Solar sterilization, as the term implies, is non-selective. It is an aggressive technique and should only be used where the intent is to kill everything under the plastic. A benefit of this technique is that the seed banks of unwanted plants are largely destroyed within a few inches of the soil surface.

Thermal Control

Treating non-native invasive plants with heat destroys plant cells and causes plant proteins to coagulate, disabling normal plant function and weakening the plant. Sources of thermal action can include open flame, hot water, steam, hot foam, or radiant heat. Non-native invasive plants vary in their response to thermal control. Newly emerged, small, or non-native invasive plants with small root reserves are more susceptible to thermal control methods. The consistent, repeated application of thermal control treatments is often necessary to substantially reduce the quantity of non-native invasive plants in a particular area.

Prescribed Fire

Prescribed fire treatments consist of applying fire to a predetermined area to reduce the growth of invasive plants and to increase the growth of desirable plants. The success of prescribed fire differs substantially among species. Prescribed fire is typically most effective when the invasive plant is more susceptible to the effects of fire than the intermingled native plants. Prescribed fire may also be used to control invasive cool-season plants or for fuel reduction following large-scale mechanical treatment (e.g., removal of burn piles).

It is likely that the use of prescribed fire would be subject to additional compliance requirements that are not included in the scope of the IPMP/EA, such as a burn management

plan or additional coordination review under the National Environmental Policy Act (NEPA) or ESA.

- **Cultural**

Cultural treatments are practices that promote the growth of desirable plants and reduce the opportunities for invasive plants to grow. Examples include irrigation and seeding of native plant species. Cultural treatment methods involve manipulating treatment areas to present invasive plants with effective native competitors. Examples of cultural treatments that could be implemented by parks include:

- Prevention
- Seeding/planting
- Cover crops and nurse crops
- Livestock grazing

Conservation Measures to Protect Threatened and Endangered Species during the Project

Under the IPMP/EA, parks would implement several species-specific best management practices designed to prevent non-target impacts of invasive plant treatments on listed or candidate native plants, wildlife, and fish species. These measures are described below. However, as new protective conservation measures for federally listed or candidate species are developed by the USFWS, those measures would also be implemented, as applicable. Similarly, as new species are listed under the ESA and critical habitats are defined, parks would be responsible for consulting and implementing protective measures for those newly listed species prior to invasive plant treatment actions, as appropriate.

Threatened and Endangered Species Best Management Practices

Under the IPMP/EA, parks would employ the following best management practices to avoid or minimize potential effects on federally listed threatened, endangered, or candidate species:

- Field personnel would be trained to recognize and avoid known and potentially present threatened, endangered, and candidate species in their work sites and travel routes, and would be provided information on locations of known habitats for listed or candidate species.
- Before working at a site, staff would be instructed on any known or potentially present listed threatened or endangered and candidate species. No-spray zones (buffer) would be used around all federally listed threatened, endangered and candidate species.
- Where chemical treatment is needed near threatened or endangered plants, hand spraying or hand wicking would be prioritized.
- If boom treatments are used to apply herbicides, a large no-spray zone would be implemented, defined by species and site conditions.
- Plowing, harrowing, or other forms of tilling would not be used in areas where such activities would have an adverse impact on known populations of threatened or endangered plants.
- Utility task vehicles (UTVs) and off-road vehicles would not be used in areas where they would have an adverse impact on known populations of threatened or endangered plants.

- No alteration of the environment, including tree removal, would occur within 1/4 mile of known NLEB hibernacula.
- Trees would not be removed within 150 feet of any known NLEB maternity roost tree during the pup-rearing season (June 1 through July 31).
- Between February 15 and October 15, known NLEB roost trees would not be removed, unless necessary to address a direct threat to human life and property (i.e. hazard trees).

Note that presently there are no known roost or maternity roost trees or hibernacula for the NLEB within the parks addressed in this letter.

Conclusion

In general, implementation of the IPMP/EA is anticipated to result in a long-term beneficial effect on federally listed species through the removal or reduction of non-native invasive plant species in the 15 NCR parks and the resulting promotion of native plants and habitats that support all native species, including those protected under the ESA. For each action, implementation of the appropriate conservation measures and best management practices as well as further coordination with USFWS when applicable would avoid or minimize short-term adverse effects.

Therefore, the NPS finds that implementation of the IPMP/EA and associated conservation measures and best management practices, may affect, but is not likely to adversely affect ESA-listed or candidate species.

The NPS is requesting your review of, and concurrence with, this finding. Should you need more information, do not hesitate to contact me at 202-339-8317 or NCR threatened and endangered species coordinator Diane Pavek at 202-339-8309.

Sincerely,



Mark Frey
Exotic Plant Management Team Liaison

Attachments:

- Attachment A – Figures
- Attachment B – USFWS ECOS List of Threatened and Endangered Species
- Attachment C – WV Field Office – No Effect/Not Likely to Adversely Affect Concurrence Form

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United States Department of the Interior

FISH AND WILDLIFE SERVICE



Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

October 30, 2015

Greetings:

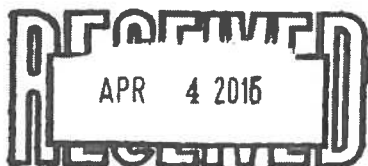
Due to increased workload and refinement of our priorities in Virginia, this office will no longer provide individual responses to requests for environmental reviews. However, we want to ensure that U.S. Fish and Wildlife Service trust resources continue to be conserved. When that is not possible, we want to ensure that impacts to these important natural resources are minimized and appropriate permits are applied for and received. We have developed a website that provides the steps and information necessary to allow any individual or entity requiring review/approval of their project to complete a review and come to the appropriate conclusion. This site can be accessed at: <http://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html>.

The website is frequently updated to provide new species/trust resource information and methods to review projects. Refer to the website for each project review to ensure that current information and methods are utilized.

If you have any questions about project reviews or need assistance, please contact Troy Andersen of this office at (804) 824-2428 or troy_andersen@fws.gov.

Sincerely,

Cindy Schulz
Field Supervisor
Virginia Ecological Services



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USFWS Quarterly Coordination – April 2016

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United States Department of the Interior



FISH AND WILDLIFE SERVICE

Chesapeake Bay Ecological Services Field Office

177 ADMIRAL COCHRANE DRIVE

ANNAPOLIS, MD 21401

PHONE: (410)573-4599 FAX: (410)266-9127

URL: www.fws.gov/chesapeakebay/;

www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

Consultation Code: 05E2CB00-2016-SLI-0015

April 18, 2016

Event Code: 05E2CB00-2016-E-01145

Project Name: NCR Invasive Plant Management Plan/EA

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Official Species List

Provided by:

Chesapeake Bay Ecological Services Field Office

177 ADMIRAL COCHRANE DRIVE

ANNAPOLIS, MD 21401

(410) 573-4599

<http://www.fws.gov/chesapeakebay/>

<http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html>

Consultation Code: 05E2CB00-2016-SLI-0015

Event Code: 05E2CB00-2016-E-01145

Project Type: INVASIVE SPECIES CONTROL

Project Name: NCR Invasive Plant Management Plan/EA

Project Description: This request is an update of a July 8, 2015 request (Consultation Code: 05E2CB00-2015-SLI-1094 / Event Code: 05E2CB00-2015-E-01009). The only change is that 90 days have elapsed.

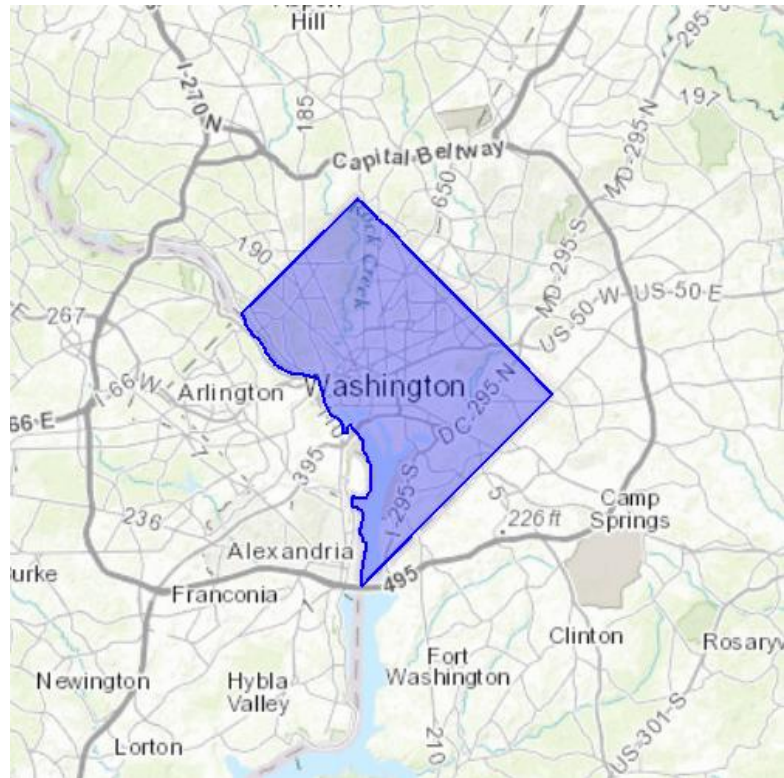
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: District of Columbia, DC



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Crustaceans	Status	Has Critical Habitat	Condition(s)
Hay's Spring amphipod (<i>Stygobromus hayi</i>) Population: Entire	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Critical habitats that lie within your project area

There are no critical habitats within your project area.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Appendix A: FWS National Wildlife Refuges and Fish Hatcheries

There are no refuges or fish hatcheries within your project area.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Appendix B: NWI Wetlands

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The following NWI Wetland types intersect your project area in one or more locations. To understand the NWI Classification Code, see <http://wetlandsfws.usgs.gov/Data/interpreters/wetlands.aspx>.

Wetland Types	NWI Classification Code	Total Acres
Freshwater Emergent Wetland	PEM1R	7.49
Freshwater Emergent Wetland	PEM1Ex	0.265
Freshwater Emergent Wetland	PEM1C	3.99
Freshwater Emergent Wetland	PEM1A	0.26
Freshwater Forested/Shrub Wetland	PFO1A	76.3
Freshwater Forested/Shrub Wetland	PFO1Eh	0.882
Freshwater Forested/Shrub Wetland	PFO1R	86.2
Freshwater Forested/Shrub Wetland	PFO1E	6.24
Freshwater Forested/Shrub Wetland	PSS1A	3.03
Freshwater Forested/Shrub Wetland	PFO1C	18.6
Freshwater Forested/Shrub Wetland	PFO1/EM5R	10.2
Freshwater Forested/Shrub Wetland	PSS1S	0.557
Freshwater Forested/Shrub Wetland	PFO1S	33.0
Freshwater Forested/Shrub Wetland	PFO/SS1A	4.16
Freshwater Forested/Shrub Wetland	PSS1C	12.3



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Freshwater Pond	PUBHh	5.0
Freshwater Pond	PUBHx	11.2
Freshwater Pond	PAB/UBF	0.968
Freshwater Pond	PAB/UBH	2.13
Freshwater Pond	PABHh	6.03
Freshwater Pond	PUBFh	0.983
Lake	L2EM2N	25.8
Lake	L1UBH	224.0
Lake	L1UBKx	40.7
Lake	L1UBHh	81.2
Lake	L1UBV	148.0
Riverine	R1USN	40.4
Riverine	R3UBH	127.0
Riverine	R1EM2N	29.7
Riverine	R3USC	4.5
Riverine	R1USR	4.99
Riverine	R1UBVx	2.89
Riverine	R1UBV	17000.0



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401

PHONE: (410)573-4599 FAX: (410)266-9127

URL: www.fws.gov/chesapeakebay/;

www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

Consultation Code: 05E2CB00-2016-SLI-0017

April 18, 2016

Event Code: 05E2CB00-2016-E-01146

Project Name: NCR Invasive Plant Management Plan/EA

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Official Species List

Provided by:

Chesapeake Bay Ecological Services Field Office

177 ADMIRAL COCHRANE DRIVE

ANNAPOLIS, MD 21401

(410) 573-4599

<http://www.fws.gov/chesapeakebay/>

<http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html>

Consultation Code: 05E2CB00-2016-SLI-0017

Event Code: 05E2CB00-2016-E-01146

Project Type: INVASIVE SPECIES CONTROL

Project Name: NCR Invasive Plant Management Plan/EA

Project Description: This request is an update of a request from July 8, 2015 (Consultation Code: 05E2CB00-2015-SLI-1093 / Event Code: 05E2CB00-2015-E-01008). The only change is that 90 days have passed.

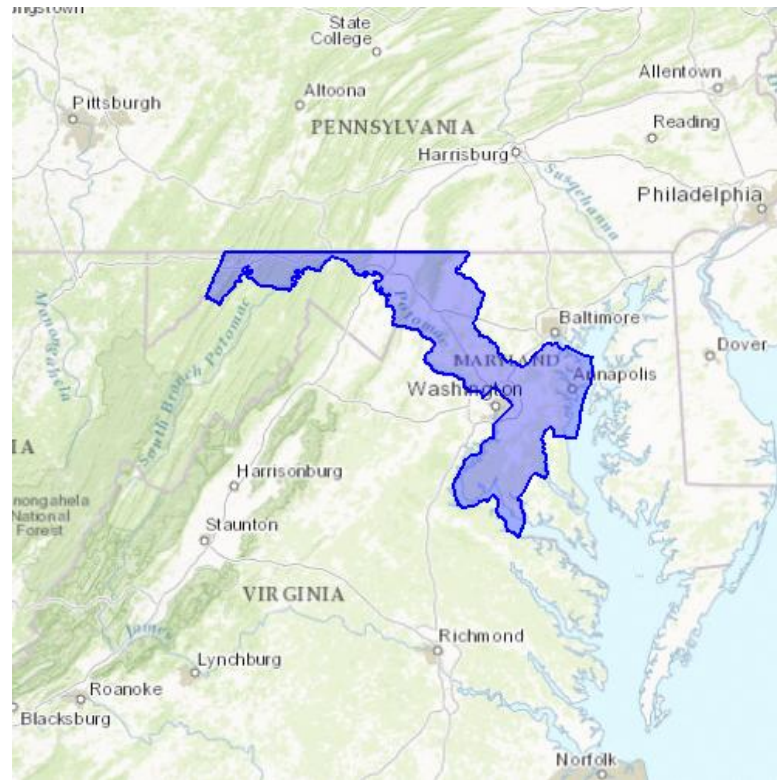
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Allegany, MD | Anne Arundel, MD | Charles, MD | Frederick, MD | Montgomery, MD | Prince George's, MD | Washington, MD



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Endangered Species Act Species List

There are a total of 9 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Clams	Status	Has Critical Habitat	Condition(s)
Dwarf wedgemussel (<i>Alasmidonta heterodon</i>) Population: Entire	Endangered		
Crustaceans			
Hay's Spring amphipod (<i>Stygobromus hayi</i>) Population: Entire	Endangered		
Flowering Plants			
harperella (<i>Ptilimnium nodosum</i>)	Endangered		
Northeastern bulrush (<i>Scirpus ancistrochaetus</i>)	Endangered		
sensitive joint-vetch (<i>Aeschynomene virginica</i>)	Threatened		
Swamp pink (<i>Helonias bullata</i>)	Threatened		
Insects			
Puritan tiger beetle (<i>Cicindela puritana</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Population: Entire			
Mammals			
Indiana bat (<i>Myotis sodalis</i>) Population: Entire	Endangered		
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Critical habitats that lie within your project area

There are no critical habitats within your project area.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Appendix A: FWS National Wildlife Refuges and Fish Hatcheries

The following FWS National Wildlife Refuges and Fish Hatcheries lie fully or partially within your project area.

Patuxent Research Refuge

12100 BEECH FOREST ROAD, ROOM 138

LAUREL, MD 20708

(301) 497-5580



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Appendix B: NWI Wetlands

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The following NWI Wetland types intersect your project area in one or more locations. To understand the NWI Classification Code, see <http://wetlandsfws.usgs.gov/Data/interpreters/wetlands.aspx>.

Wetland Types	NWI Classification Code	Total Acres
Estuarine and Marine Deepwater	E1UBL6	44500.0
Freshwater Emergent Wetland	PEM1A	116.0
Freshwater Emergent Wetland	PEM1Ad	21.7
Freshwater Emergent Wetland	PEM5A	228.0
Freshwater Emergent Wetland	PEM1E	3.97
Freshwater Emergent Wetland	PEM1C	77.9
Freshwater Emergent Wetland	PEM5E	22.7
Freshwater Emergent Wetland	PEM5C	29.8
Freshwater Emergent Wetland	PEM1Eh	0.753
Freshwater Emergent Wetland	PEM5B	1.59
Freshwater Emergent Wetland	PEM5/UBF	1.37
Freshwater Emergent Wetland	PEM5Ax	12.0
Freshwater Emergent Wetland	PEM5/UBFH	0.833
Freshwater Emergent Wetland	PEM1Fh	0.993
Freshwater Emergent Wetland	PEM5Cd	1.96



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Freshwater Emergent Wetland	PEM1/UBF	5.6
Freshwater Emergent Wetland	PEM1Ch	0.7
Freshwater Emergent Wetland	PEM5FH	0.496
Freshwater Emergent Wetland	PEM1B	0.727
Freshwater Emergent Wetland	PEM1Kx	1.31
Freshwater Forested/Shrub Wetland	PSS1A	63.1
Freshwater Forested/Shrub Wetland	PFO1A	1250.0
Freshwater Forested/Shrub Wetland	PFO1E	57.4
Freshwater Forested/Shrub Wetland	PFO/SS1A	24.7
Freshwater Forested/Shrub Wetland	PFO1/EM5A	12.0
Freshwater Forested/Shrub Wetland	PSS1/EM5A	175.0
Freshwater Forested/Shrub Wetland	PFO1/SS1E	7.37
Freshwater Forested/Shrub Wetland	PSS1/EM1E	0.38
Freshwater Forested/Shrub Wetland	PFO1Ch	9.66
Freshwater Forested/Shrub Wetland	PFO/EM5A	2.47
Freshwater Forested/Shrub Wetland	PFO1C	77.7
Freshwater Forested/Shrub Wetland	PFO1/SS1A	13.2
Freshwater Forested/Shrub Wetland	PSS1E	5.46
Freshwater Forested/Shrub Wetland	PSS1C	20.3
Freshwater Forested/Shrub Wetland	PFO1/EM1A	1.52
Freshwater Forested/Shrub Wetland	PSS1/EM5FH	2.45
Freshwater Forested/Shrub Wetland	PFO1R	51.8



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Freshwater Forested/Shrub Wetland	PFO1/4E	57.7
Freshwater Forested/Shrub Wetland	PFO1B	3.48
Freshwater Forested/Shrub Wetland	PSS1/EM1A	18.1
Freshwater Forested/Shrub Wetland	PSS1/EM1Ad	6.54
Freshwater Forested/Shrub Wetland	PFO5/UBFx	2.08
Freshwater Forested/Shrub Wetland	PFO1Ad	5.98
Freshwater Forested/Shrub Wetland	PFO5/UBHh	0.992
Freshwater Forested/Shrub Wetland	PSS1/EM5C	1.74
Freshwater Forested/Shrub Wetland	PSS1/EM5E	0.645
Freshwater Forested/Shrub Wetland	PFO/SS1E	2.76
Freshwater Forested/Shrub Wetland	PSS1/EM1F	3.35
Freshwater Forested/Shrub Wetland	PFO1/EM5C	0.182
Freshwater Pond	PUBHh	239.0
Freshwater Pond	PUBHx	45.2
Freshwater Pond	PUBFx	3.05
Freshwater Pond	PUBF	0.848
Freshwater Pond	PUBH	1.91
Freshwater Pond	PABKx	194.0
Lake	L1UBHh	559.0
Lake	L2RS1Ah	0.285
Other	PRBKx	19.7
Other	PUBFh	0.996



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Riverine	R2UBH	783.0
Riverine	R3RSA	1.76
Riverine	R3UBH	127.0
Riverine	R3RBH	387.0

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United States Department of the Interior



FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 SHORT LANE

GLOUCESTER, VA 23061

PHONE: (804)693-6694 FAX: (804)693-9032

URL: www.fws.gov/northeast/virginiafield/

Consultation Code: 05E2VA00-2015-SLI-2624

April 18, 2016

Event Code: 05E2VA00-2016-E-02769

Project Name: NCR Invasive Plant Management Plan/EA

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and

endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Official Species List

Provided by:

Virginia Ecological Services Field Office

6669 SHORT LANE

GLOUCESTER, VA 23061

(804) 693-6694

<http://www.fws.gov/northeast/virginiafield/>

Consultation Code: 05E2VA00-2015-SLI-2624

Event Code: 05E2VA00-2016-E-02769

Project Type: INVASIVE SPECIES CONTROL

Project Name: NCR Invasive Plant Management Plan/EA

Project Description: On April 21, 2015 I received an official species list for this existing project (Consultation Code: 05E2VA00-2015-SLI-1755 /

Event Code: 05E2VA00-2015-E-01760). Since 90 days has passed I am requested an updated official list.

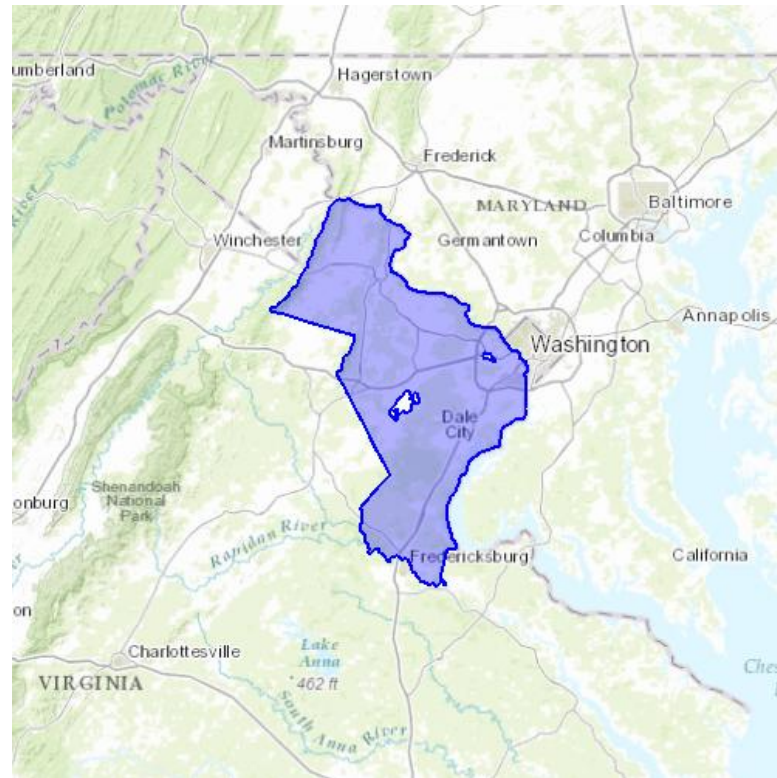
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Alexandria, VA | Arlington, VA | Fairfax, VA | Fairfax (city), VA | Loudoun, VA | Prince William, VA | Stafford, VA



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Endangered Species Act Species List

There are a total of 5 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Clams	Status	Has Critical Habitat	Condition(s)
Dwarf wedgemussel (<i>Alasmidonta heterodon</i>) Population: Entire	Endangered		
Flowering Plants			
harperella (<i>Ptilimnium nodosum</i>)	Endangered		
sensitive joint-vetch (<i>Aeschynomene virginica</i>)	Threatened		
Small Whorled pogonia (<i>Isotria medeoloides</i>)	Threatened		
Mammals			
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Critical habitats that lie within your project area

There are no critical habitats within your project area.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Appendix A: FWS National Wildlife Refuges and Fish Hatcheries

The following FWS National Wildlife Refuges and Fish Hatcheries lie fully or partially within your project area.

Featherstone National Wildlife Refuge

C/O POTOMAC RIVER NWR COMPLEX
12638 DARBY BROOK COURT
WOODBIDGE, VA 22192
(703) 490-4979

Mason Neck National Wildlife Refuge

C/O POTOMAC RIVER NWR COMPLEX
12638 DARBY BROOKE COURT
WOODBIDGE, VA 22192
(703) 490-4979

Occoquan Bay National Wildlife Refuge

C/O POTOMAC RIVER NWR COMPLEX
12638 DARBY BROOK COURT
WOODBIDGE, VA 22192
(703) 490-4979

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
West Virginia Ecological Services Field Office
694 BEVERLY PIKE
ELKINS, WV 26241
PHONE: (304)636-6586 FAX: (304)636-7824
URL: www.fws.gov/westvirginiafieldoffice/

Consultation Code: 05E2WV00-2015-SLI-0650

April 18, 2016

Event Code: 05E2WV00-2016-E-00747

Project Name: NCR Invasive Plant Management Plan/EA

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement.

If the official species list you receive identifies any listed, proposed, or candidate species as potentially occurring in the proposed project area, then further section 7 consultation under the ESA is required with the Fish and Wildlife Service. Please submit a project review request to the West Virginia Field Office. To find out what information needs to be submitted with your project review request go to this link:

<http://www.fws.gov/westvirginiafieldoffice/projectreview.html>

Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you should submit to our office.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can

be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). For information on bald and golden eagles in your project area please contact the West Virginia Division of Natural Resources, Natural Heritage Program at P.O. Box 67 Elkins, WV 26241, or call 304-637-0245.

Additionally, wind energy projects should follow the Service's wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>; and [http://www.fws.gov/westvirginiafieldoffice/PDF/Communication%20Tower%20Letter%20\(1\).pdf](http://www.fws.gov/westvirginiafieldoffice/PDF/Communication%20Tower%20Letter%20(1).pdf)

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Official Species List

Provided by:

West Virginia Ecological Services Field Office

694 BEVERLY PIKE

ELKINS, WV 26241

(304) 636-6586

<http://www.fws.gov/westvirginiafieldoffice/>

Consultation Code: 05E2WV00-2015-SLI-0650

Event Code: 05E2WV00-2016-E-00747

Project Type: INVASIVE SPECIES CONTROL

Project Name: NCR Invasive Plant Management Plan/EA

Project Description: On April 21, 2015 I received an official list for this existing project (Consultation Code: 05E2WV00-2015-SLI-0428 / Event Code: 05E2WV00-2015-E-00476). Since 90 days has passed I am requesting an updated list.

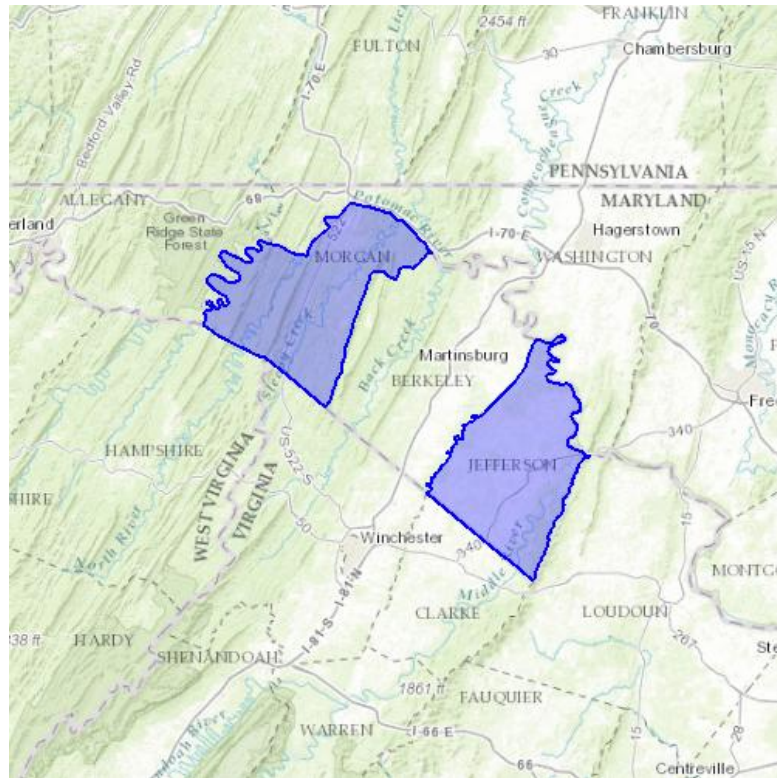
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Jefferson, WV | Morgan, WV



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Endangered Species Act Species List

There are a total of 5 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Crustaceans	Status	Has Critical Habitat	Condition(s)
Madison Cave isopod (<i>Antrolana lira</i>) Population: Entire	Threatened		
Flowering Plants			
harperella (<i>Ptilimnium nodosum</i>)	Endangered		
Northeastern bulrush (<i>Scirpus ancistrochaetus</i>)	Endangered		
Mammals			
Indiana bat (<i>Myotis sodalis</i>) Population: Entire	Endangered		
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: NCR Invasive Plant Management Plan/EA

Critical habitats that lie within your project area

There are no critical habitats within your project area.



United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
Natural Resources & Science
4598 MacArthur Boulevard, N.W.
Washington, D.C. 20007-1582

May 2, 2016

U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, Virginia 23061-4410

Re: Self Certification Letter, Invasive Plant Management Plan/ Environmental Assessment (IPMP/EA), Alexandria, Arlington, Fairfax, Loudoun, Prince William, Stafford, Virginia

We have reviewed the referenced project using the Virginia Field Office's online project review process and have followed all guidance and instructions in completing the review. We completed our review on May 2, 2016 and are submitting our self-certification package in accordance with the instructions on your website; therefore, NPS is consulting on Section 7 with ourself.

Our proposed action consists of: The National Parks Service (NPS) is developing a comprehensive region-wide Invasive Plant Management Plan/ Environmental Assessment (IPMP/EA) for 15 NPS park units located within the National Capital Region (NCR). Of these 15 parks, five are located entirely or partly within the Commonwealth of Virginia. The IPMP/EA will identify long-term natural resources management strategies to reduce the impacts or threats from invasive plants on park resources and provide opportunities for restoration (proposed action). The primary goal of the IPMP/EA is to provide park staff with adaptive, cost effective strategies for invasive plant management. No construction is proposed as a part of the actions.

The location of the project and the action area is listed below and identified on the enclosed maps:

- Manassas National Battlefield Park (entirely in Virginia)
- Prince William Forest Park (entirely in Virginia)
- Wolf Trap National Park for the Performing Arts (entirely in Virginia)
- George Washington Memorial Parkway (mostly in Virginia)
- Harpers Ferry National Historical Park (partly in Virginia)

The project is expected to be completed: The IPMP is intended to provide NPS with long-term invasive plant management strategies. However, the IPMP/EA would be reevaluated by NPS staff on a yearly basis to determine whether updates and/or additional/new analysis is needed.

The National Park Service has funded the project through appropriated funds.

The enclosed self-certification package provides the information about the listed species, no critical habitat, and de-listed bald eagles considered in our review, and the listed species

conclusions table included in the package identifies our determinations for the resources that may be affected by the project but are not likely to adversely affect.

Should you need more information, do not hesitate to contact me at 202-339-8317 or NCR threatened and endangered species coordinator Diane Pavek at 202-339-8309.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Frey', with a long horizontal stroke extending to the right.

Mark Frey
Exotic Plant Management Liaison

Enclosures:

- Official Species List from IPaC
- Maps showing the action area
- Eagle Nest Maps
- Eagle Concentration Areas Maps
- Species Conclusion Table

Appendix E

Public Scoping

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Contents

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United States Department of the Interior

NATIONAL PARK SERVICE
National Capital Region
1100 Ohio Drive, S.W.
Washington, D.C. 20242

May 11, 2015

Dear Valued Stakeholder:

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for 15 parks within the National Capital Region. The parks include Antietam National Battlefield, Catoctin Mountain Park, Chesapeake & Ohio Canal National Historical Park, George Washington Memorial Parkway, Greenbelt Park, Harpers Ferry National Historical Park, Manassas National Battlefield Park, Monocacy National Battlefield, National Capital Parks – East, National Mall and Memorial Parks, Piscataway Park, Prince William Forest Park, Rock Creek Park, White House / President's Park, and Wolf Trap National Park for the Performing Arts.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act of 1969 (NEPA) to address the issues concerning the management of invasive plant species and implement a comprehensive management strategy to be used throughout the 15 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the treatment, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

The purpose for the IPMP/EA is to decrease the impacts of invasive plants and promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. This plan is needed because invasive species are impacting cultural resources and disrupting ecological processes. The strategies in the IPMP/EA will enable parks to minimize invasive plant impacts and maximize park-specific integrated pest management successes.

At this time, the NPS is announcing the opening of a 30-day public scoping period to solicit public comments on preliminary alternatives for this proposal. The public is invited to identify any issues or concerns they might have with the proposed project so that the NPS can appropriately consider them in the preparation of the Environmental Assessment. A scoping brochure describing the project is available at the NPS Planning, Environment and Public Comment (PEPC) website at http://parkplanning.nps.gov/ncr_ipmpea.

Comments may be provided electronically at the NPS PEPC website (http://parkplanning.nps.gov/ncr_ipmpea) or submitted in writing to:

National Park Service
National Capital Region
c/o Mark Frey, Exotic Plant Management Team Liaison
4598 MacArthur Blvd. N.W.
Washington, D.C. 20007

Please submit your comments on the scope of this proposal by June 10, 2015. Once the EA is developed, it will be made available for public review and comment for a 30-day period. The NPS anticipates that the Draft IPMP/EA will be published for public review in the fall of 2015.

For further information, please contact Mark Frey at 202-339-8317 or via email at Mark_Frey@nps.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert A. Vogel", written over the printed name.

Robert A. Vogel
Regional Director



Public Scoping Newsletter

Dear Friends and Visitors,

Thank you for your interest in your national parks. While the parks in the National Capital Region (NCR)* protect many different ecosystems, they all face threats from nearly 200 species of damaging, invasive plants. The National Park Service (NPS) is preparing an Invasive Plant Management Plan and Environmental Assessment (IPMP/EA) to guide our work to ensure a healthy future – for people and nature, and well-preserved history in the parks. We will achieve this by identifying long-term invasive plant management strategies that would reduce the impacts of invasive plants to natural and cultural resources, and provide opportunities for restoring native plant communities and cultural landscapes on NPS administered and managed lands within the designated boundaries of the 15 parks.

This comprehensive approach will establish management guidelines, action options, and best practices. The plan will provide park managers with information they need to protect parks' natural ecosystems, restore native plants, preserve cultural resources, and help people enjoy these special places.

Whether the concern is invasive plants on land or in the water, park staff will be able to choose the methods that fit their specific needs and provide the most value in terms of cost and effectiveness. The plan will also help us identify the most urgent needs so we can focus our attention where the threats are most dire.



Non-native porcelainberry vines and other invasives plants covering trees and a cleared area in Rock Creek Park.

This newsletter marks the beginning of a public scoping process. We invite individuals, government agencies, organizations and interested parties to submit comments by visiting the NPS Planning, Environment, and Public Comment (PEPC) website at http://parkplanning.nps.gov/ncr_ipmpea. You may also comment by sending us a letter. Please see the “Public Scoping Period and How to Comment” section of this newsletter for more details.

Your thoughts are important to our success.

Sincerely,

Bob Vogel, Regional Director
National Park Service, National Capital Region

“While the parks in the National Capital Region protect many different ecosystems, they all face threats from nearly 200 species of damaging, invasive plants.”

*The National Capital Region includes Washington, D.C. and portions of Maryland, Virginia and West Virginia.

Scope of the IPMP/EA

The IPMP will recommend invasive plant management strategies applicable to each NPS park in the NCR and will evaluate the impacts potentially resulting from the implementation of those strategies on resources within each NPS park. It is anticipated that the management strategies would have no impacts on resources outside the boundaries of the 15 NPS parks in the NCR; thus, the scope of the invasive plant management strategies presented in the IPMP/EA and the evaluation of impacts potentially resulting from the implementation of each will be limited to the areas within the boundary of each NPS park in the NCR.

Section 106 Consultation

The scope of the EA includes consultation under section 106 of the National Historic Preservation Act. NPS will consult with the State Historic Preservation Officer of each state or jurisdiction in which the 15 NCR National Parks are located. This consultation is meant to identify buildings, structures, archeological sites, historic districts and other resources eligible or potentially eligible for listing in the National Register of Historic Places. It will help us avoid or mitigate adverse effects on those resources potentially resulting from the implementation of the IPMP/EA. Section 106 consultation will be ongoing throughout the IPMP/EA process.

Purpose and Need

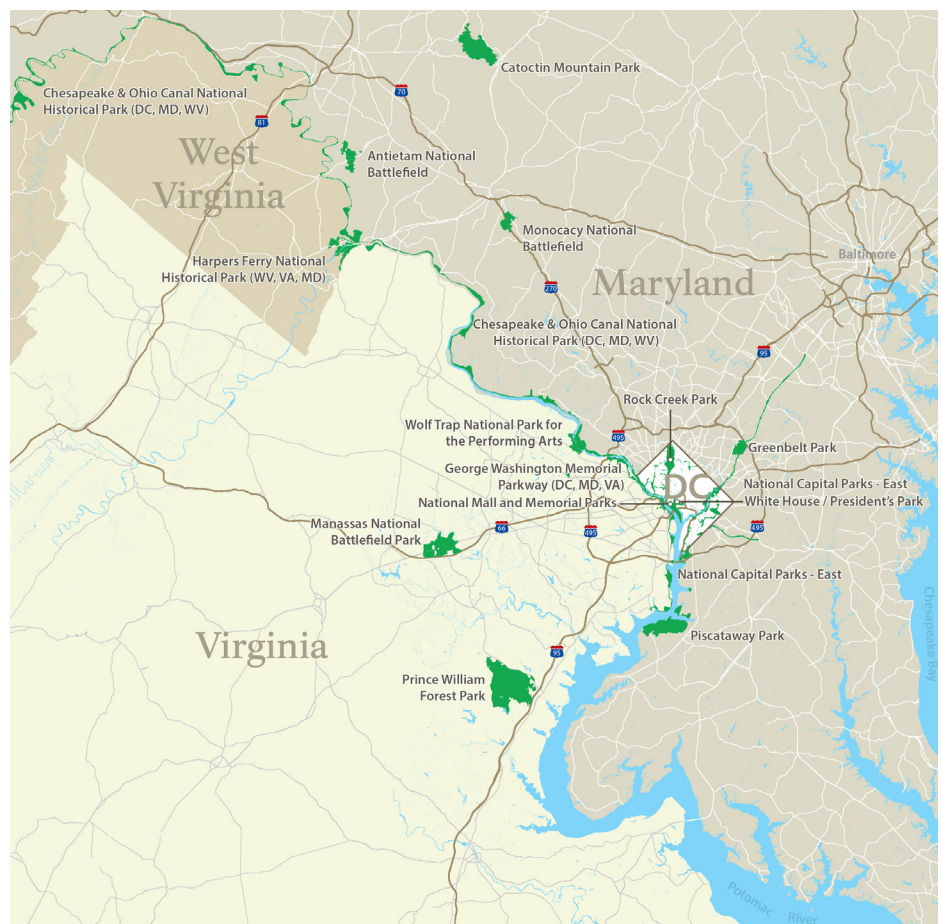
The purpose and need statements developed for this project address the questions of what the NPS intends to accomplish by taking action and why the NPS is taking action at this time.

The purpose of the IPMP/EA is to:

- Decrease the impacts of invasive plants to promote the restoration of natural and cultural resources.
- Identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources.
- Provide guidance regarding non-native invasive plant management that is useful both currently and long term.

The NCR IPMP/EA is needed because:

- Invasive species are adversely impacting natural and cultural resources and disrupting ecological processes.
- The full range of potential treatment strategies are not currently being utilized throughout the 15 NCR National Parks.
- Standardized best management practices and guidance tools are needed to mitigate potential impacts associated with park and visitor activities, and to help prioritize management and compliance.
- A unified compliance approach is needed across the region.



National Capital Region Parks

Objectives

Objectives are more specific statements of purpose that provide additional basis for comparing the effectiveness of alternatives in achieving a desired outcome.

The primary goal of the IPMP/EA is to provide park staff with adaptive, cost effective strategies for invasive plant management treatment options, using the most appropriate or a combination of appropriate treatment options and controls. These strategies will allow parks to minimize invasive plant impacts and maximize park-specific integrated pest management practices.

A comprehensive evaluation of potential impacts associated with invasive plant management, and identifying standardized best management practices, will educate park staff on the potential effects of various treatment methods and help mitigate potential impacts associated with both park and visitor activities. Due to the diversity of NPS parks within the project area, a regional IPMP/EA is needed that will provide resource managers with multiple treatment options that fit specific needs. The IPMP/EA will establish guidelines for treatment selection. Resource managers will select the most appropriate treatment option or combination of treatments using the guidelines so that they minimize potential impacts and maximize overall management success.

When completed, the NCR IPMP/EA will provide strategies for park staff to manage terrestrial, wetland, and aquatic invasive plants on NPS administered and managed lands within the designated boundaries of the NCR. There is an economy of scale associated with preparing a region-wide document, and the IPMP/EA will standardize guidance tools and help prioritize invasive species management throughout the region.

Impact Topics

Impact topics are the lens the NPS uses to assess the effects of a project. It is not the intent of the IPMP/EA to evaluate the merits of the project, but rather to analyze the effects on park resources, policies and/or practices that could potentially result from the project. The impact topics are used to organize and provide context for the potential effects. The list of impact topics could change as the NPS receives more information during scoping.

Impact topics that could be analyzed in the IPMP/EA include the following:

Natural Resources
Cultural Resources
Soundscapes and Lightscapes
Visitor Use and Experience
Socioeconomics
Sustainability
Health and Safety

Alternatives

The IPMP/EA will analyze a No Action Alternative and three Action Alternatives. Based on the analysis of impacts in the EA and other factors, one of the Action Alternatives will ultimately be chosen as the NPS Preferred Alternative for treating non-native invasive plants across the 15 NCR parks. Because the Action Alternatives are still being developed, they are referred to as “Concept Alternatives” below.

Under the No Action Alternative, the NPS would continue to treat non-native invasive plants across parks in the NCR as it currently does. Current management involves using a range of approaches being applied independently at each individual park. Invasive plant species and sites are targeted for treatment based upon the professional expertise of the separate park managers with case-by-case input from regional staff. The No Action Alternative is analyzed in the EA to provide a baseline against which impacts can be evaluated.

For Concept Alternative 1, the treatment of non-native invasive plants would be prioritized by species within each park. The highest-priority species would then be grouped and treated wherever they are found in the park.

Under Concept Alternative 2, non-native invasive plants would be treated in specific sites or areas of each park identified by park managers as having the highest value. Depending on the park, the sites prioritized for treatment may consist of rare plants, rare plant communities, visitor facilities, historic resources or other resources. Non-native invasive species would then be treated at the highest priority sites first.

Concept Alternative 3 would combine the site prioritization and species prioritization approaches. Non-native invasive plant species with the highest priority would be treated at the highest priority sites. Lower priority sites could receive treatment if high priority species are present, and lower priority species could receive treatment if they are present at a high priority site.



Exotic Plant Management Team member Casey Cate chemically treating lesser celandine at Wolf Trap National Park for the Performing Arts.



Project Milestones

Milestone	Date
Public Scoping Period Begins	May 11, 2015
End of Scoping Period	June 10, 2015
Begin Preparation of EA	June 2015
Public Release of EA	September 2015
Public Review Period	October 2015
Prepare Decision Document	November 2015

EXPERIENCE YOUR AMERICA™

Submitting Comments

Comments can be submitted electronically at the National Park Service's PEPC website: http://parkplanning.nps.gov/ncr_ipmpea. Written comments may be mailed or hand-delivered to:

National Park Service
National Capital Region
c/o Mark Frey, Exotic Plant Management
Team Liaison
1100 Ohio Drive, S.W.
Washington, D.C. 20242

To be most helpful to the planning process, NPS requests that you submit your comments within 30 days of receiving this letter.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Public Scoping Period and How to Comment

During this scoping period, the public and all interested parties are encouraged to comment on the project and provide concerns or issues related to the project's potential effects on cultural resources, natural resources, visitor experience, and park operations. Let us know what you think about these impact topics.

Questions to consider:

- Do the purpose, need and objectives reflect what you think the NPS needs to accomplish with this project?
- If not, what else do you think needs to be accomplished?
- What concerns or do you have about the potential impacts of the project to revitalize the park?
- How do you think these concerns could be addressed?

INVASIVE PLANT MANAGEMENT PLAN ENVIRONMENTAL ASSESSMENT

PUBLIC SCOPING REPORT COMMENT SUMMARY

**INTERNAL REVIEW
JUNE 25, 2015**

INTRODUCTION TO SCOPING PROCESS

Project Description

The National Park Service (NPS) is preparing an Invasive Plant Management Plan / Environmental Assessment (IPMP/EA) for 15 parks within the National Capital Region. The parks include Antietam National Battlefield, Catoctin Mountain Park, Chesapeake & Ohio Canal National Historical Park, George Washington Memorial Parkway, Greenbelt Park, Harpers Ferry National Historical Park, Manassas National Battlefield Park, Monocacy National Battlefield, National Capital Parks – East, National Mall and Memorial Parks, Piscataway Park, Prince William Forest Park, Rock Creek Park, White House / President's Park, and Wolf Trap National Park for the Performing Arts.

The NPS is developing the IPMP/EA in accordance with the National Environmental Policy Act of 1969 (NEPA) to address the issues concerning the management of invasive plant species and implement a comprehensive management strategy to be used throughout the 15 parks. The primary focus of the IPMP/EA is to define parameters and establish procedures for the treatment, control, and containment of exotic invasive plants throughout a variety of landscapes, using a broad range of vegetation management techniques.

Purpose and Need

The purpose for the IPMP/EA is to decrease the impacts of invasive plants to promote the restoration of natural and cultural resources; identify and implement environmentally sound, cost effective invasive plant management strategies that pose the least possible risk to people and park resources; and to provide guidance regarding non-native invasive plant management that is useful both currently and in the long term. This is needed because invasive species are impacting cultural resources and disrupting ecological processes. The strategies in the IPMP/EA will enable parks to minimize invasive plant impacts and maximize park-specific integrated pest management successes.

Scoping Period

The scoping period for the IPMP/EA began on May 11, 2015, and extended through June 10, 2015. Materials posted on the NPS Planning, Environment, and Public Comment website included the scoping courtesy letter and public scoping newsletter. A press release was distributed to local media outlets and posted to the National Capital Region's website.

SUMMARY OF COMMENTS

Introduction

Seven pieces of correspondence from two states, Virginia and Maryland, were received during the public comment period. Several groups including Monocacy Scenic River Citizens Advisory Board and Friends of Dyke Marsh provided comments.

Agency comments were received from the Virginia Department of Conservation and Recreation (Virginia DCR), the Virginia Department of Agriculture and Consumer Services (VDACS), and the US Fish and Wildlife Service. Their comments are summarized in the following section.

Comment analysis assists the planning team in organizing, clarifying, and addressing technical information pursuant to NEPA regulations. It also aids in identifying the topics and issues to be evaluated and considered throughout the planning process. The following summary of comments is provided to outline the major groupings of comments, along with examples of specific comments to illustrate the trend.

General statements that the comments included

1. **AE11000 Affected Environment: Species Of Special Concern:** VDACS requested that all projects comply with Virginia's Endangered Plant and Insect Species Act (EPISA) and noted that proposed projects should be submitted to the Virginia DCR for determination of impacts to state-listed threatened and endangered species.

The Virginia DCR provided tables of National Heritage resources documented within each park. The agency noted that the current activity will not affect any documented state-listed threatened and endangered plants or insect species and that there are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity. Virginia DCR provided information on accessing the Virginia Department of Game and Inland Fisheries (VDGIF) database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters.

2. **AE9000 Affected Environment: Vegetation:** Comments were received describing existing vegetation resources in specific areas of the NCR, as well as documented instances of non-native invasive plants.
3. **AL4000 Alternatives: New Alternatives Or Elements:** Commenters provided suggestions for new alternatives and/or elements to consider incorporating into the alternatives.
 - Utilize alliances with volunteers such as "Friends" groups to help address invasive plant management.
 - Identify and select for treatment the most biologically-significant areas at risk under NPS jurisdiction, including areas that are significant nationally in the NPS system, like Dyke Marsh and the Potomac Gorge.
 - Dyke Marsh should be given priority status for invasive plant control.
 - Explore utilizing hydrology changes such as flooding as a way of controlling invasive species in certain areas.
 - Utilize herbicides in a targeted and selected way.
 - Plant native plants to replace the killed or removed exotics.
 - Enhance the effectiveness of volunteers by training and authorizing some volunteers in use of herbicides.

- Sprayed areas should be cordoned off while the persistence of the chemicals remain
- Re-evaluate the pesticide treatment program and stop its use especially in populated areas of park land.
- Consider utilizing the Nature Conservancy's "An Invasive Plant Management Decision Analysis Tool" (IPMDAT).

4. AL5100 Support Alternative/Project Elements: Comments were received expressing support for the overall concept of invasive plant management, as well as specifically for alternative 1 (the prioritization of non-native, invasive vegetation treatment), and alternative 2 (treatment of invasive plants prioritized by area).

- "The Friends of Dyke Marsh (FODM) applauds the efforts of the National Park Service/ National Capital Region (NPS-NCR) "to identify long-term invasive plant management strategies that would reduce the impacts of invasive plants to natural and cultural resources, and provide opportunities for restoring native plant communities and cultural landscapes on NPS administered and managed lands within the designated boundaries of the 15 parks."
We welcome and encourage a stronger effort to discourage the use of and to control invasive plants in and near federal lands."
- "The River Board supports Concept Alternative #1, the prioritization of non-native, invasive vegetation for treatment. We realize that every National Park in the National Capital Region, including the Monocacy National Battlefield, contains unique areas and sites that have high-value resources but also has non-native vegetation that disrupts ecological processes -like forest succession-and impacts overall park functions and user experiences, but we feel Alternative #1 is the more direct and sound approach compared to targeting isolated sites and areas for invasive plant removal within the National Parks."

5. AL5200 Oppose Alternative/Project Elements: Comments were received expressing opposition specific alternatives, including the No Action Alternative, which would merely maintain the status quo; Concept Alternative 1, because prioritization by species would have minimal beneficial impacts and selective removal of a species would allow other invasive species to replace them; and Concept Alternative 3 as prioritization of species could fail.

- "Alternative 1: Treatment of invasive plants prioritized by species. Prioritization by species is an idea that will have minimal beneficial effects. There are more than a dozen rampant invasive species in GWMP. Selective removal of any one in an area would likely constitute an invitation to other invasives, which would quickly replace the removed invasives."

6. CC1000 Consultation and Coordination: General Comments: The comments received regarding previous communication, public involvement, and stakeholder coordination indicated that NPS has not provided adequate responses to resident and park visitor communications regarding questions and concerns related to pesticide treatments within Rock Creek Park.

- "For the past 8 years the National Park Service has been less than transparent with residents and park visitors.

'few responses or none from our letters of inquiry/emails to the officials of the Park. Upon

trying to present a petition of 250 patrons of the park, we were blocked by a lock-down at Park Headquarters in 2013.”

- “we did receive a NPS response to our inquiry re: Freedom of Information and the response by the IPM Coordinator focused on FIFRA and IPM. However there was no evidence given as to the restoring or planting of native species.

‘this year we asked the Park Ranger if Rock Creek NPS had received a Clean Water Act Pesticide General Permit. We received no response, yet the spraying of pesticides took place.”

7. IN100 ISSUES - Natural resource issues: Comments on natural resource issues centered on environmental health concerns related to herbicide use, as well as impacts of invasive plants.

Comments on the impacts of invasive plants noted that invasive plants alter and destroy habitat and that early detection and mitigation is necessary to protect agricultural and natural resources.

- “Loss of habitat is reducing the biodiversity of many of our valuable ecosystems and invasive plants represent one of the ways that habitat is altered and destroyed.”

Comments received on the environmental health concerns related to the use of herbicides, noting herbicides are emerging contaminants in the Chesapeake Bay Watershed, that they damage soils and wildlife, questioning whether damage to soils and floodplains have been studied by NPS, questioning what problems have been associated with wildlife exposure to pesticides in the park, and questioning whether there are long-term benefits to herbicide use. In addition, the commenter expressed concern that pesticide applicators do not understand vernal pool care as regulated by the District and operate with little or no oversight by park personnel.

- “Environmental implications. Herbicides are listed as part of the emerging contaminants being found in the Chesapeake Bay Watershed. These contaminants are not filtered out of our tap water. The impact of their use is also noted as it affects the mycorrhizal fungi. Has any damage to the soil of this area or similar floodplains been studied by the NPS? How well does the Migratory Bird Treaty Act prevent pesticide poisoning of the birds? What problems have been associated with wildlife exposure to pesticide applications at this site? Is the NPS in compliance with the Clean Water Act?”
- “applicators. Being from out of state, they do not understand care of the vernal pools and spray right to the creek’s edge in violation of DC law. There appears no/little oversight by park personnel. One time there was no pesticide application or license number on their vehicles. Also lacking was courtesy on their part. For several years the spraying has taken place despite warnings of impending storms within hours.”

8. IV100 ISSUES - Visitor use or experience issues: The comments on visitor use and experience centered on public health concerns related to herbicide use. The commenter expressed concern regarding the use of toxic chemicals near highly used portions of Rock Creek Park, around both people and animals. The commenter noted that medical professionals advise against pesticide exposure, that glyphosate was recently upgraded to a “probable” carcinogen, and cited dogs that were sickened and hospitalized due to pesticide exposure. In addition, the commenter noted that signage for sprayed areas has been inadequate.

- “As requested, we have detailed here ongoing concerns re: invasive plant spraying in a very popular public area of Rock Creek Park. We are hopeful you will take several minutes to assess and understand why we as residents and park-goers are concerned for the well being of our children, our pets, and the healthy preservation of the parkland itself. Two years ago, on March 14, 2013, we submitted a petition with over 250 residents' signatures opposing the spraying. We have asked for a conversation or an open forum with residents. In absence of a response from the department, we will document here the situation at hand.”
- “we have known dogs that have become sick/hospitalized due to the poisons used. Also it should be noted that the very powerful statements of the American Academy of Pediatrics¹ and the American College of Obstetricians and Gynecologists² advise against pesticide exposure. Glyphosate, the toxin used since 2009 in the NPS applications, has recently been upgraded to a "probable" carcinogen by IARC of World Health Organization.”

9. MT1000 Miscellaneous Topics: General Comments: Comments were received regarding elements outside the scope of the Invasive Plant Management EA related to implementation of the Dyke Marsh Wetland Restoration and Long-term Management Plan/Final Environmental Impact Statement and comments related to seeking funding for the reduction of invasive species within George Washington Memorial Parkway.

- “The marsh restoration project presents unique challenges and opportunities not associated with other GWMP parks. The U.S. Geological Survey has predicted that Dyke Marsh could be gone by 2035. Restoration is urgent. Other GWMP parks do not face the risk of disappearing, at least to this degree or this urgently.”
- “We strongly urge NPS to prepare a comprehensive, long-term monitoring plan to identify, remove and/or control invasive plants in the restored areas. We support the statement on page 226 of the EIS that monitoring should continue "for at least 10 years." We question why NPS states on page 228 that submerged aquatic vegetation will not be "part of structured monitoring program." It appears to us that submerged aquatic vegetation is an critical element of a freshwater wetland.

Developing and implementing a strong monitoring plan is critical to restoration's success. FODM is willing to help with the monitoring, to recruit volunteers and perhaps raise or contribute funding to implement a comprehensive monitoring plan. We believe several area universities would be interested in partnering with NPS to monitor the restoration's success.”

10.PN8000 Purpose And Need: Objectives In Taking Action: A commenter questioned the “unified compliance approach” for the project, noting that control of invasive species can be very site specific and that approaches used in one location may not be appropriate in another.

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Appendix F

Laws and Regulations Applicable to the IPMP/EA

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The following sections present a discussion of federal, state, District of Columbia, and local regulatory measures, as well as NPS policies and guidelines that are applicable to the IPMP/EA.

F.1 Federal Regulatory Measures

The following federal regulatory measures are applicable to the alternatives analyzed in this EA:

- Endangered Species Act (ESA) of 1973, as amended
- Migratory Bird Treaty Act
- EO 13112, *Invasive Species*
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA);
- Federal Noxious Weed Act of 1974
- Federal Seed Act of 1939
- Noxious Weed Control and Eradication Act of 2004
- Occupational Safety and Health Administration (OSHA) Hazard Communication Standard
- Plant Protection Act of 2000
- Clean Water Act (CWA) of 1972
- EO 13508, *Chesapeake Bay Protection and Restoration*
- Chesapeake Bay Total Maximum Daily Load (TMDL)
- Chesapeake Bay Watershed Agreement

F.1.1 Endangered Species Act of 1973, As Amended

The Endangered Species Act of 1973, as amended (ESA), 16 U.S.C. §§1531-1543, focuses on the conservation and protection of endangered or threatened species and their habitats. Although ESA has no direct regulation of invasive species, it could limit actions involving an invasive plant species to the extent the action may harm a listed species. ESA is jointly administered by the Departments of the Interior and Commerce (CRS 2013). Under Section 7 of the ESA, federal agencies must consult with the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) when any action the agency carries out, funds, or authorizes (such as through a permit) may affect a listed endangered or threatened species. Section 7 consultation is required prior to implementing invasive plant treatment options at parks. Further consultation and coordination may be required at parks that support habitats and populations of federally listed threatened, endangered, and candidate species.

F.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. §703-712, as amended) implements various treaties and conventions between the US and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. The MBTA makes it unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg of any such bird, unless authorized under a permit issued by the Secretary of the Interior. The USFWS has statutory authority and responsibility for enforcing the MBTA (USFWS 2016). Although the MBTA has no direct regulation of invasive plant species, certain treatment methods, such as herbicide application and ground-disturbing treatments, may result in takes or kills that could require further coordination with the USFWS.

F.1.3 Executive Order 13112, *Invasive Species*

Section 2 of EO 13112 directs federal agencies to identify actions that may affect the status of invasive species and to take action to:

- Prevent the introduction of invasive species;
- Detect, respond rapidly to, and control populations of such species in a cost-effective and environmentally sound manner;
- Monitor invasive species populations accurately and reliably;
- Provide for restoration of native species and habitat conditions in ecosystems that have been invaded;

Conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and

- Promote public education on invasive species and the means to address them.

EO 13112 also established the National Invasive Species Council and authorized the Council to develop and implement a National Invasive Species Management Plan, which serves as a comprehensive blueprint for federal action on invasive species. The first edition of this plan was finalized in 2001; the most recent edition is dated August 2008 and covers the 2008-2012 planning period (USDA 2016; CRS 2013). The latest revision to the National Invasive Species Management Plan is expected to be finalized in 2016.

F.1.4 Federal Insecticide, Fungicide, and Rodenticide Act of 1972, As Amended

First passed in 1910 and significantly revised in 1972, 1988, 1996 (Food Quality Protection Act [FQPA]) and 2012, FIFRA and the regulations established by the US Environmental Protection Agency (EPA) (FIFRA, Sections 116-117, 165, 170-172) serve as the primary legislation for federal control of pesticide distribution, sale, and use. FIFRA defines “pesticide” as follows:

1. Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pests.
2. Any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.
3. Any nitrogen stabilizer, except that the term “pesticide” shall not include any article that is a “new animal drug” within the definition of the Federal Food, Drug, and Cosmetic Act.

As the NCR IPMP/EA is specific to treating invasive plant species, herbicides are the only types of pesticides that would be used under this plan. To be consistent with NPS policy definitions and other pesticide reference materials, the term pesticide is used synonymously with herbicide throughout the NCR IPMP/EA to describe chemical treatments.

Before pesticides can be sold in the United States, they must be thoroughly evaluated and registered by the EPA to ensure that they meet federal safety standards to protect human health and the environment. As part of the registration process, pesticides are studied to determine hazards to humans, domestic animals, non-target species and endangered species. Once a pesticide has met the EPA’s applicable scientific and regulatory requirements, the EPA grants a registration or license that permits the distribution, sale, and use of the pesticide (EPA 2015).

Scientific data need to address concerns pertaining to the identity, composition, potential adverse effects, and environmental fate of each pesticide must be provided by potential registrants of pesticides. Such data enables the EPA to determine whether a pesticide could harm humans, plants, ground water, and/or non-target organisms, including wildlife and rare, threatened and endangered species (EPA 2015).

The first step in the assessment and evaluation of the toxic characteristics of a pesticide usually consists of determining acute oral, dermal and inhalation toxicity. Data generated from this step provide information on health hazards likely to arise as a result of and/or soon after short-term exposure. The classification and precautionary labeling (e.g., lethal dose) of a pesticide are based on data from acute studies (EPA 2015). Laboratory studies also provide basic toxicity information that serves as a starting point for assessment of hazards to humans, domestic animals, and non-target organisms such as birds, mammals, fish, terrestrial and aquatic invertebrates, and plants. Actual and/or simulated field data are used to examine acute and chronic adverse effects on captive or monitored fish and wildlife populations under natural or near-natural environments. Such studies are required only when predictions as to possible adverse effects in less extensive studies cannot be made to establish how long humans must wait before re-entering a treated area. Similarly, the EPA requires applicator/user exposure data for all pesticides to evaluate the potential risks to people applying the pesticide, i.e., those who may be exposed to higher concentrations of the pesticide through handling, including mixing or applying (EPA 2015).

Once registered, a label is developed for each pesticide. Pesticide labels include directions for the protection of workers who apply the pesticide, directions for reducing exposure to non-applicators, and directions for reducing potential impacts. The storage and disposal of most pesticides is also regulated under FIFRA, with specific directions provided on pesticide labels. Where a hazard exists to humans, domestic animals, or non-target

organisms, precautionary statements that describe the particular hazard, route of exposure and precautions to be taken must appear on the label (EPA 2015). The enforcement of FIFRA is delegated to individual states. Because labels contain important application, safety, and storage and disposal information, labels must be kept with the product. Violations of pesticide label directions constitute a violation of FIFRA (CRS 2013).

F.1.5 Federal Noxious Weed Act

Most provisions in the Federal Noxious Weed Act of 1974 were supplanted by the Plant Protection Act; however, a key section (7 U.S.C. §2814) still requires each federal agency to provide for noxious weed management on lands under its jurisdiction. The provision, introduced in the Food Agriculture Conservation and Trade Act of 1990 (Public Law [P.L.] No. 101-624, 104 Stat. 3359), amended the Federal Noxious Weed Act to require federal agencies to establish and fund noxious weed management programs. It also enables federal agencies to implement cooperative agreements with state agencies regarding the management of undesirable plant species in areas adjacent to federal lands. The law requires joint leadership from the Secretaries of Agriculture and the Interior in coordinating federal agency programs for control, research, and education associated with designated noxious weeds. In 1994, a memorandum of understanding among several federal agencies created the Federal Interagency Committee for Management of Noxious and Exotic Weeds (FICMNEW) as a vehicle to coordinate noxious weed priorities (CRS 2013).

F.1.6 Federal Seed Act

The Federal Seed Act of 1939, as amended (7 U.S.C. §§1551 et seq.), requires accurate labeling and purity standards for seeds in commerce and prohibits the importation and movement of adulterated or misbranded seeds. The law also authorizes enforcement activities and rulemaking functions; regulates interstate and foreign commerce in seeds; and addresses “noxious weed seeds” that may be present in agricultural (e.g., lawn, pasture) or vegetable seed. The Animal and Plant Health Inspection Service (APHIS) administers the foreign commerce provision of this law. The US Department of Agriculture’s (USDA) Agricultural Marketing Service administers the interstate commerce provisions. The law works in conjunction with the Plant Protection Act (7 U.S.C. §§7701 et seq.), which authorizes APHIS to regulate imports of agricultural seed when they may contain noxious weed seeds (CRS 2013).

F.1.7 Noxious Weed Control and Eradication Act

The Noxious Weed Control and Eradication Act of 2004 (7 U.S.C. §§7781-7786) amended the Plant Protection Act to direct the USDA to establish a grant program to provide financial and technical assistance to weed management entities to control or eradicate harmful, invasive plants on public and private lands. The law also authorizes the USDA to enter into cooperative agreements with weed management entities to fund weed eradication activities and to enable rapid response to outbreaks of noxious weeds. The law is administered by the USDA’s APHIS (CRS 2013).

F.1.8 Occupational Safety and Health Administration Hazard Communication Standard

Under the OSHA Hazard Communication Standard (29 CFR 1910 Subpart Z; Standard 1910.1200), employers must provide workers with training, protective equipment, and information about hazardous substances. The employer is also required to maintain safety data sheets (SDS), formerly known as material safety data sheets (MSDS), about these substances and to provide employees with a copy of the SDS if they request a copy. Generally, SDS for most herbicides can be obtained from the websites of the respective manufacturers. Park resource managers must maintain a current set of SDS for all herbicides identified for use in their management programs.

F.1.9 Plant Protection Act of 2000

The Plant Protection Act of 2000 (7 U.S.C. §104) authorizes the USDA’s APHIS to regulate biological control agents or “any enemy, antagonist or competitor used to control a plant pest or noxious weed.” Plant Protection and Quarantine (PPQ) is a program within APHIS to safeguard agriculture and natural resources from the risks associated with the entry, establishment, or spread of animal and plant pests and noxious weeds to ensure an abundant, high-quality, and varied food supply. PPQ is also responsible for granting permission to federal agencies for the use of biological control agents within the United States (CRS 2013).

Once a target invasive plant and biological control agent are identified, PPQ conducts extensive host-specificity testing. Biological agents are tested for host specificity initially in their native range and then in quarantine conditions in the United States. Biological agents are only approved for release if testing indicates a very low likelihood of non-target effects, as determined by the Technical Advisory Group for Biological Control Agents of Weeds (TAG), a group of experts who report to the USDA's APHIS. This testing is designed to ensure that introduced biological control agents are limited in their host range and do not threaten endangered, native, or crop plants. Permission for release must also be secured from the USFWS, which has primary responsibility for protecting threatened and endangered species (CRS 2013; Hough-Goldstein 2015; Van Driesche et al. 2010).

F.1.10 Clean Water Act of 1972

The Clean Water Act (CWA) of 1972, as amended (33 U.S.C. §1251 et seq.), establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The CWA makes it unlawful to discharge any pollutant from a point or nonpoint source into navigable waters unless a permit is obtained. Under this act, federal jurisdiction is broad, particularly regarding the establishment of national standards for water quality or effluent limitations. Certain responsibilities are delegated to the states, such as day-to-day enforcement, while the federal government sets the agenda and standards for pollution abatement. Although the CWA has no direct regulation of invasive plant species, certain treatment methods, such as herbicide application and ground-disturbing treatments, are subject to provisions of the Act (CRS 2010).

F.1.11 Executive Order 13508, Chesapeake Bay Protection and Restoration

Executive Order (EO) 13508 on Chesapeake Bay Protection and Restoration to protect and restore the health, heritage, natural resources, and social and economic value of the Nation's largest estuarine ecosystem and the natural sustainability of its watershed. Among other strategies, the EO directs federal agencies to "target resources to better protect the Chesapeake Bay and its tributary waters, including resources under the Food Security Act of 1985 as amended, the Clean Water Act, and other laws" and to "develop focused and coordinated habitat and research activities that protect and restore living resources and water quality of the Chesapeake Bay and its watershed." Among the specific provisions of the EO applicable to IPMP are the restoration of Chesapeake Bay water quality, the reduction of water pollution from federal lands and facilities, and the protection and restoration of living resources.

F.1.12 Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment

The Chesapeake Bay TMDL for Nitrogen, Phosphorus and Sediment is the largest ever developed by the EPA, encompassing a 64,000-square-mile watershed. The TMDL identifies the necessary pollution reductions from major sources of nitrogen, phosphorus, and sediment across the Chesapeake Bay jurisdictions and sets pollution limits necessary to meet water quality standards. Chesapeake Bay jurisdictions include Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia and the District of Columbia. The TMDL is designed to ensure that all pollution control measures needed to fully restore the Chesapeake Bay and its tidal rivers are in place by 2025. The TMDL also calls for practices to be in place by 2017 to meet 60 percent of the overall nitrogen, phosphorus, and sediment reductions (EPA 2016). Although the Chesapeake Bay TMDL has no direct regulation of invasive plant species, regulatory programs that oversee herbicide use, water quality, and stormwater discharges will indirectly influence the management of invasive plant species on NPS property.

F.1.13 Chesapeake Bay Watershed Agreement

The most recent Chesapeake Bay Watershed Agreement was signed on June 16, 2014. Signatories include jurisdictional representatives from the entire watershed, committing for the first time the Chesapeake Bay's headwater states to full partnership in the Bay Program. This plan for collaboration across the Chesapeake Bay's political boundaries establishes goals and outcomes for the restoration of the Bay, its tributaries, and the lands that surround them. Goals with management strategies that may address invasive species include Sustainable Fisheries - Protect, restore and enhance finfish, shellfish and other living resources, their habitats and ecological relationships to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay. Vital Habitats - Restore, enhance and protect a network of land and water habitats to support fish and wildlife, and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed, and Healthy

Watersheds - Sustain state-identified healthy waters and watersheds recognized for their high quality and/or high ecological value. Goals that may impact invasive control practices include: Water Quality - Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health and Toxic Contaminants - Ensure that the Bay and its rivers are free of effects of toxic contaminants on living resources and human health.

F.2 State Regulatory Measures

The District of Columbia and states of Virginia, West Virginia and Maryland have established legislation and regulations that identify noxious weeds and non-native invasive plant species, and that further define pesticide registration and usage, training and certification of pesticide applicators, and the criminal enforcement and civil penalties associated with the misuse of pesticides. All pesticide application will be conducted by or under the supervision of pesticide applicators licensed, registered or otherwise certified by the jurisdiction (i.e., Virginia, West Virginia, Maryland or the District of Columbia) in which the work is being conducted. In addition, signage will be posted in areas of NPS parks that receive treatment under the IPMP informing park visitors and NPS staff to avoid those areas or otherwise make them aware of the potential risks of entering those areas. Implementation of the NCR IPMP/EA will conform to all applicable state and District of Columbia laws. The NPS must obtain and/or abide by all state NPDES discharge permits, pesticide bans, and other water quality protection requirements that relate to the vegetation management.

F.3 Local Regulatory Measures

Implementation of the IPMP/EA will conform to applicable local laws to the maximum extent possible. Under the IPMP/EA, parks will comply with more stringent local requirements where applicable, such as local ordinances and regulations that further define pesticide use. Where a park falls within multiple jurisdictional boundaries, park staff would comply with guidelines of the jurisdiction within which they are implementing treatment actions.

F.4 National Park Service Policies and Guidelines

National Park Service (NPS) parks are guided by the following four primary internal documents in managing invasive plants:

- NPS Management Policies 2006
- Director's Order 77
- Director's Order 12
- Park-specific Natural Resource Management Plans, General Management Plans, and IPMPs

In addition, every national park is required to prepare and maintain a park foundation document. Each park's foundation document serves as the underlying guidance for all park management and planning decisions, as it describes a particular park's core mission, purpose and significance, regional context, and resources. As such, the foundation document serves as the underlying guidance for all park management and planning decisions.

F.4.1 NPS Management Policies 2006

General policies for management of invasive plants are provided in NPS Management Policies 2006, specifically in Section 4.4.4, Management of Exotic Species, and Section 4.4.5, Pest Management. These sections are summarized below.

Management Policies Section 4.4.4, *Management of Exotic Species*

Section 4.4.4 of NPS Management Policies 2006 authorizes parks to manage invasive species by stating that "[E]xotic species will not be allowed to displace native species if displacement can be prevented."

Management Policies Section 4.4.4.2, *Removal of Invasive Species Already Present*

Section 4.4.4.2 of NPS Management Policies 2006 presents criteria that parks should use to determine whether to undertake invasive plant management, including assessing if control is prudent and feasible, and if the invasive species interferes with natural processes and the perpetuation of natural features, native species, or natural habitats.

For a species determined to be invasive and where management appears to be needed, feasible, and effective, park staff should:

1. Evaluate the species' current or potential effect on park resources;
2. Develop and implement invasive species management plans according to established planning procedures;
3. Consult, as appropriate, with federal and state/District of Columbia agencies; and
4. Invite public review and comment, where appropriate.

Programs to manage invasive species will be designed to avoid causing significant damage to native species, natural ecological communities, natural ecological processes, cultural resources, and human health and safety.

Section 4.4.4 of the Management Policies also provides guidance to the parks on how to determine invasive plant management priorities. As such, "High priority will be given to managing exotic species that have, or potentially could have, a substantial impact on park resources, and that can reasonably be expected to be successfully controlled. Lower priority will be given to exotic species that have almost no impact on park resources or that probably cannot be successfully controlled."

Management Policies Section 4.4.5, *Pest Management*

Section 4.4.5 provides guidance on general pest management as well as the definition and guidelines for invasive plant management adopted for the proposed action analyzed in this EA. The purpose of the section is to give NPS personnel or their concessioners, contractors, permittees, licensees, and visitors guidance and understanding about the NPS approach to pest management.

Management Policies Section 4.4.5.1, *Pests*

Pests are living organisms that interfere with the purposes or management objectives of a specific site within a park or that jeopardize human health or safety. The decisions about whether to manage a plant considered a pest will be influenced by whether the plant is an exotic or a native species. Exotic plant species would be managed according to this Section 4.4.5 and under the exotic species policies in Section 4.4.4. A common misconception is that many native species of plants are pests, but they are in fact native organisms functioning in the natural ecosystem. Native plant species considered pests are not under consideration for management under this IPMP.

Management Policies Section 4.4.5.2, *Integrated Pest Management Program*

The NPS conducts an IPM program to reduce risks to the public, park resources, and the environment from pests and pest-related management strategies. Integrated pest management is a decision-making process that coordinates knowledge of pest biology, the environment, and available technology to prevent unacceptable levels of pest damage by cost-effective means while posing the least possible risk to people, resources, and the environment. The NPS and each park unit will use an IPM process to address invasive plant issues. Proposed invasive plant management activities must be conducted according to the IPM process prescribed in Director's Order #77-7: Integrated Pest Management.

Management Policies Section 4.4.5.3, *Pesticide Use*

A pesticide, as defined by FIFRA, is any substance or mixture that is used in any manner to destroy, repel, or control the growth of any viral, microbial, plant, or animal pest. Except as identified in the next paragraph, all prospective users of pesticides in parks must submit pesticide use requests, which would be reviewed on a case-by-case basis, taking into account environmental effects, cost and staffing, and other relevant considerations. The decision to incorporate a chemical pesticide into a management strategy would be based on a determination by a designated IPM specialist that it is necessary and other available options are either not acceptable or not feasible. Pesticide applications would only be performed by or under the supervision of certified or registered applicators licensed under the procedures of a federal or state certification system.

Management Policies Section 4.4.5.4, *Biological Control Agents and Bioengineered Products*

The application or release of any bio-control agent or bioengineered product relating to pest management activities must be reviewed by designated IPM specialists in accordance with Director's Order #77-7: Integrated

Pest Management and conform to the exotic species policies in Section 4.4.4. The decision to incorporate a biological or bioengineered pesticide into a management strategy would be based on a determination by a designated IPM specialist that it is necessary and other available options are either not acceptable or not feasible.

Management Policies Section 4.4.5.5, *Pesticide Use, Purchase, and Storage*

Section 4.4.5.5 states that pesticides must not be stockpiled. No pesticides may be purchased unless they are authorized and expected to be used within 1 year from the date of purchase. Pesticide storage, transport, and disposal will comply with procedures established by (1) the EPA; (2) the individual states in which parks are located; and (3) Director's Order #30A: Hazardous and Solid Waste Management, Director's Order #77-1: Wetland Protection, and Director's Order #77-7: Integrated Pest Management. This section of the management policies is implemented through the BMPs of the NCR's IPM program.

F.4.2 Director's Order #77 and Natural Resource Management Guidelines

Director's Order #77 (DO-77), currently being developed, supersedes previous guidance given in the Natural Resource Management Guideline (also known as NPS-77) issued in 1991. The Natural Resource Management Reference Manual #77 (RM-77) is being developed to support DO-77 and will replace the guidance given in NPS-77. Some sections of RM-77 are still being revised, while other sections are awaiting review by the NPS's legal authority. Once formalized, policy and guidance included in DO-77 and RM-77 would apply to any actions taken under the IPMP/EA. Since RM-77 has not been approved, the IPMP/EA was developed based on existing policy included in NPS-77 and NPS Management Policies 2006. However, some concepts that are included in draft versions of RM-77 have been incorporated into this IPMP/EA to provide additional guidance, where appropriate.

Review and Approval to Use Pesticides

NPS-77 provides guidance on the review and approval process for pesticides, biological control, and bioengineered pesticides. The natural resource manager at the park can approve treatments that do not involve the use of pesticides or biological control. However, if pesticides or biological control treatments would be used, a Pesticide Use Proposal must be submitted to the regional IPM Coordinator. The regional IPM Coordinator may then forward requests to the national IPM Coordinator, as necessary. Pesticides must be reviewed and approved prior to use if they:

- Are applied to any lands, waters, or structures that are owned, managed, or regulated by the NPS;
- Are purchased by NPS or cooperating association funds;
- Are used on privately owned lands or lands managed by another government agency and are located within a park boundary, and NPS approval is required under the terms of a legally binding agreement between the park and the landowner; or
- Are purchased by the park for employees (e.g., insect repellants and bear deterrents).

Parks that propose the use of pesticides or biological control agents must also follow established state, District of Columbia, and federal regulations. To obtain approval for pesticide use, each park (Park IPM Coordinator) is required to prepare a pesticide use proposal. The regional IPM Coordinator approves ("concurs"), disapproves ("non-concurs"), or approves proposals on a conditional basis and specifies the conditions. If a non-concur is given, the regional coordinator would discuss the reason for that decision with the park coordinator and they would work to try to find an alternative solution that can be approved. In some situations (e.g., applications to water and wetlands and applications that might affect endangered or threatened species), upper-level review by the national IPM Coordinator is required. Pesticide use proposals that also require a second level of review by the national IPM Coordinator are:

- Pesticide uses that involve aquatic applications or situations in which the applied pesticide could reasonably be expected to get into waters or wetlands,
- Pesticide use involving aerial application, and
- Restricted-use pesticides as defined by the EPA.

Broadcast applications over a specified acreage may also require approval from the national IPM Coordinator under DO-77-7 (still under development). The decision by either the regional IPM Coordinator or national IPM

Coordinator to approve a pesticide use proposal is based on its conformance with NPS policies and guidelines, a determination of whether other alternatives are available or feasible, and whether the pesticide is registered for the proposed use. If proposals are denied, the regional or national IPM Coordinator would provide a written explanation of the denial and suggestions for suitable alternatives.

Pesticide use proposals are considered as they are submitted and, once approved, are effective for one calendar year, unless new policy or guidance directs otherwise. Proposals are submitted by designated park IPM Coordinators using the NPS Pesticide Use Proposal System (PUPS).

Reporting Pesticide Use

Parks are required to maintain records of pesticide use. Pesticide usage must be reported for each calendar and is required to be completed prior to submittal of new proposals. Pesticide use reports are submitted electronically through PUPS.

Review and Approval to Use Biological Control Agents

As with pesticides, releases of biological control agents must be reviewed and receive approval from the regional and national IPM Coordinators. Parks should begin by contacting the regional IPM Coordinator and appropriate environmental compliance staff who are responsible for NEPA to discuss the possibility of a release. If NEPA compliance can be met and the type of compliance required can be determined, NEPA compliance should be completed. Once NEPA is completed, the park(s) should submit a biological control use request through PUPS for review by the regional and national IPM Coordinators. NEPA compliance must be provided in the PUPS proposal and documentation attached. The park is responsible for obtaining any state or District of Columbia permit required for transport and release of a biological control agent.

Other Pesticide Related Guidelines

NPS-77 also provides guidelines for the following activities: pesticide purchase, pesticide storage, disposal of pesticides, pesticide safety, and contracted pest management services.

Invasive Species Management

NPS-77 provides guidance on a number of invasive species management topics. These topics include prevention of invasive species invasions, management of established invasive species, biological control, invasive plant management and pesticide use, and environmental compliance and planning documents. This guidance has been used to develop this IPMP/EA. NPS-77 also includes guidance for NPS concessioners that manage pests on NPS property or in NPS buildings. Based on NPS-77, the NPS has developed guidance to help educate parks on their responsibilities for implementing IPM. The guidance document is titled *Invasive Plant Management Planning: Technical Considerations* (NPS 2015).

F.4.3 Director's Order 12

Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making and its accompanying handbook, set forth the policy and procedures by which the NPS carries out its responsibilities under NEPA. Director's Order #12 and the handbook lay the groundwork for a necessary evolution in the way NPS approaches environmental analysis, public involvement, and resource-based decision-making. Under DO-12, certain invasive plant management activities may fall under the categorical exclusion for which a record is needed. Specifically under Section 3.4 subsection B, the "removal of individual members of a non-threatened/endangered species or populations of pests and exotic plants that pose an imminent danger to visitors or an immediate threat to park resources" is categorically excluded.

F.4.4 Park-specific Planning

Parks within the NCR are in various stages of development management planning. In some cases the IPMP portion of this document may supersede or complement sections of a park's current natural resource management, resource stewardship strategy, general management or invasive species management plans.

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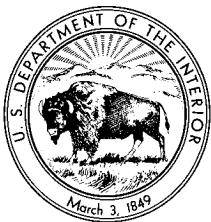
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Appendix G

Memorandum to Files Template for Annual Invasive Plant Treatment Plans

*This template is only valid if the Environmental Assessment (EA) for the National Capital Region Invasive
Plant Management Plan (IPMP) is approved*

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United States Department of the Interior

NATIONAL PARK SERVICE

[PARK NAME]

[Park Address]

[Park City, State, Zip]



dd Month yyyy

Memorandum to File

From: Name, Position Title, Park/Region/Office

Subject: 20XX Invasive Plant Management

Project Information

Park Name: XXXX

PEPC Project Number: XXXX

Project Title: Invasive Plant Control in [PARK NAME] for Calendar Year 20XX

Project Type: Invasive Species Management

Project Location: XXXX

County, State: XXXXXX County, XX

Project Description

The Annual Treatment Plan, as presented in Table 1, specifically addresses the logistical information regarding the location, treatment methods, and invasive species to be treated by [PARK NAME]. The National Park Service (NPS) completed an Environmental Assessment (EA) for the National Capital Region Invasive Plant Management Plan (IPMP). [PARK NAME] staff have selected a set of areas within the park to be treated during Calendar Year 20XX. Appended to this form is a map of the areas that are proposed for treatment.

This compliance document covers invasive plant control work that is expected to be initiated in Calendar Year 20XX by park staff, park volunteers, interns, contractors, and the National Park Service's National Capital Region's Exotic Plant Management Team.

The following table lists the specific sites where treatment will occur, the species to be treated, and the treatment methods employed.

Table 1: Invasive Plant Treatment Plan for 2016

Project Location	Species to be Treated	Treatment Methods

The following BMPs and Mitigation Measures will be employed specifically for the project

locations in Table 1.

- General BMPS and Mitigation Measures
 - o [Insert BMPs employed]
- Cultural Resource BMPS and Mitigation Measures
 - o [Insert BMPs employed]
- Visual Resource and Noise BMPS and Mitigation Measures
 - o [Insert BMPs employed]
- Erosion and Sedimentation BMPS and Mitigation Measures
 - o [Insert BMPs employed]
- General Wildlife BMPS and Mitigation Measures
 - o [Insert BMPs employed]
- Threatened, Endangered, and Sensitive Species BMPS and Mitigation Measures
 - o [Insert BMPs employed]

Background

Under NPS Management Policies 2006, an invasive plant must meet several criteria to be managed:

All exotic plant and animal species that are not maintained to meet an identified park purpose will be managed—up to and including eradication—if (1) control is prudent and feasible, and (2) the exotic species interferes with natural processes and the perpetuation of natural features, native species, or natural habitats, or:

- Interferes with natural processes and the perpetuation of natural features, native species, or natural habitats;
- Disrupts the genetic integrity of native species;
- Disrupts the accurate presentation of a cultural landscape;
- Damages cultural resources;
- Significantly hampers the management of park or adjacent lands;
- Poses a public health hazard as advised by the US Public Health Service (which includes the Centers for Disease Control and the NPS Public Health Program); or
- Creates a hazard to public safety.

For species that meet these criteria, management priorities would be assigned to each invasive plant. Invasive plants would then be managed according to relative management priority. In accordance with Management Policies 2006, Section 4.4.4.2, relative management priorities would be determined as follows:

Higher priority will be given to managing invasive species that have, or potentially could have, a substantial impact on park resources, and that can reasonably be expected to be successfully controlled. Lower priority will be given to invasive species that have almost no impact on park resources or that probably cannot be successfully controlled.

Description of Previous Compliance Documentation

National Park Service (NPS) Management Policies call for the treatment of non-native invasive plant species that are not meeting an identified park purpose and that are already present in a park

(Section 4-4-4.2). Accordingly, [PARK NAME] is proposing to treat certain species meeting this definition. This procedure is to be performed following the NPS Integrated Pest Management (IPM) Program parameters (Section 4-4-5-2). Impacts on the natural, cultural, and human environment were identified and analyzed in the IPMP/EA in accordance with the National Environmental Policy Act of 1969 (NEPA), the regulations of the Council on Environmental Quality (CEQ) for implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and NPS Director's Order #12 (DO-12): Conservation Planning, Environmental Impact Analysis, and Decision-making. The EA also recommends mitigation measures for identified impacts. The vast majority of treatment methods included in the proposed action are typically considered under NEPA to be categorically excluded under Section 3.4(E)(2) of DO-12 as the "restoration of noncontroversial native species into suitable habitats within their historic range and elimination of exotic species." The EA was developed to ensure that the proposed IPMP will not have significant impacts when considered on a broad regional scale.

Conclusion

The interdisciplinary team (IDT), consisting of the IDT members listed below, conducted internal scoping to review the proposed project. After careful review the team concurs that the previous document adequately describes and analyzes the impacts for Project ID#: XXXXXX. There is no change to project scope, the description of impacts (context, intensity and duration) remain as described in the previous NEPA document, and site conditions have not changed since preparation of the environmental assessment. No additional public involvement is required. Neither the original compliance document (i.e., EA or EIS) nor this evaluation have identified adverse resource impacts that would lead to an impairment of National Park System resources and values from implementation of this project. This assessment is consistent with the original decision document (i.e., FONSI or ROD).

Interdisciplinary Team leader:

[Insert Name], Biologist

Interdisciplinary Team members:

[Insert Name], Chief Ranger

[Insert Name], Chief of Natural Resources

[Insert Name], 106 Coordinator Historical Architect NHPA Specialist Curator

[Insert Name], NEPA Specialist

Based on the environmental impact information contained in the statutory compliance file environmental documentation for this stage of the subject project is complete.

Recommended:

Superintendent: _____ Date: _____

NPS Contact: _____ Date: _____

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Appendix H

National Pollutant Discharge Elimination System Overview for
the NCR Exotic Plant Management Team

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NPDES¹ Overview for NCR EPMT²

Darcy L. Herman, Technical Writer, Volunteer
and
Mark Frey, EPMT Liaison, National Capital Region
August 3, 2012

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¹ NPDES = National Pollutant Discharge Elimination System

² NCR EPMT = National Capital Region Exotic Plant Management Team

Background

On October 31, 2011, the Environmental Protection Agency (EPA) issued a final National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) for point source discharges from the application of pesticides to waters of the United States. The provisions of the PGP are designed to improve protection of our nation's water quality by minimizing discharges of pesticides to U.S. waters. EPA's final permit covers discharges of biological pesticides, and chemical pesticides that leave a residue, from the following pesticide use categories:

- Mosquito and other flying insect pest control,
- Weed and algae control (category relevant to NCR EPMT),
- Animal pest control, and
- Forest canopy pest control.

By "water," the PGP is meant to encompass controlling animal, plant, or other pathogen pests in water and at water's edge, including but not limited to applying pesticides on or near ditches and canals and to forest canopies where, to target the pest species effectively, a portion of the pesticide unavoidably will be applied over and deposited to water.

The final PGP requires permittees to minimize pesticide discharges through the use of pest management measures and monitor for and report any adverse incidents. Some permittees are also required to submit Notices of Intent (NOIs) prior to beginning to discharge and implement integrated pest management (IPM)-like practices. Record-keeping and reporting requirements in the permit will provide valuable information to EPA and the public regarding where, when, and how much pesticides are being discharged to U.S. waters.

Purpose of This Document

The purpose of this document is to summarize the NPDES PGP processes and restrictions specific to each state where the National Park Service (NPS) Exotic Plant Management Team of the National Capital Region works. The summary will serve as a starting point for NPS land managers to apply for, acquire, and adhere to the requirements of a PGP in each of the five states where the NCR EPMT works.

The summary is not meant to be an exhaustive or authoritative stand-alone resource—rather it is designed to:

- Serve as a starting point for the process of acquiring a PGP,
- Collect key contacts (Appendix) and online references (References) for each state,
- Highlight ways in which a state's processes or restrictions differ from EPA's general guidance, and
- Illustrate visually the steps and processes for acquiring a PGP in each state.

NPDES Permitting Authorities

EPA's PGP covers discharges in selected areas where EPA is the NPDES permitting authority (including Washington, DC). The remaining 44 states and the Virgin Islands are authorized to develop and issue their own NPDES pesticide permits. Clean Water Act Section 401 certification requirements provide these entities with an opportunity to add conditions to ensure that discharges covered under EPA's

permit are consistent with any state-specific water quality requirements—hence the need for this summary document.

The states of concern to the National Capital Region’s NPS Exotic Plant Management Team have the following PGP permitting authorities:

State	NPDES Permitting Authority
District of Columbia	EPA (Federal)
Maryland	MD Department of the Environment/Water Management Administration/Wastewater Permits Program
Virginia	VA Department of Environmental Quality/Office of Water Permits & Compliance Assistance
Pennsylvania	PA Department of Environmental Protection
West Virginia	WV Department of Environmental Protection/Division of Water and Wastewater Management

How to Use This Document

The NPDES permitting process is complex, and so are the technical materials supporting the process for each state in the National Capital Region. However, by reviewing the sections of the State-Specific Summaries in the following order, you will gain a clearer picture of the logical starting points in the process for each state:

1. Review the Notes section.
2. Download the Key Online References listed within each State-Specific Summary.
3. Review the Process flowchart for each state, paying particular attention to references to specific documents and sections.
4. Use the Appendix to find contacts for further questions for each state.

State-Specific Summaries

State-specific summaries and process flow charts follow.

District of Columbia

NPDES Permitting Authority

U.S. Environmental Protection Agency, Region 03 [however, the District Department of the Environment (DDOE) is responsible for reviewing and approving Pesticide Discharge Management Plans (PDMPs) as a part of the permitting process]. A PDMP template is available online (http://www.epa.gov/npdes/pubs/pgp_pdmp_template.doc)

Notes

- EPA has developed a Pesticides Permit Decision Tool (see link below) to aid operators in determining whether they are eligible for coverage under the permit.
- Although the official Pesticides General Permit (PGP) for the District of Columbia is issued by the EPA (Federal authority), the DDOE is responsible for reviewing PDMPs and must receive copies of the Notice of Intent (NOI) and any monitoring and reporting documentation sent to the EPA.

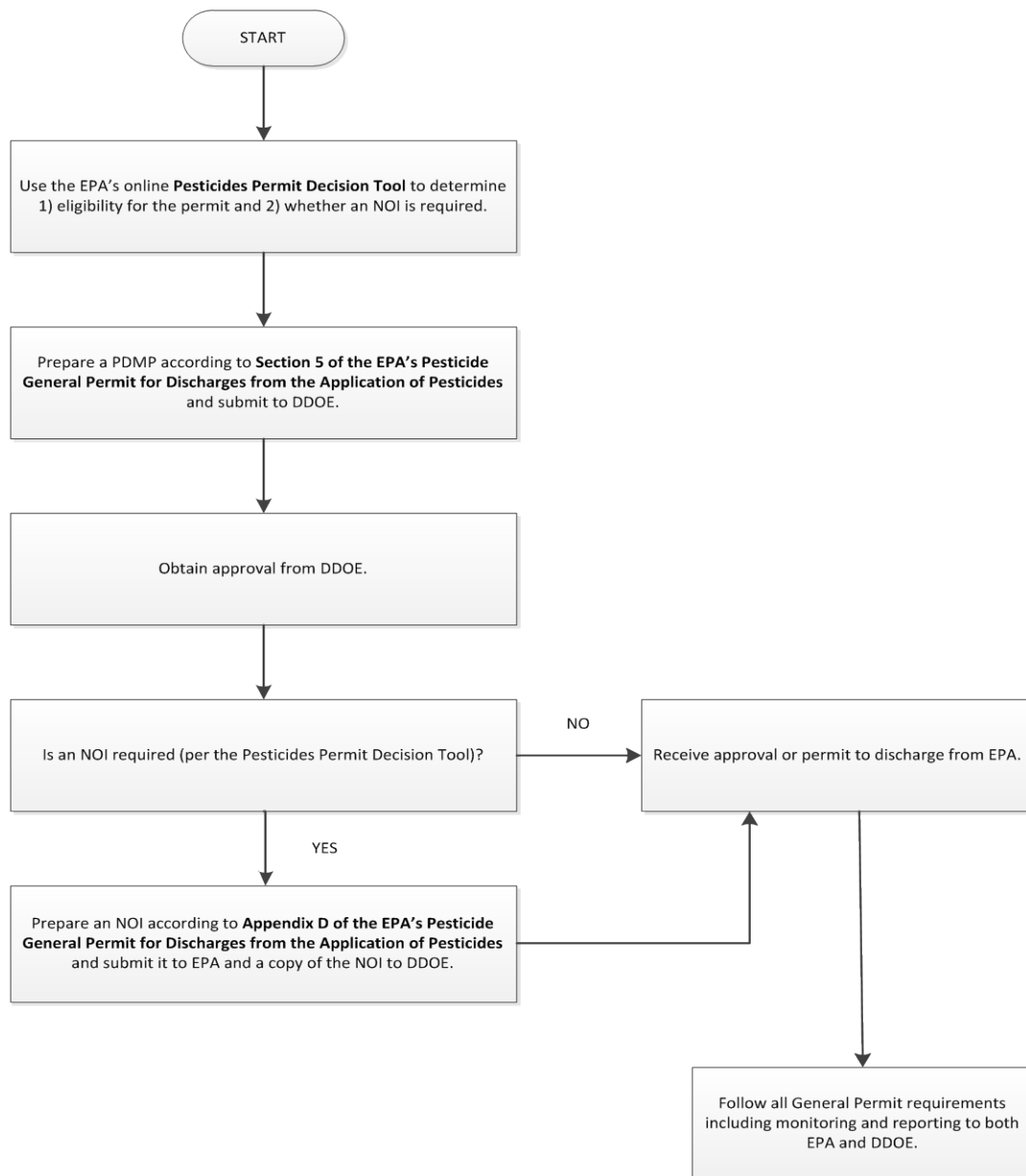
Key Online Resources for DC

EPA NPDES pesticides page: http://cfpub.epa.gov/npdes/home.cfm?program_id=410

Fact Sheet: Final National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States from the Application of Pesticides: http://www.epa.gov/npdes/pubs/pgp_final_factsheet.pdf

EPA Pesticides Permit Decision Tool: <http://cfpub.epa.gov/npdes/pesticides/prtool.cfm>

Process for District of Columbia



Maryland

NPDES Permitting Authority

Maryland Department of the Environment (MDE)/Water Management Administration/Wastewater Permits Program

Notes

- There are no requirements to **submit** an application or other documentation in MD—only to **develop and maintain** a PDMP if an operator's annual pesticide treatment area will exceed the thresholds indicated in Part I, Section H of the MD General Permit for Discharges from the Application of Pesticides (see link below and copied table below). A PDMP template is available online (http://www.epa.gov/npdes/pubs/pgp_pdmp_template.doc)
- Notices of Intent are also **not** required for Maryland. MDE instead relies on licensing information by commercial applicators regulated through the MD Department of Agriculture's IPM program.
- MDE does not delineate responsibilities between "decision makers" and "non-decision makers," i.e., all parties involved in a pesticide event are considered responsible.
- MDE maintains a limited exclusion from applying pesticides to Tier III (Outstanding National Resource) Waters. The state does not currently have any waterways designated as Tier III, but on the possibility that this might change, the state wishes to avoid blanket exclusion in favor of rapid response capability in these waters.

Key Online Resources for MD

Facts About...Maryland's Proposed NPDES General Permit for Discharges from the Application of Pesticides (Draft Permit No. PE-

11): <http://www.mde.state.md.us/programs/Permits/WaterManagementPermits/WaterDischargePermitApplications/Documents/PGP%20Factsheet%20Tentative%20Determination%20January%203%202011.pdf>

MD General Permit for Discharges from the Application of Pesticides:

<http://www.mde.state.md.us/programs/Permits/WaterManagementPermits/WaterDischargePermitApplications/Documents/PGP%20Final.pdf>

Table 1 Annual Treatment Area Thresholds for Maryland (based upon Part I, Section H of the MD General Permit for Discharges from the Application of Pesticides)

Pesticide Use	Annual Threshold
Mosquitoes and Other Flying Insect pests	6,400 acres of treatment area ¹
Weed, Algae, and Pathogen Control:	
In Water	80 acres of treatment area ²
At Water's Edge	20 linear miles of treatment area at water's edge ³
Nuisance Animal Control:	
In Water	80 acres of treatment area ²
At Water's Edge	20 linear miles of treatment area at water's edge ³
Forest Canopy Pest Control	6,400 acres of treatment area ¹

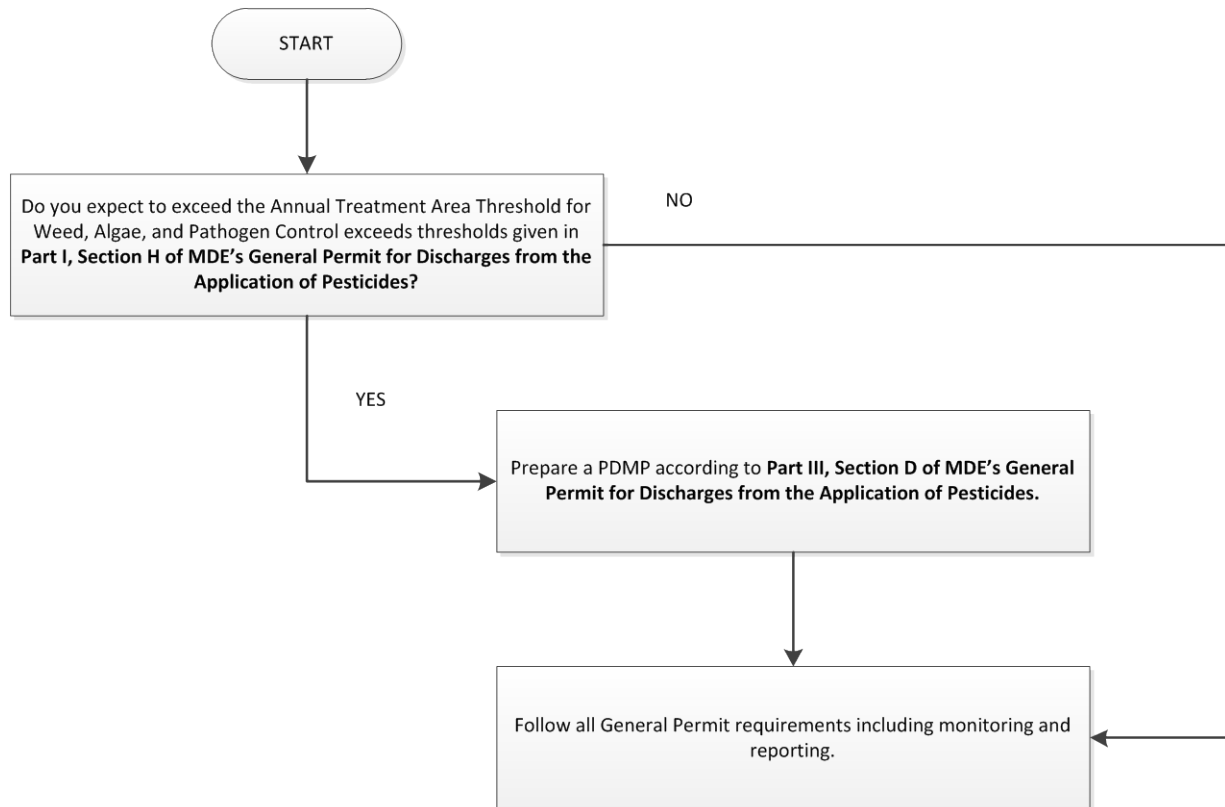
Notes

- ¹ For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten-acre site should be counted as twenty acres of treatment area.
- ² Calculations should include the area of the applications made to: (1) waters of the State and (2) conveyances with a hydrologic surface connection to waters of the State at the time of pesticide application. For calculating annual treatment area totals, count each treatment area once, regardless of how many applications are performed to that area.
- ³ Calculations should include the linear extent of the application made at water's edge adjacent to: (1) waters of the State and (2) conveyances with a hydrologic surface connection to waters of the State at the time of pesticide application. For calculating annual treatment totals, count each treatment area once, regardless of how many applications are performed to that area and count each side of a linear water body (other than a ditch) as a separate activity or area. For example, treating both sides of a ten-mile stream is equal to twenty miles of water treatment area.

"Annual" shall refer to the calendar year, and that includes the year in which this permit is issued.

If multiple operators are associated with an application (for example, a decisionmaker and a licensed applicator), each person shall count that application in their individual tally.

Process for Maryland



Virginia

NPDES Permitting Authority

Virginia Department of Environmental Quality (DEQ)/Office of Water Permits & Compliance Assistance

Notes

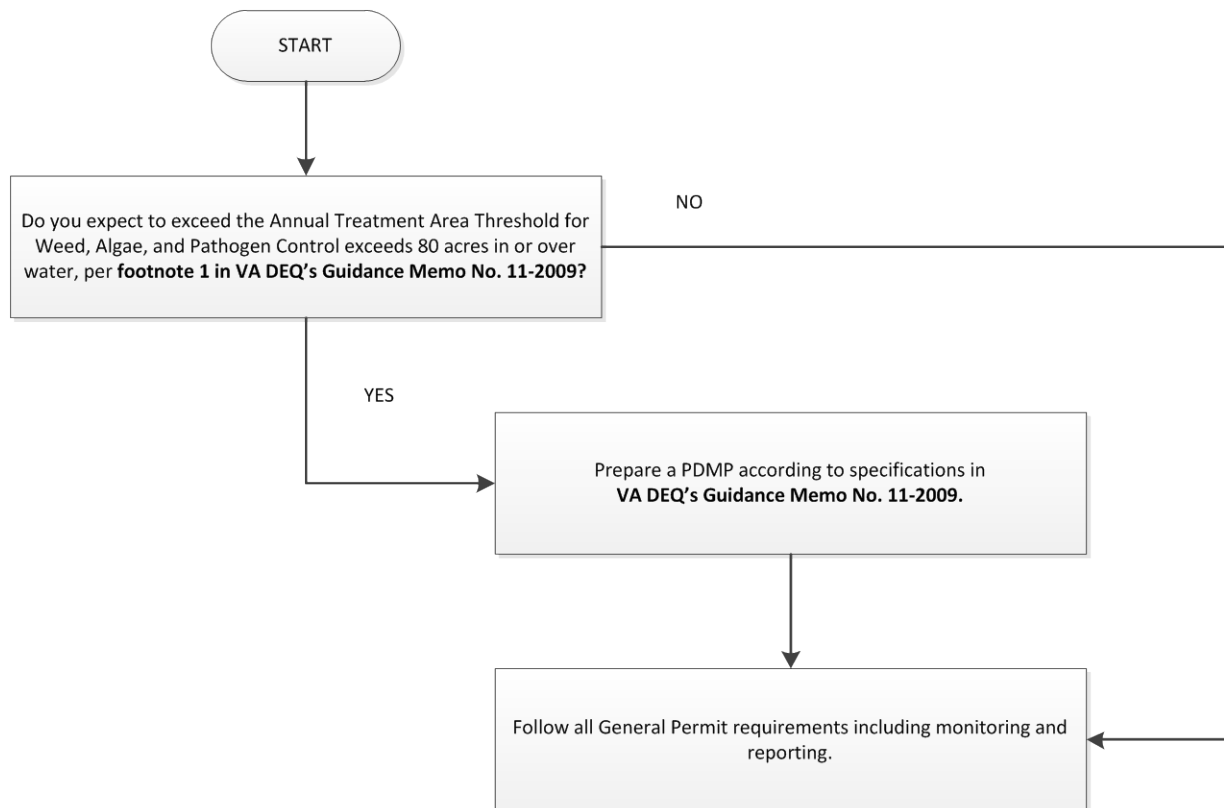
- There are no requirements to submit an application or other documentation in VA—only to develop and maintain a PDMP if an operator’s annual pesticide treatment area will exceed a specified threshold.
- NOIs are also not required for Virginia.

Key Online Resources for VA

Guidance Memo No. 11-2009: Implementation of the 2011 Issuance of the VPDES General Permit Regulation for Discharges Resulting from the Application of Pesticides to Surface Waters

VAG87: http://www.townhall.state.va.us/L/GetFile.cfm?File=E:\townhall\docroot\GuidanceDocs\440\GDoc_DEQ_4509_v1.pdf.

Process for Virginia



Pennsylvania

NPDES Permitting Authority

PA Department of Environmental Protection (DEP), Bureau of Water Standards and Facility Regulation

Notes

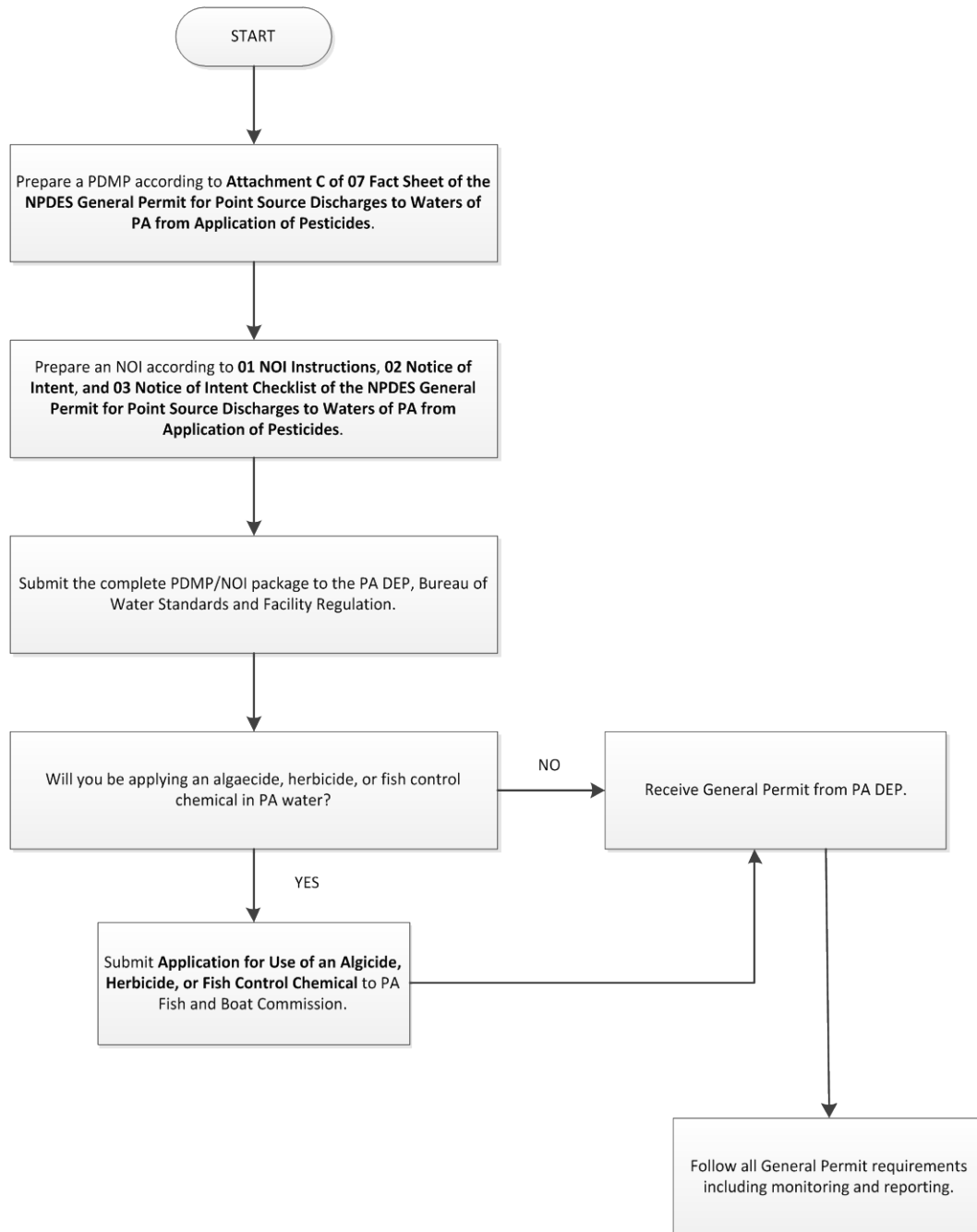
- All Federal (and State) agencies with a responsibility to control weeds and algae are required to submit NOIs—regardless of annual treatment area threshold.
- Operators who intend to use algicides, herbicides, or fish control chemicals in PA waters must also obtain joint approval from the Pennsylvania Fish and Boat Commission (PFBC) and the Department's Safe Drinking Water Program, regardless of annual treatment area threshold. DEP is responsible for coordinating permit reviews with the PFBC.

Key Online Resources for PA

NPDES General Permit for Point Source Discharges to Waters of PA from Application of Pesticides: <http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10772>

Application for Use of an Algicide, Herbicide or Fish Control Chemical in Waters of the Commonwealth: <http://fishandboat.com/images/pages/forms/algifrm.pdf>

Process for Pennsylvania



West Virginia

NPDES Permitting Authority

West Virginia Department of Environmental Protection (DEP), Division of Water and Wastewater Management, Permitting Section

Notes

- West Virginia is currently setting up an office for NPDES permitting for pesticide application. They do not anticipate that their processes will differ from the basic EPA guidance, but this is yet to be formally determined.
- In the interim, WV is issuing permits using EPA's general guidance, and applicants should start at the EPA web site for more detailed background and instructions on the content required for the PDMP and NOI to submit to the WV DEP. A PDMP template is available online (http://www.epa.gov/npdes/pubs/pgp_pdmp_template.doc)

Key Online Resources for WV

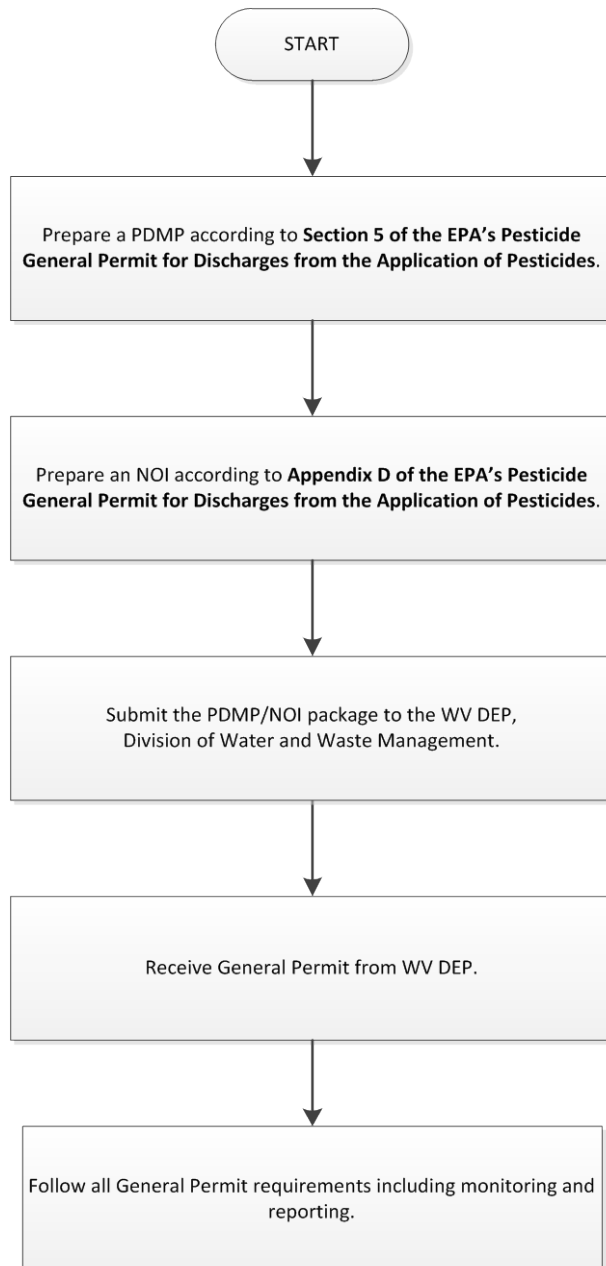
National Pollutant Discharge Elimination System Water Pollution Control Permit for West Virginia:

http://www.dep.wv.gov/WWE/permit/general/Documents/2011_Pesticide_General_Permit_Final.pdf

Pesticide General Permit (PGP) for Discharges from the Application of Pesticides:

http://www.epa.gov/npdes/pubs/final_pgp.pdf

Process for West Virginia



References

General and District of Columbia

EPA NPDES page on pesticides

http://cfpub.epa.gov/npdes/home.cfm?program_id=410. Accessed June 19, 2012.

Pesticides: State Agency Contacts. U.S. Environmental Protection

Agency. http://cfpub.epa.gov/npdes/contacts.cfm?program_id=410&type=STATE. Accessed June 19, 2012.

Fact Sheet: Final National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States from the Application of Pesticides. U.S. Environmental Protection Agency. http://www.epa.gov/npdes/pubs/pgp_final_factsheet.pdf. Accessed June 20, 2012.

Pesticide Discharge Management Plan

template http://www.epa.gov/npdes/pubs/pgp_pdmp_template.doc. Accessed August 3, 2012

Maryland

Facts About...Maryland's Proposed NPDES General Permit for Discharges from the Application of Pesticides (Draft Permit No. PE-11). Maryland Department of the

Environment. <http://www.mde.state.md.us/programs/Permits/WaterManagementPermits/WaterDischargePermitApplications/Documents/PGP%20Factsheet%20Tentative%20Determination%20January%203%202011.pdf> Accessed June 19, 2012.

Virginia

Guidance Documents: Department of Environmental Quality, State Water Control Board, General Virginia Pollutant Discharge Elimination System Permit for Pesticide Discharges. Virginia Regulatory Town Hall. <http://www.townhall.state.va.us/L/gdocs.cfm?chapterid=2418>. Accessed June 19, 2012.

Implementation of the 2011 Issuance of the VPDES General Permit Regulation for Discharges Resulting from the Application of Pesticides to Surface Waters VAG87. Virginia Regulatory Town Hall. http://www.townhall.state.va.us/L/GetFile.cfm?File=E:\townhall\docroot\GuidanceDocs\440\GDoc_DEQ_4509_v1.pdf. Accessed June 19, 2012.

Pennsylvania

NPDES General Permit for Point Source Discharges to Waters of PA from Application of Pesticides. Commonwealth Of Pennsylvania, Department Of Environmental Protection (DEP), Bureau of Water Standards and Facility Regulation. <http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10772>. Accessed June 19, 2012.

Fact Sheet: Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) General Permit for Point Source Discharges to Waters of the Commonwealth of Pennsylvania from the Application of Pesticides. Commonwealth Of Pennsylvania, Department Of Environmental

Protection (DEP), Bureau of Water Standards and Facility Regulation. [http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-85918/3800-PM-WSFR0345g%20Fact%20Sheet%20\(Final%2010-2011\).pdf](http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-85918/3800-PM-WSFR0345g%20Fact%20Sheet%20(Final%2010-2011).pdf). Accessed June 19, 2012.

Discharges Associated with Pesticide Applications Under the NPDES Permit Program: Frequently Asked Questions (FAQ). http://files.dep.state.pa.us/Water/Wastewater%20Management/EDMRPortalFiles/NPDES_Pesticides_FAQ.pdf. Accessed June 28, 2012.

West Virginia

National Pollutant Discharge Elimination System Water Pollution Control Permit. State of West Virginia, Department of Environmental Protection, Division of Water and Waste Management. http://www.dep.wv.gov/WWE/permit/general/Documents/2011_Pesticide_General_Permits_Final.pdf. Accessed June 19, 2012.

Appendix: Pesticides: State Agency Contacts

DISTRICT OF COLUMBIA

Peter Weber (weber.peter@epa.gov)
US EPA, Region 03 (Permitting Authority for DC)
1650 Arch St
Mail Code: 3WP41
Philadelphia, PA 19103-2029
Phone: (215) 814-5749

Collin Burrell (collin.burrell@dc.gov)
Associate Director for Water Quality Division
District Department of the Environment (for local information)
51 N St. NE
5th Floor
Washington, DC 20002
Phone: (202) 535-2255

MARYLAND

Edwal Stone (estone@mde.state.md.us)
Division Chief
Maryland Department of the Environment/Water Management Administration/Wastewater Permits Program
1800 Washington Blvd
Baltimore, MD 21230-1708
Phone: (410) 537-3661
Maryland General Discharge Permit for Discharges from the Application of Pesticides

Edward Gertler (egertler@mde.state.md.us)
Maryland Department of the Environment/Water Management Administration/Program Review Division
1800 Washington Blvd
Baltimore, MD 21230-1708
Phone: (410) 537 3651
Maryland General Discharge Permit for Discharges from the Application of Pesticides

VIRGINIA

Fred K. Cunningham (frederick.cunningham@deq.virginia.gov)
Director
Virginia Department of Environmental Quality/Office of Water Permits & Compliance Assistance
629 E. Main St.
PO Box 1105
Richmond, VA 23219
Phone: (804) 698-4285
Virginia Pollutant Discharge Elimination System Permit for Pesticide Discharges

Elleanore M. Daub (elleanore.daub@deq.virginia.gov)
Virginia Department of Environmental Quality/Office of Water Permits & Compliance Assistance
629 E. Main St.
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Richmond, VA 23219
Phone: (804) 698-4111
Virginia Pollutant Discharge Elimination System Permit for Pesticide Discharges

Burton R. Tuxford (burton.tuxford@deq.virginia.gov)
Virginia Department of Environmental Quality/Office of Water Permits & Compliance Assistance
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Fax: (804) 698-4032
Virginia Pollutant Discharge Elimination System Permit for Pesticide Discharges

PENNSYLVANIA

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Pennsylvania Department of Environmental Protection
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Pennsylvania NPDES General Permit for Point Source Discharges to Waters of PA from Application of Pesticides

WEST VIRGINIA

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Management/Permitting Section
601 57th St. SE
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Phone: (304) 926-0499 x1014
Fax: (304) 926-0496
West Virginia Pesticide General Permit for Point Source Discharges