# 2020 NATURAL RESOURCES INVENTORY APPENDICES





## TOWNSHIP OF MONTGOMERY SOMERSET COUNTY, NEW JERSEY

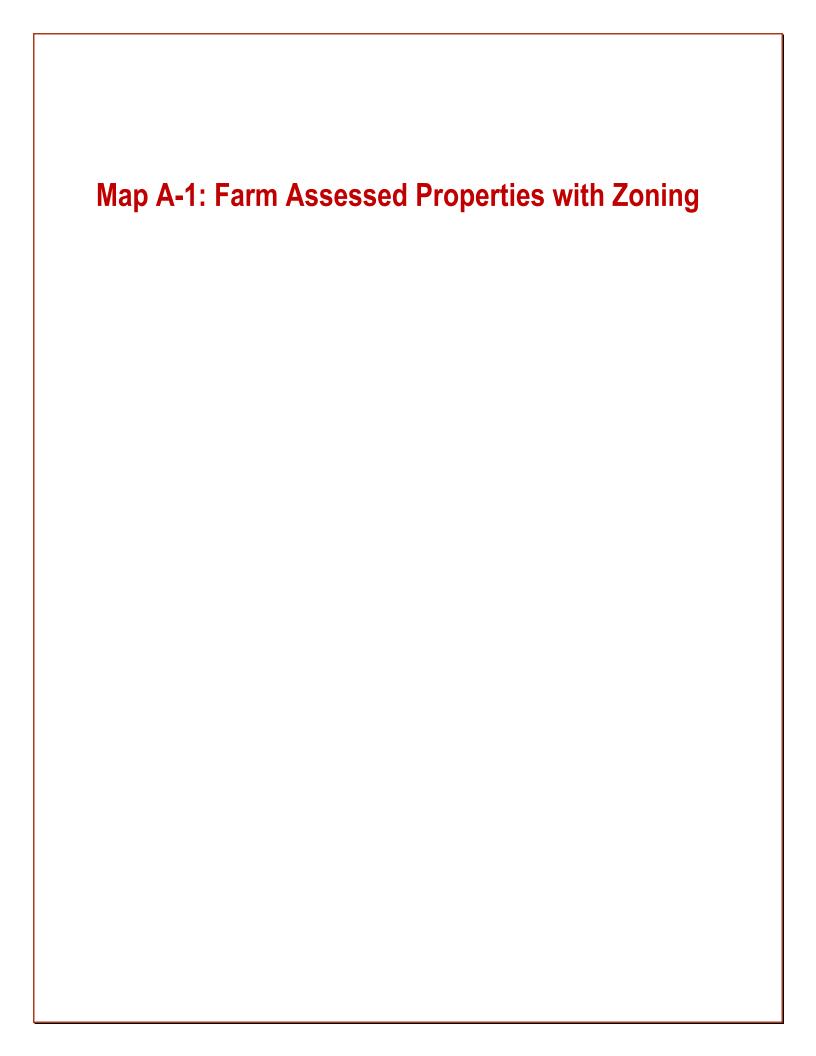


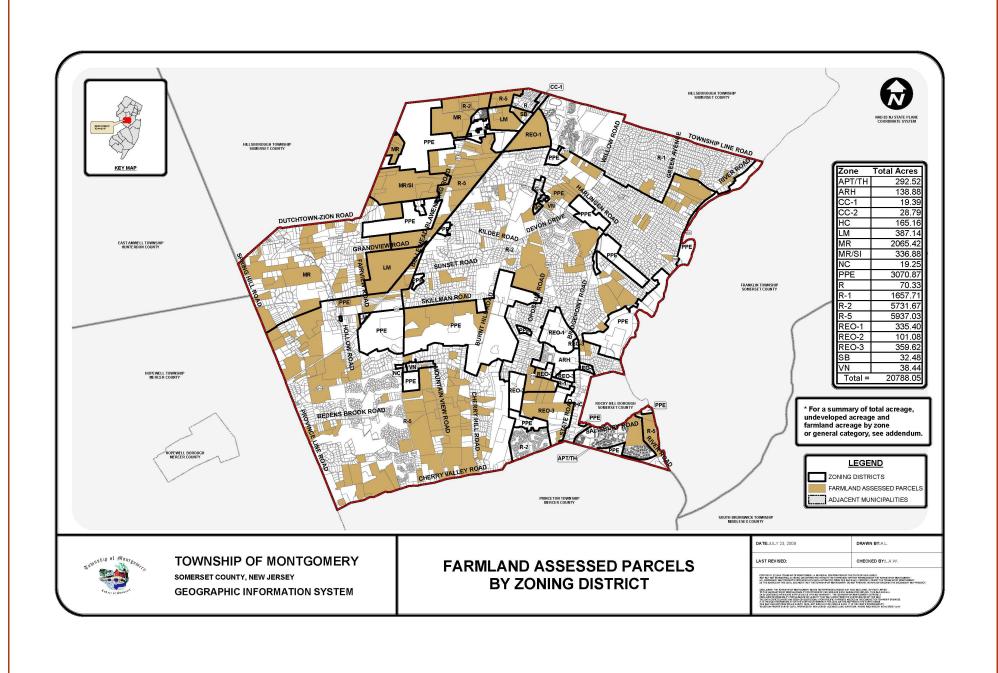


Prepared By:

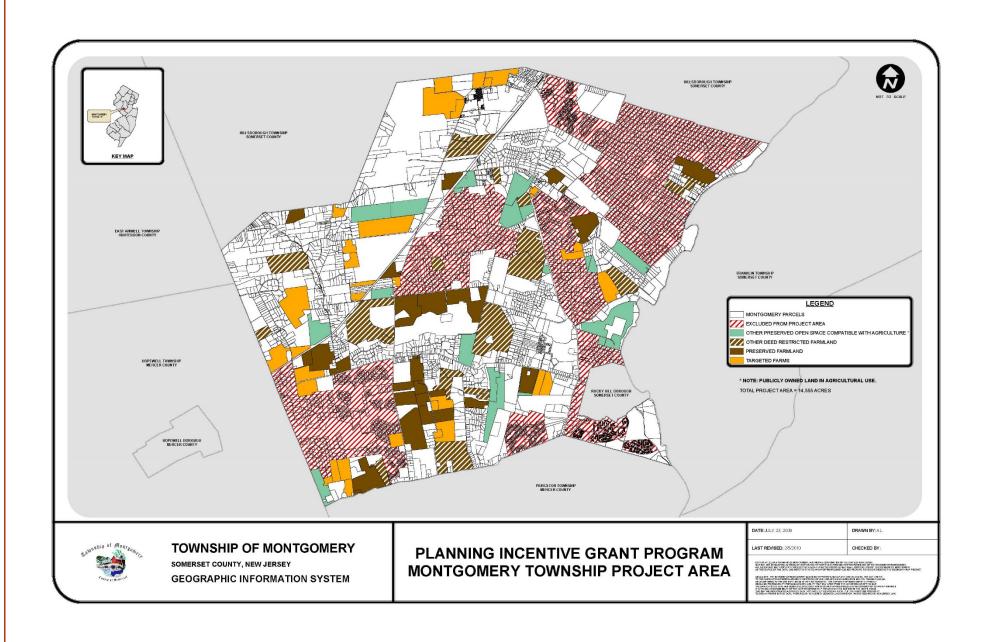


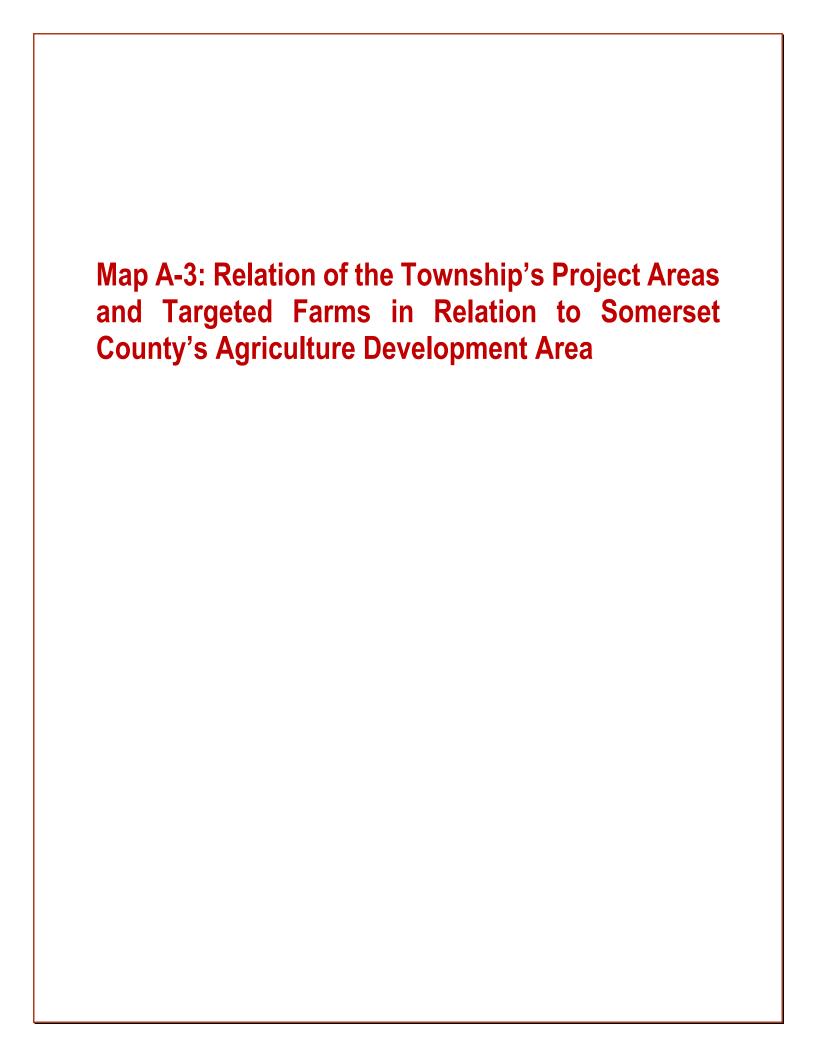


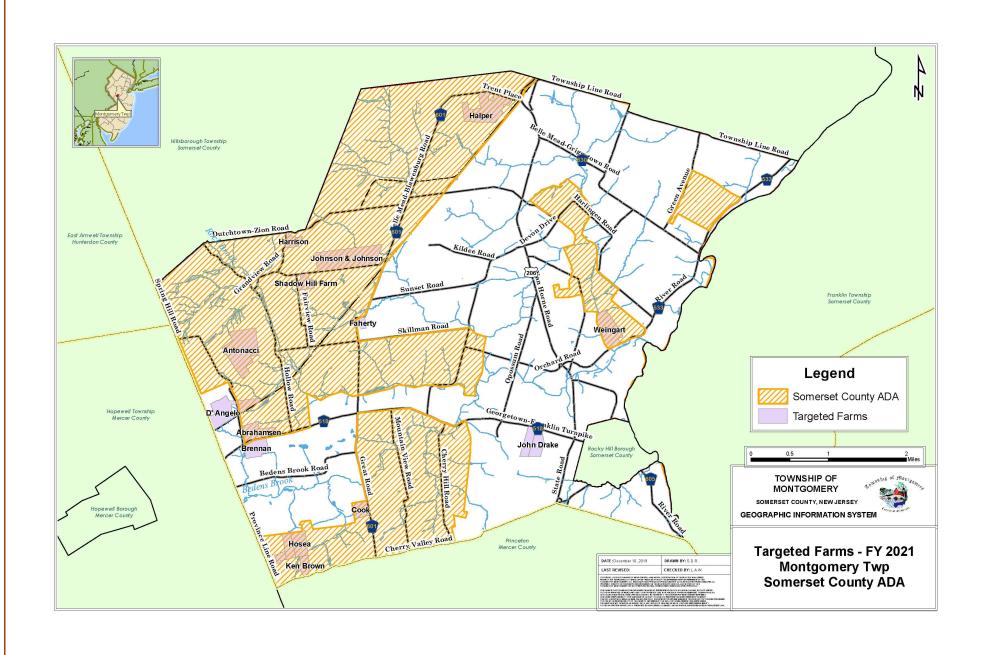


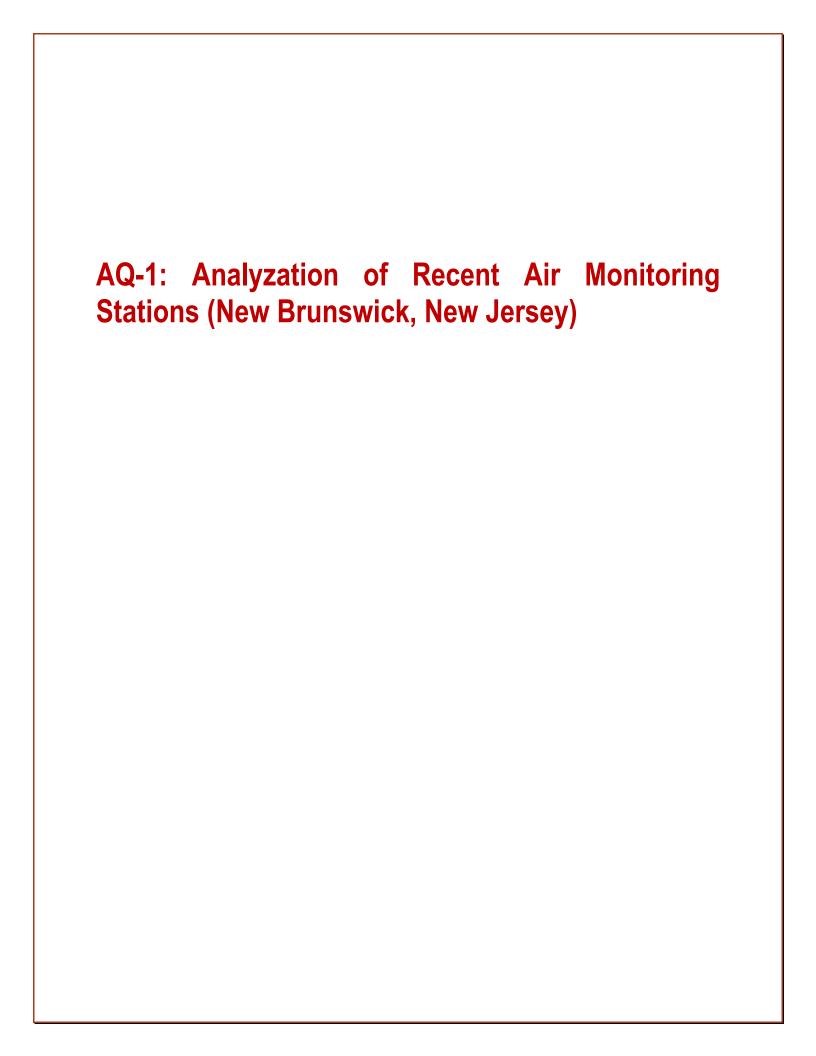


Map A-2: Project Areas with Targeted and **Preserved Farms** 









### Air Monitoring Station Report - July 2016 (New Brunswick Station)

Report Type : StationReport

Date	Time	O3	NO	NO2	NOX	PM25
		ppm	ppm	ppm	ppm	μg/m3
7/1/2016	24:00 AM	0.035	0	0.006	0.007	12.2
7/2/2016	24:00 AM	0.032	0	0.001	0.002	6.3
7/3/2016	24:00 AM	0.032	0	0.003	0.003	8.9
7/4/2016	24:00 AM	0.038	0	0.002	0.003	13
7/5/2016	24:00 AM	0.031	0	0.003	0.003	6.4
7/6/2016	24:00 AM	0.039	0	0.004	0.005	8.9
7/7/2016	24:00 AM	0.045	0	0.005	0.005	14.4
7/8/2016	24:00 AM	0.039	0	0.007	0.008	13.9
7/9/2016	24:00 AM	0.022	0	0.002	0.003	4.1
7/10/2016	24:00 AM	0.025	0	0.001	0.002	1
7/11/2016	24:00 AM	0.026	0	0.004	0.006	2
7/12/2016	24:00 AM	0.035	0.002	0.005	0.008	5
7/13/2016	24:00 AM	0.025	0	0.006	0.007	7.5
7/14/2016	24:00 AM	0.036	0	0.003	0.004	8.7
7/15/2016	24:00 AM	0.044	0	0.004	0.005	11.8
7/16/2016	24:00 AM	0.043	0	0.004	0.005	10.2
7/17/2016	24:00 AM	0.041	0	0.003	0.004	10.5
7/18/2016	24:00 AM	0.043	0	0.004	0.005	11
7/19/2016	24:00 AM	0.028	0	0.005	0.006	7.1
7/20/2016	24:00 AM	0.03	0.001	0.008	0.01	8.9
7/21/2016	24:00 AM	0.048	0	0.003	0.005	10
7/22/2016	24:00 AM	0.058	0	0.004	0.004	16.5
7/23/2016	24:00 AM	0.048	0	0.003	0.004	10.8
7/24/2016	24:00 AM	0.034	0	0.004	0.005	8.5
7/25/2016	24:00 AM					
7/26/2016	24:00 AM					
7/27/2016	24:00 AM					
7/28/2016	24:00 AM					
7/29/2016	24:00 AM					
7/30/2016	24:00 AM					
7/31/2016	24:00 AM	0.035	0	0.002	0.003	8.9
Minimum		0.022	0	0.001	0.002	1
MinDate		9-Jul	1-Jul	2-Jul	2-Jul	10-Jul
MinTime		24:00:00	24:00:00	24:00:00	24:00:00	24:00:00
Maximum		0.058	0.002	0.008	0.01	16.5
MaxDate		22-Jul	12-Jul	20-Jul	20-Jul	22-Jul
MaxTime		24:00:00	24:00:00	24:00:00	24:00:00	24:00:00
Avg		0.036	0	0.003	0.004	9
Num		25	25	25	25	25
Data[%]		80	80	80	80	80
STD		0	0	0	0	3.6

### Air Monitoring Station Report - July 2017 (New Brunswick Station)

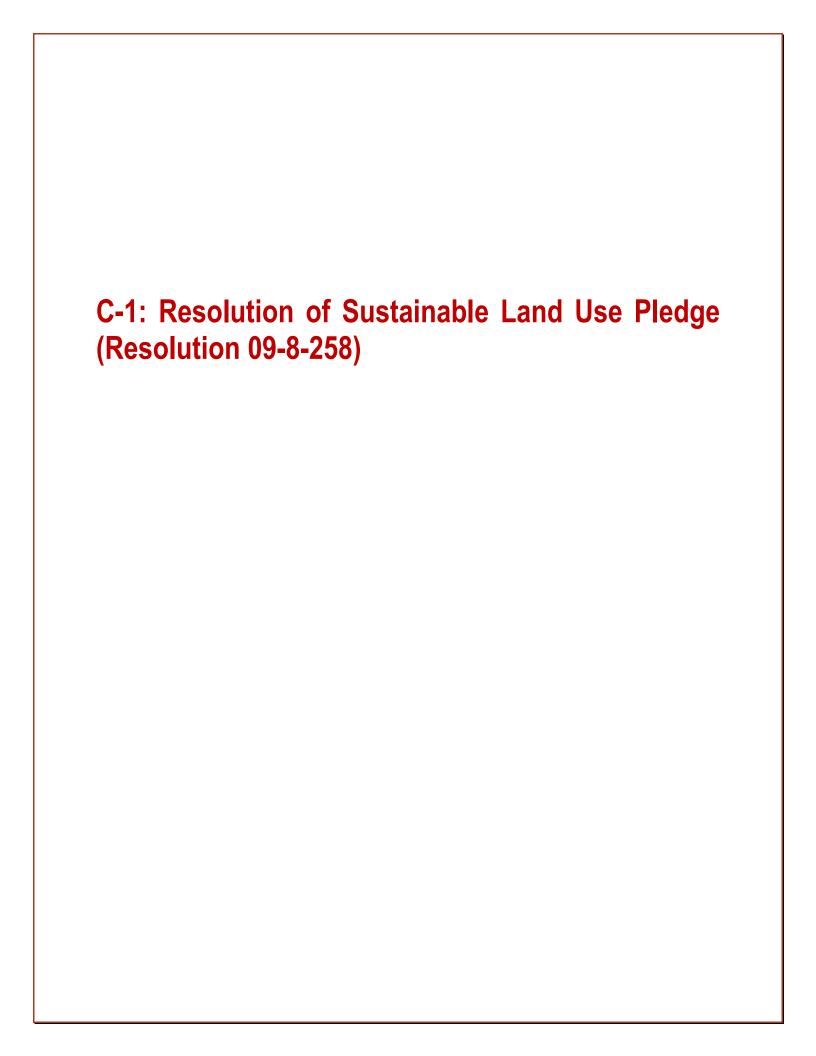
Report Type : StationReport

Date	Time	O3	NO	NO2	NOX	PM25
		ppm	ppm	ppm	ppm	μg/m3
7/1/2017	24:00 AM	0.028	0	0.002	0.002	6.4
7/2/2017	24:00 AM	0.036	0	0.002	0.003	8.3
7/3/2017	24:00 AM	0.039	0	0.003	0.004	12.5
7/4/2017	24:00 AM	0.039	0	0.005	0.006	18.6
7/5/2017	24:00 AM	0.028	0.002	0.008	0.011	24.4
7/6/2017	24:00 AM	0.024	0	0.004	0.005	6.5
7/7/2017	24:00 AM	0.028	0.001	0.004	0.006	4.7
7/8/2017	24:00 AM	0.04	0	0.001	0.002	7.5
7/9/2017	24:00 AM	0.029	0	0.002	0.003	7.7
7/10/2017	24:00 AM	0.034	0	0.004	0.005	8.1
7/11/2017	24:00 AM		0	0.004	0.005	13.6
7/12/2017	24:00 AM		0	0.003	0.003	10.2
7/13/2017	24:00 AM	0.038	0	0.005	0.006	16.1
7/14/2017	24:00 AM	0.016	0	0.005	0.006	5.6
7/15/2017	24:00 AM	0.028	0	0.003	0.004	9.4
7/16/2017	24:00 AM	0.032	0	0.002	0.003	6.6
7/17/2017	24:00 AM	0.037	0	0.003	0.004	9.9
7/18/2017	24:00 AM	0.036	0	0.004	0.005	6.7
7/19/2017	24:00 AM	0.046	0	0.003	0.004	12.9
7/20/2017	24:00 AM	0.045	0	0.003	0.004	17.2
7/21/2017	24:00 AM	0.036	0	0.004	0.006	10.4
7/22/2017	24:00 AM		0	0.003	0.004	12.1
7/23/2017	24:00 AM		0	0.001	0.002	13.3
7/24/2017	24:00 AM	0.028	0	0.005	0.006	8.5
7/25/2017	24:00 AM	0.015	0.003	0.012	0.016	7.4
7/26/2017	24:00 AM	0.027	0	0.006	0.007	6.1
7/27/2017	24:00 AM	0.028	0	0.004	0.006	7.2
7/28/2017	24:00 AM	0.031	0.003	0.009	0.013	11.5
7/29/2017	24:00 AM	0.025	0	0.004	0.004	10.1
7/30/2017	24:00 AM	0.031	0	0.002	0.003	6.6
7/31/2017	24:00 AM	0.024	0	0.004	0.006	8.4
Minimum		0.015	0	0.001	0.002	4.7
MinDate		25-Jul	1-Jul	8-Jul	1-Jul	7-Jul
MinTime		24:00:00	24:00:00	24:00:00	24:00:00	24:00:00
Maximum		0.046	0.003	0.012	0.016	24.4
MaxDate		19-Jul	25-Jul	25-Jul	25-Jul	5-Jul
MaxTime		24:00:00	24:00:00	24:00:00	24:00:00	24:00:00
Avg		0.031	0	0.004	0.005	10.1
Num		27	31	31	31	31
Data[%]		87	100	100	100	100
STD		0	0	0	0	4.3

### Air Monitoring Station Report - July 2018 (New Brunswick Station)

Report Type : StationReport

Date	Time	O3	NO	NO2	NOX	PM25
		ppm	ppm	ppm	ppm	μg/m3
7/1/2018	24:00 AM	0.045	0	0.003	0.003	17.2
7/2/2018	24:00 AM	0.048	0	0.004	0.005	18.6
7/3/2018	24:00 AM	0.04	0	0.006	0.008	18.4
7/4/2018	24:00 AM	0.023	0	0.005	0.006	15.6
7/5/2018	24:00 AM	0.019	0	0.001	0.002	11.6
7/6/2018	24:00 AM	0.026	0	0.002	0.003	6.6
7/7/2018	24:00 AM	0.035	0	0.003	0.004	6.1
7/8/2018	24:00 AM	0.035	0	0.004	0.004	8.3
7/9/2018	24:00 AM	0.041	0	0.003	0.004	7.9
7/10/2018	24:00 AM	0.053	0	0.004	0.005	11.6
7/11/2018	24:00 AM	0.041	0	0.004	0.005	12.1
7/12/2018	24:00 AM	0.039	0	0.007	0.009	11.9
7/13/2018	24:00 AM	0.035	0.002	0.007	0.01	11
7/14/2018	24:00 AM	0.043	0	0.002	0.003	10.7
7/15/2018	24:00 AM	0.035	0	0.003	0.004	7.9
7/16/2018	24:00 AM	0.05	0	0.004	0.005	15
7/17/2018	24:00 AM	0.038	0	0.003	0.004	11.3
7/18/2018	24:00 AM	0.022	0	0.004	0.005	7.4
7/19/2018	24:00 AM	0.033	0.001	0.008	0.01	6.7
7/20/2018	24:00 AM	0.031	0.002	0.007	0.01	7.7
7/21/2018	24:00 AM	0.025	0	0.004	0.004	4
7/22/2018	24:00 AM	0.024	0	0	0.001	5.7
7/23/2018	24:00 AM	0.021	0	0.001	0.002	7.1
7/24/2018	24:00 AM	0.019	0	0.001	0.002	6.2
7/25/2018	24:00 AM	0.022	0	0.001	0.002	4.9
7/26/2018	24:00 AM	0.034	0	0.002	0.002	4.6
7/27/2018	24:00 AM	0.034	0	0.004	0.005	13.2
7/28/2018	24:00 AM	0.033	0	0.003	0.004	8.4
7/29/2018	24:00 AM					
7/30/2018	24:00 AM					
7/31/2018	24:00 AM					
Minimum		0.019	0	0	0.001	4
MinDate		5-Jul	1-Jul	22-Jul	22-Jul	21-Jul
MinTime		24:00:00		24:00:00	24:00:00	24:00:00
Maximum		0.053	0.002	0.008	0.01	18.6
MaxDate		10-Jul	13-Jul	19-Jul	13-Jul	2-Jul
MaxTime		24:00:00	24:00:00	24:00:00	24:00:00	24:00:00
Avg		0.033	0	0.003	0.004	9.9
Num		28	28	28	28	28
Data[%]		90	90	90	90	90
STD		0	0	0	0	4.1



#### RESOLUTION #09~8~258 - CREATING A SUSTAINABLE LAND USE PLEDGE

WHEREAS, Land use and protection of natural resources are essential components of overall sustainability for a municipality;

WHEREAS, Poor land use decisions can lead to and increase societal ills such as decreased mobility, high housing costs, increased greenhouse gas em.is s ions, reduction of water supply, increase of pollution, loss of open space and the degradation of natural resources;

WHEREAS, Well-planned land use can create transportation choices, provide for a range of housing options, create walkable communities, preserve open space, greenbelts, and farmland allow for continued use and protection of vital natural resources;

WHEREAS, Given New Jersey's strong tradition of home rule and local authority over planning and zoning, achieving a statewide sustainable land use pattern will require municipalities to take thelead;

**NOW THEREFORE BE IT RESOLVED** By the Township Committee of the Township of Montgomery that Montgomery will take the following steps, as much as reasonably practicable, with regard to our municipal land use decisions with the intent of making Montgomery a truly sustainable community. It is our intent to recommend to the Planning Board that further study and consideration of these principles be undertaken in the next master plan review and revision so that our zoning can be updated accordingly.

- 1. **Facilities Siting** *We pledge*, to the extent feasible, to take into consideration factors such as walkability/bikeability, access to public transit and proximity to other uses when siting new or relocated municipal facilities. The actions of a municipality when locating theirown facilities can set a positive precedent and encourage other public and private sector entities to consider sustainable land use when locating their own facilities.
- **2.** Housing Variety We *pledge* through the use of our zoning and revenue generation powers, to foster a diverse mix of housing types to meet the needs of people from all ages, incomes, diverse backgrounds, and walks of life, within the limits and capacity of the Township's environmental, infrastructure and fiscal resources. A variety of housing options, from single family homes to one-bedroom apartments, including but not limit ed to housing affordable to people with low, moderate and middle incomes, in accordance with our Housing Element and Fair Share Plan, is vital to allow residents to live and work in a municipality through various stages of their lives.
- 3. **Open Space Preservation** *We pledge* to continue to preserve, monitor, and manage open space and conservation areas, and create recreational opportunities within our municipality. As the most densely populated state in the nation, open space in New Jerseyis at a premium. Preserving what is left of our

open space, for its ecological and recreationall value, is critical for a sustainable future. Further *We Pledge* to continue updating our Natural Resources Inventory to identify and assess the extent of our natural resources in order to link natural resource management and protection to carrying capacity analysis, and land use planning and zoning.

- 4. Water Quality Protection We pledge to continue to protect and improve water quality in our municipality through land use decisions. Availability of clean water, aquifer recharge, management of stormwater runoff and point source pollution are critical elements of achieving a sustainable municipality. Strategies for water quality protection will include low impact development, public education, water friendly landscape design, protection and enhancement of stream buffers, woodlands preservation, and wise stormwater management.
- 5. **Transportation Choices** *We Pledge* to create transportation choices within our municipality when planning transportation projects by considering all modes of transportation, including walking, biking, mass transit and automobiles. Given that emissions from transportation, mainly passenger cars, make up the largest share of the state's carbon footprint, creating transportation alternatives at the local level is critical to reducing the state's overall carbon footprint.
- 6. **Mix of Uses** *We Pledge* to use our zoning power to continue to pursue smart growth land use choices that allow for a :mix of uses in areas that make the most sense for our municipality and the region. We will continue to explore redevelopment and infill
- opportunities, preferred over green field development, when practicable. Development is not needed in every community, but where development and redevelopment make sense, land use patterns that aggregate uses such as commercial and residential create an environment where the only feasible mode of transportation is the automobile. Allowing for a balanced mix of compatible land uses, residential units above retail stores for example, can help reduce the necessity of driving by allowing people to walk to various destinations.
- 7. **Green Design** *We pledge* to incorporate the principles of green design and renewable energy generation when updating our site plan and subdivision requirements in order to complement our existing low impact development requirements. Green design strategies not only improve the environmental performance of buildings and grounds but lessen the impact of those properties on the surrounding environment. Such strategies include energy efficiency, water conservation, water friendly landscape design, LEED practices, sound stormwater management techniques, indoor environmental quality management, use of recycled and renewable materials, waste reduction, reduced auto use, tree preservation, native planting, limitation of large lawns, reduction of pollutants and avoidance of disturbing environmentally sensitive features.
- 8. **Regional Cooperation** We pledge to reach out to administrations of our neighboring municipalities concerning land use decisions, and to take into consideration their concerns when making regional level land use decisions.

Local land use decisions can often have regional impacts, even though they are decided exclusively by one municipality. For example, a large mall built in one municipality can affect traffic and retail opportunities in neighboring towns.

9. **Parking Regulations** - *We pledge* to reevaluate our parking requirements with the areas where walking, biking, and mass transit are existing, stringent parking requirements can hinder the goal of creating vibrant centers that have a critical mass or people to support local arts, shopping, and other services. Flexible parking requirements, pervious parking surfaces, and innovative parking design can decrease the amount of land dedicated to parking lots, stormwater runoff, land clearing, and heat island effects, while promoting transportation alternatives to individual automobile use. Evaluate areas to install safe and secure bicycle parking. Evaluate parking revenues, where fee for parking may be implemented or needs to be implemented.

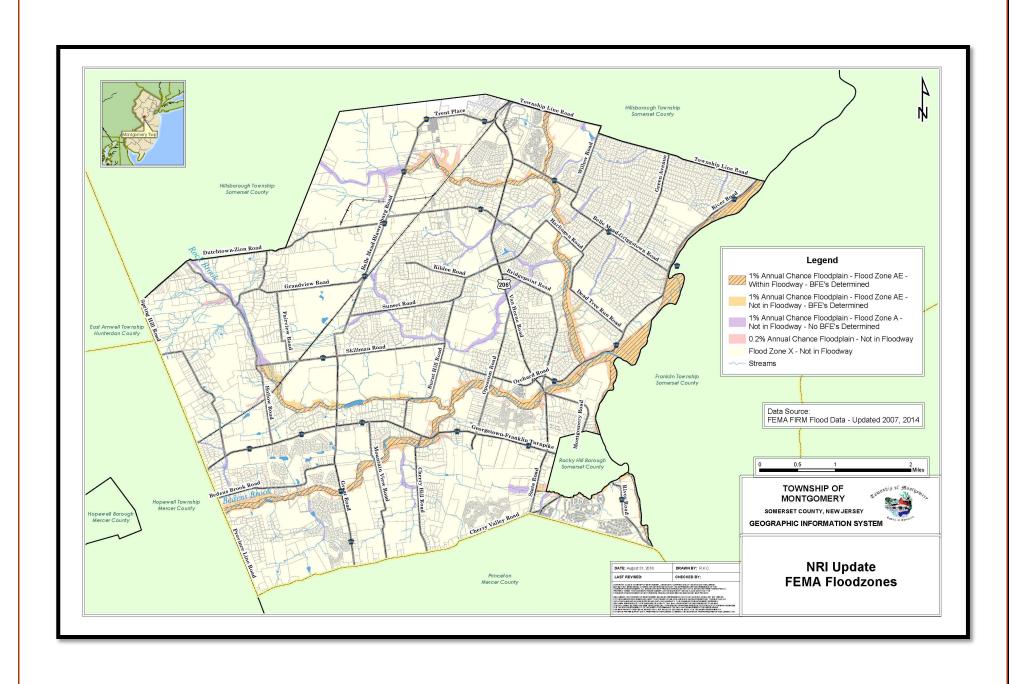
#### CERTIFICATION

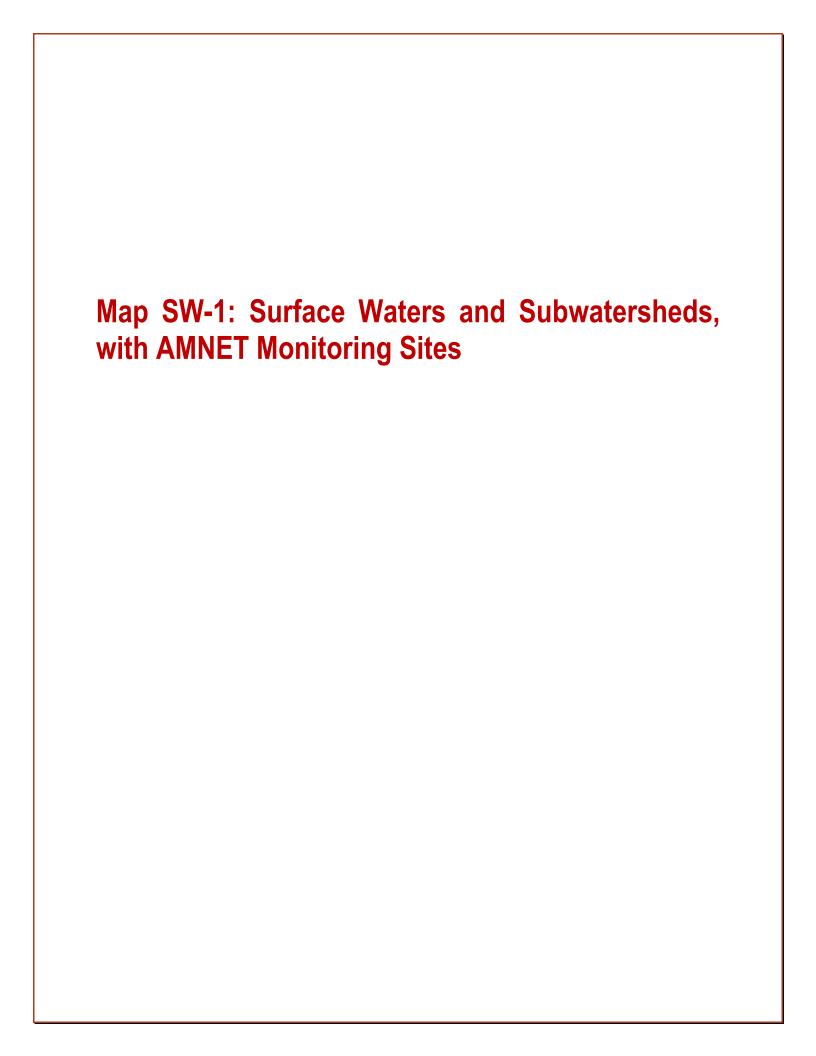
I HEREBY CERTIFY THE ABOVE TO BE A TRUE COPY OF A RESOLUTION ADOPTED BY THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF MONTGOMERY AT A MEETING HELD

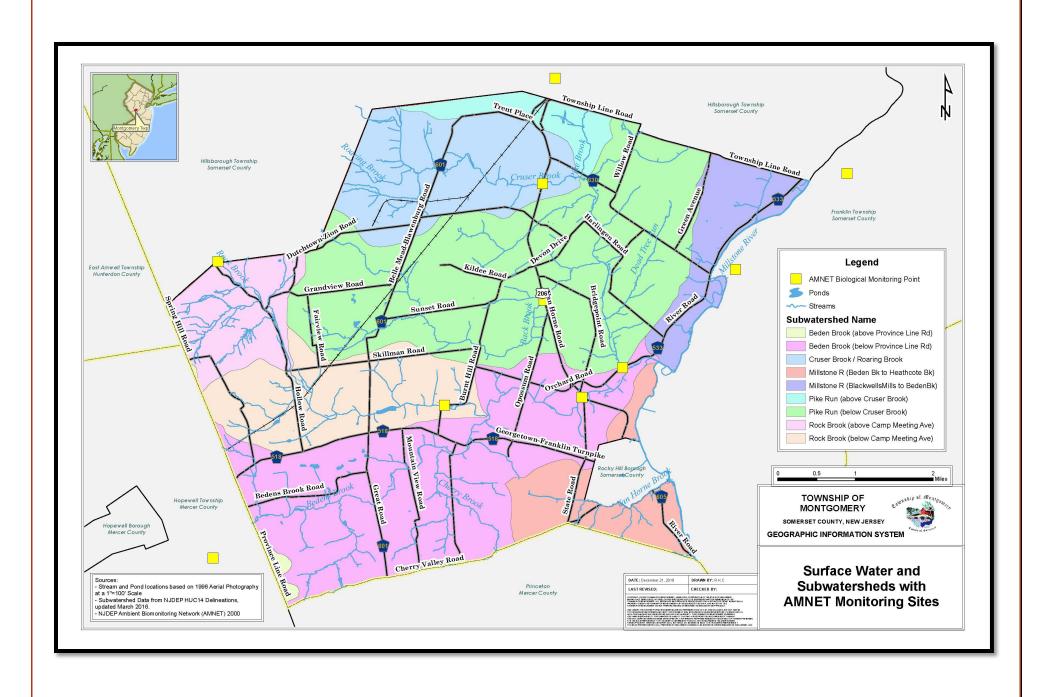
AUGUST 6, 2009

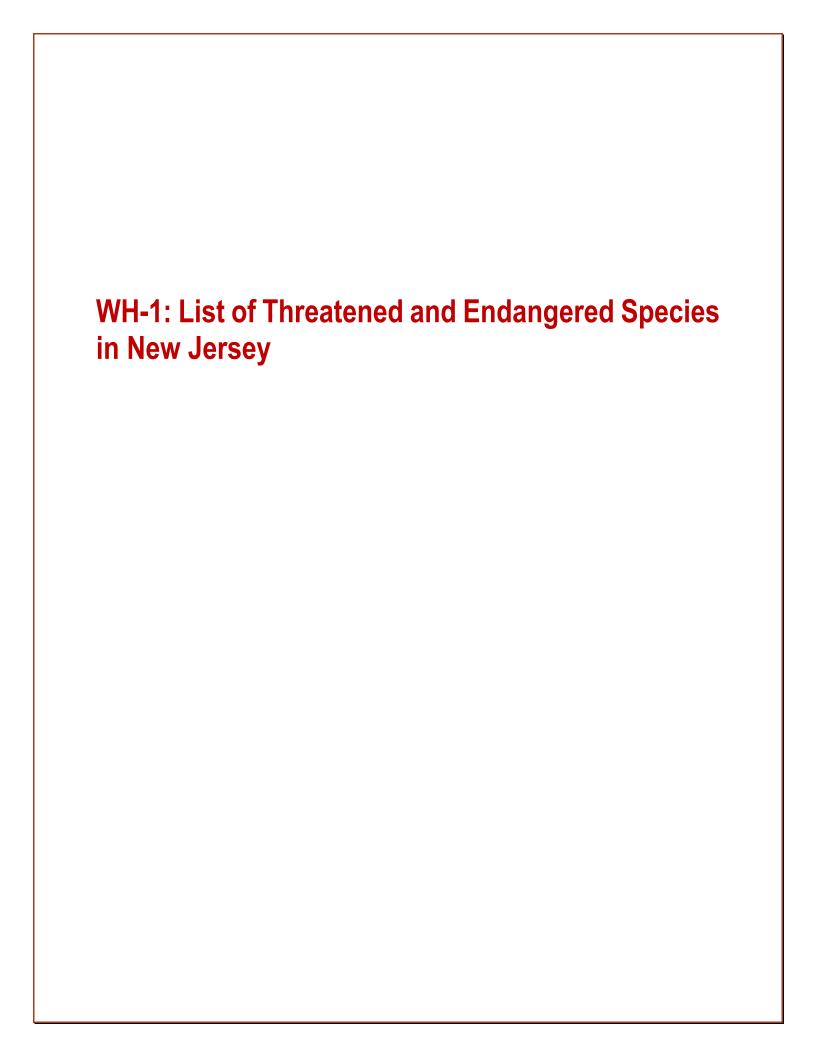
Township Clerk

Map FP-1: Flood Zones	









BIRDS				
	Endangered		Threatened	
Bittern, American BR	Botaurus lentiginosos BR	Bobolink BR	Dolichonyx oryzivorus BR	
Eagle, bald BR	Haliaeetus leucocephalus BR	Eagle, bald NB	Haliaeetus leucocephalus NB	
Falcon, peregrine BR	Falco peregrinus BR	Egret, cattle BR	Bubulcus ibis BR	
Goshawk, northern BR	Accipiter gentilis BR	Kestrel, American	Falco sparverius	
Grebe, pied- billed BR	Podilymbus podiceps BR	Lark, horned BR	Eremophila alpestris BR	
<u>Harrier,</u> <u>northern</u> вк	Circus cyaneus BR	Night-heron, black- crowned BR	Nycticorax nycticorax BR	
Hawk, red- shouldered BR	Buteo lineatus BR	Night-heron, yellow-crowned	Nyctanassa violacea	
Knot, red Nв	Calidris canutus NB	Osprey BR	Pandion haliaetus BR	
Owl, short- eared BR	Asio flammeus BR	Owl, barred	Strix varia	
Plover, piping**	Charadrius melodus**	Owl, long-eared	Asio otus	
Rail, black BR	Laterallus jamaicensis BR	Rail, black NB	Laterallus jamaicensis NB	
<u>Sandpiper,</u> <u>upland</u>	Batramia longicauda	Sparrow, grasshopper	Ammodramus savannarum BR	
<u>Shrike,</u> <u>loggerhead</u>	Lanius Iudovicianus NB	Sparrow, Savannah BR	Passerculus sandwichensis BR	
Skimmer, black	Rynchops niger	Woodpecker, red-headed	Melanerpes erythrocephalus	
Sparrow, Henslow's	Ammodramus henslowii			
Sparrow, vesper BR	Pooecetes gramineus BR			
Tern, least	Sternula antillarum	**Federally endan	gered or threatened	
Tern, roseate**	Sterna dougallii**	BR - Breeding pop	ulation only; NB - non-breeding	
Warbler, golden- winged BR	Vermivora chrysoptera BR			
Wren, sedge	Cistothorus platensis			

REPTILES			
Enda	ingered	Thr	eatened
Rattlesnake, timber	Crotalus h. horridus	Snake, northern pine	Pituophis m. melanoleucus
Snake, corn	Elaphe g. guttata	Turtle, Atlantic green**	Chelonia mydas**
<u>Snake, queen</u>	Regina septemvittata	Turtle, wood	Glyptemys insculpta
Turtle, bog**	Glyptemys muhlenbergii**		
Hawksbill, Atlantic**	Eretmochelys imbricata**		
Leatherback, Atlantic **  Dermochelys coriacea**			
Loggerhead, Atlantic **	Caretta caretta**		
Ridley, Atlantic **	Lepidochelys kempii**		
**Federally endangered or threatened			

AMPHIBIANS			
Endange	ered	Threate	ened
Salamander, blue-spotted	Ambystoma laterale	Salamander, eastern mud	Pseudotriton montanus
Salamander, eastern tiger	Ambystoma tigrinum	Salamander, long-tailed	Eurycea longicauda
Treefrog, southern gray	Hyla chrysocelis	Treefrog, pine barrens	Hyla andersonii

INVERTEBRATES			
Endangered		Threate	ned
Beetle, American burying**	Nicrophorus americanus**	Baskettail, robust(dragonfly)	Epitheca spinosa
Beetle, northeastern beach tiger**	Cincindela d. dorsalis**	Clubtail, banner (dragonfly)	Gomphus apomyius
Copper, bronze	Lycaena hyllus	Clubtail, harpoon (dragonfly)	Gomphus descriptus
Floater, brook (mussel)	Alasmidonta varicosa	Elfin, frosted (butterfly)	Callophrys irus
Floater, green (mussel)	Lasmigona subviridis	Emerald, Kennedy's (dragonfly)	Somatochlora kennedyi
Petaltail, gray (dragonfly)	Tachopteryx thoreyi	Floater, triangle (mussel)	Alasmidonta undulata
Satyr, Mitchell's (butterfly)**	Neonympha m. mitchellii**	Fritillary, silver- bordered (butterfly)	Bolaria selene myrina
Skipper, arogos (butterfly)	Atrytone arogos arogos	Jewelwing, superb (dragonfly)	Calopteryx amata
Skipper, Appalachian grizzled (butterfly)	Pyrgus wyandot	Lampmussel, eastern (mussel)	Lampsilis radiata
Wedgemussel, dwarf**	Alasmidonta heterodon**	Lampmussel, yellow (mussel)	Lampsilis cariosa
		Mucket, tidewater (mussel)	Leptodea ochracea
		Pondmussel, eastern (mussel)	Ligumia nasuta
		Snaketail, brook, (dragonfly)	Ophiogomphus asperses
		White, checkered (butterfly)	Pontia protodice

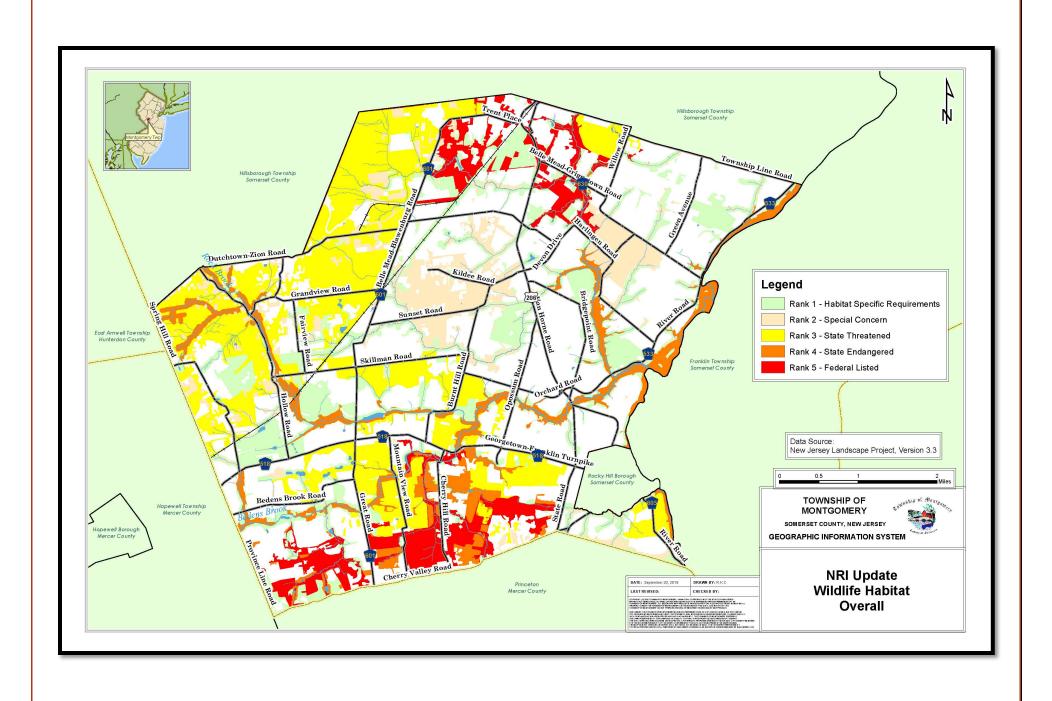
<sup>\*\*</sup>Federally endangered or threatened

MAMMALS			
Endangere	d		
Bat, Indiana**	Myotis sodalis**		
Bobcat	Lynx rufus		
Whale, North Atlantic right**	Eubalaena glacialis**		
Whale, blue**	Balaenoptera musculus**		
Whale, fin**	Balaenoptera physalus**		
Whale, humpback**	Megaptera novaeangliae**		
Whale, sei**	Balaenoptera borealis**		
Whale,sperm**	Physeter macrocephalus**		
Woodrat, Allegheny	Neotoma magister		
**Federally Endangered			

FISH				
Eı	ndangered			
Sturgeon, Atlantic**	Acipenser oxyrinchus oxyrinchus**			
Sturgeon, shortnose**	Acipenser brevirostrum**			
**Federally Endangered				

Source: NJDEP's Division of Fish and Wildlife <a href="https://www.nj.gov/dep/fgw/tandespp.htm">https://www.nj.gov/dep/fgw/tandespp.htm</a>

WH-2: Ranked Habitat	



## **HABITAT OVER LAND USES**

Map WH-3: Critical Habitat Located in Agricultural Land Uses

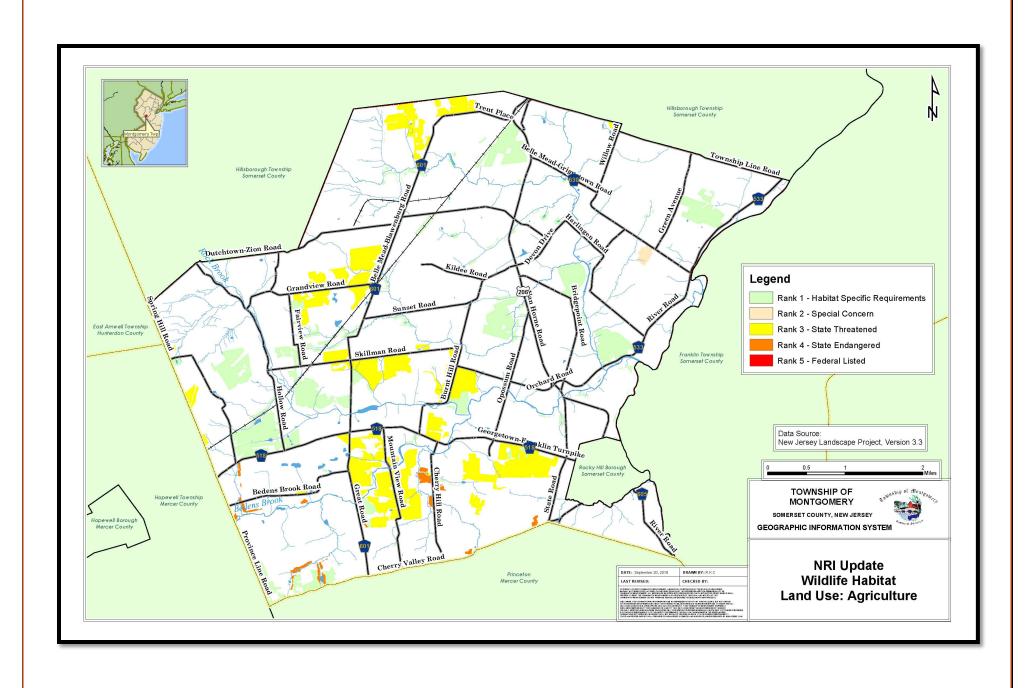
Map WH-4: Critical Habitat Located in Barren Land

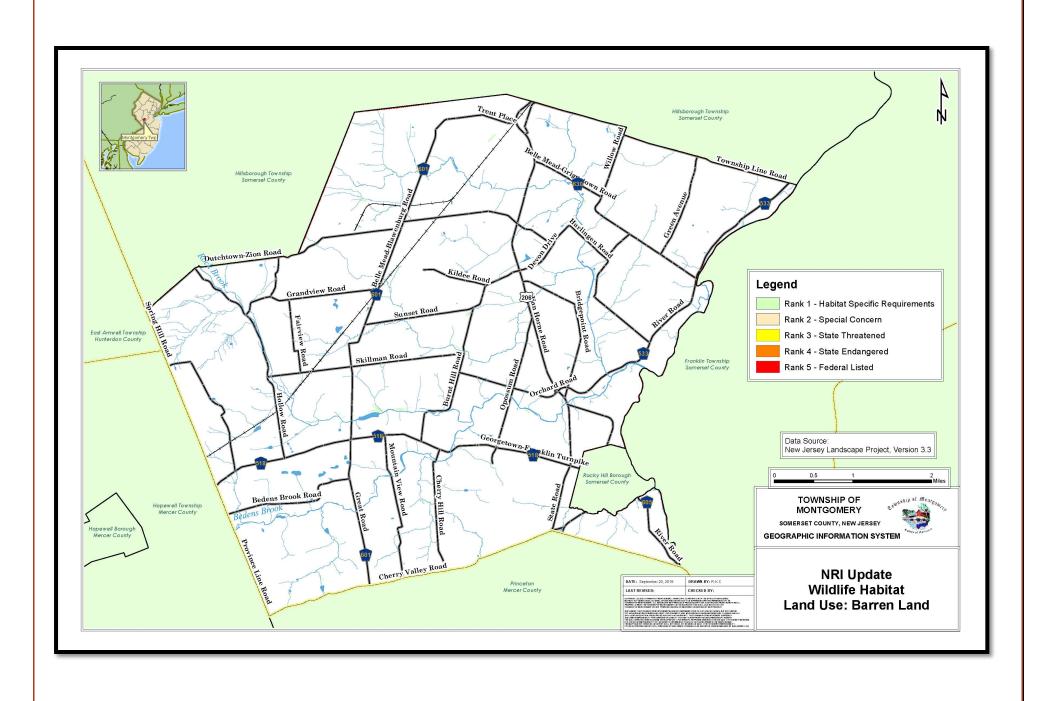
Map WH-5: Critical Habitat Located in Forest

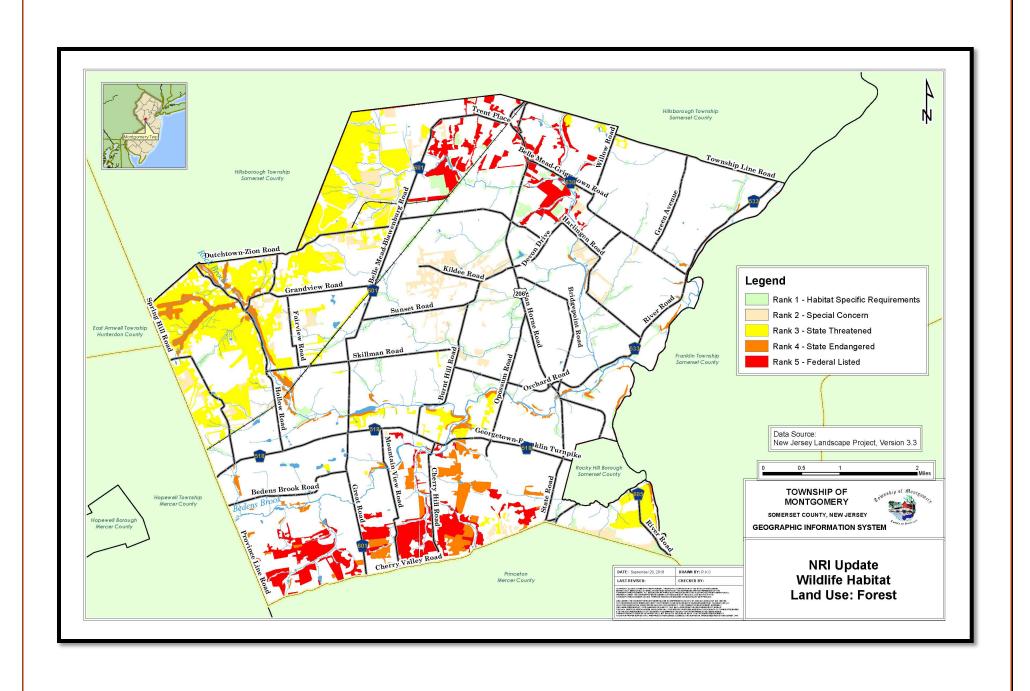
Map WH-6: Critical Habitat Located in Urban Land

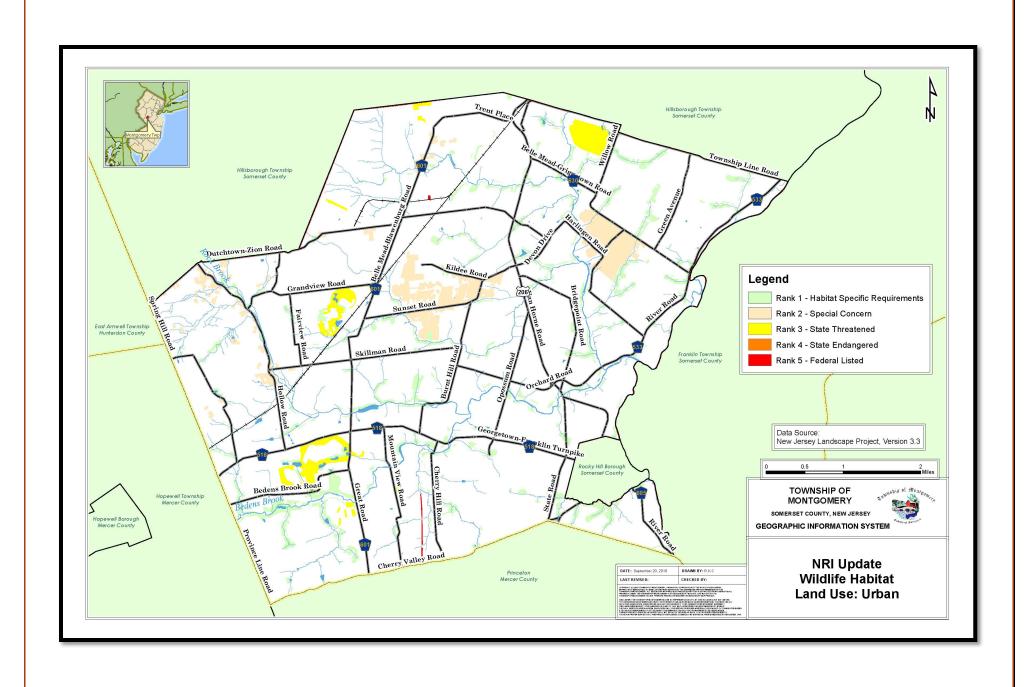
Map WH-7: Critical Habitat Located in/near Water

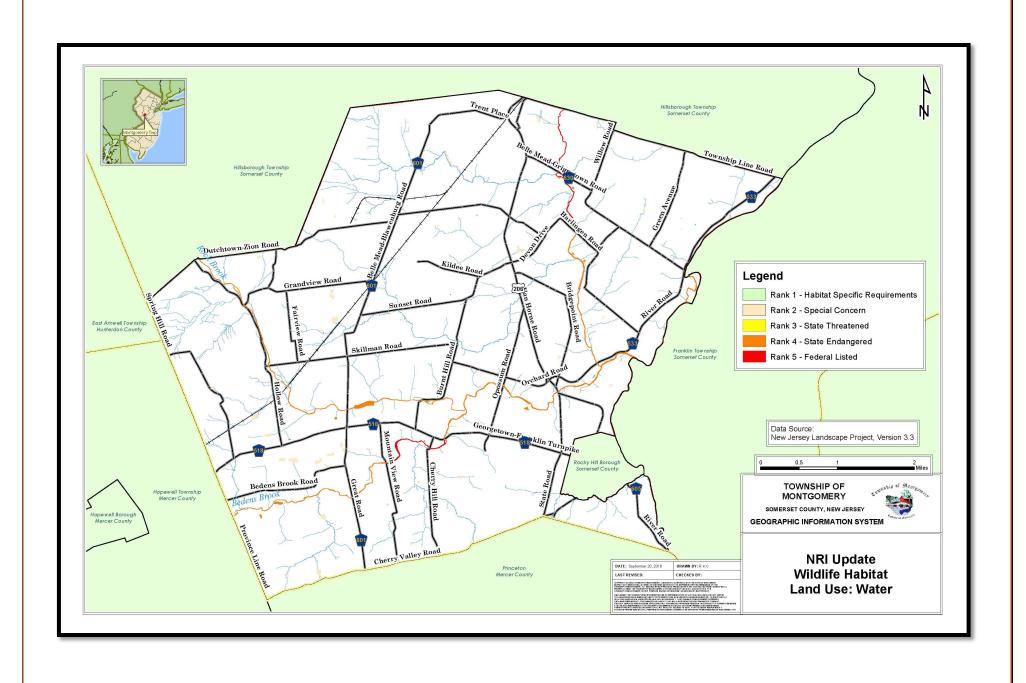
Map WH-8: Critical Habitat Located in Wetlands

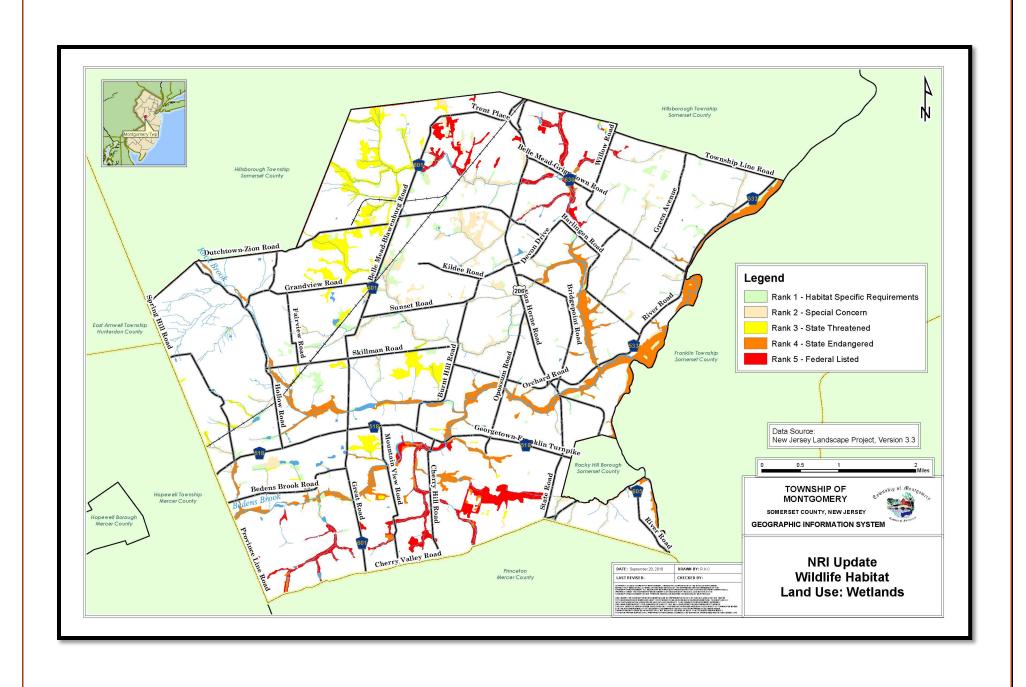




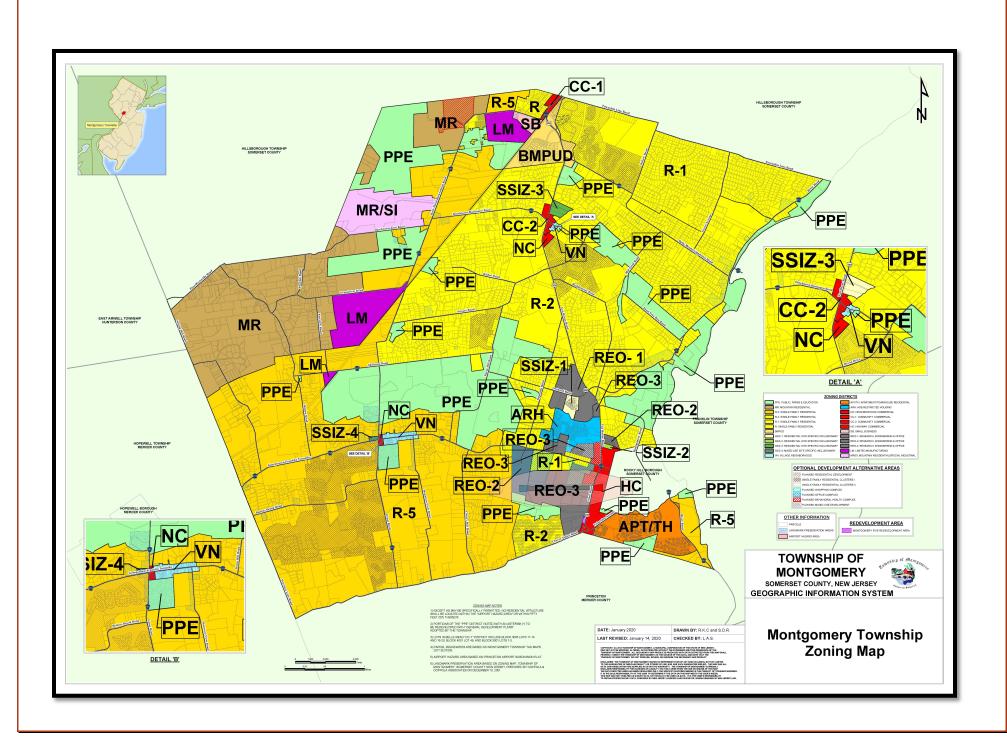




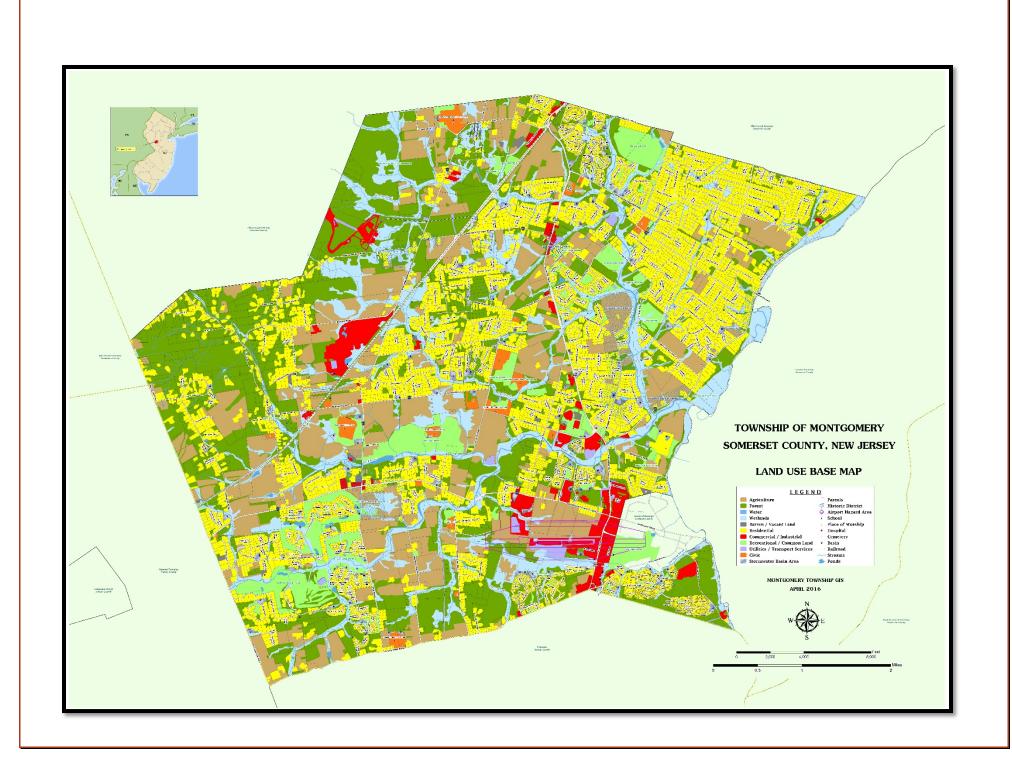


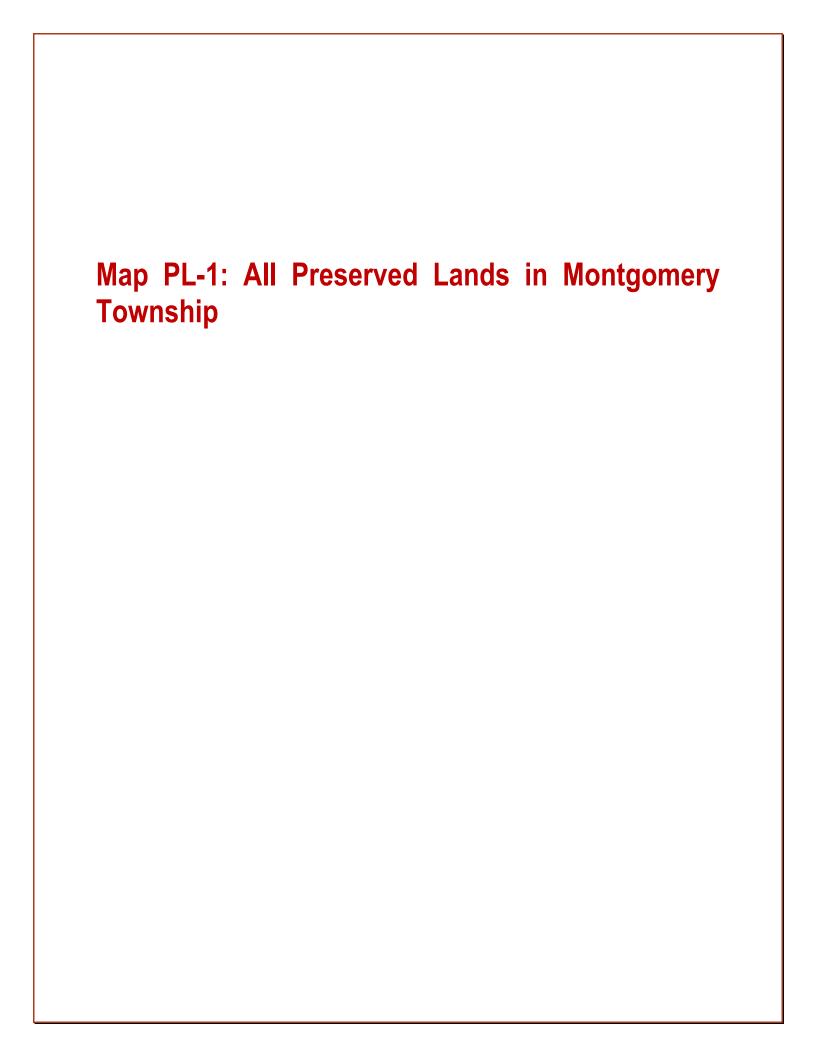


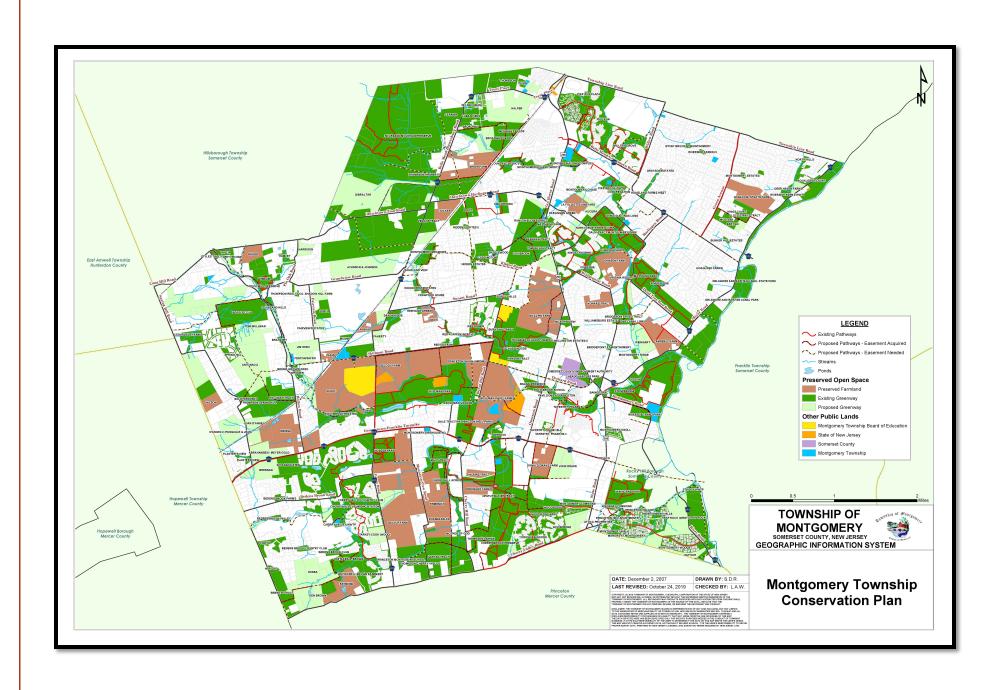
Map LU-1: Zoning Map	



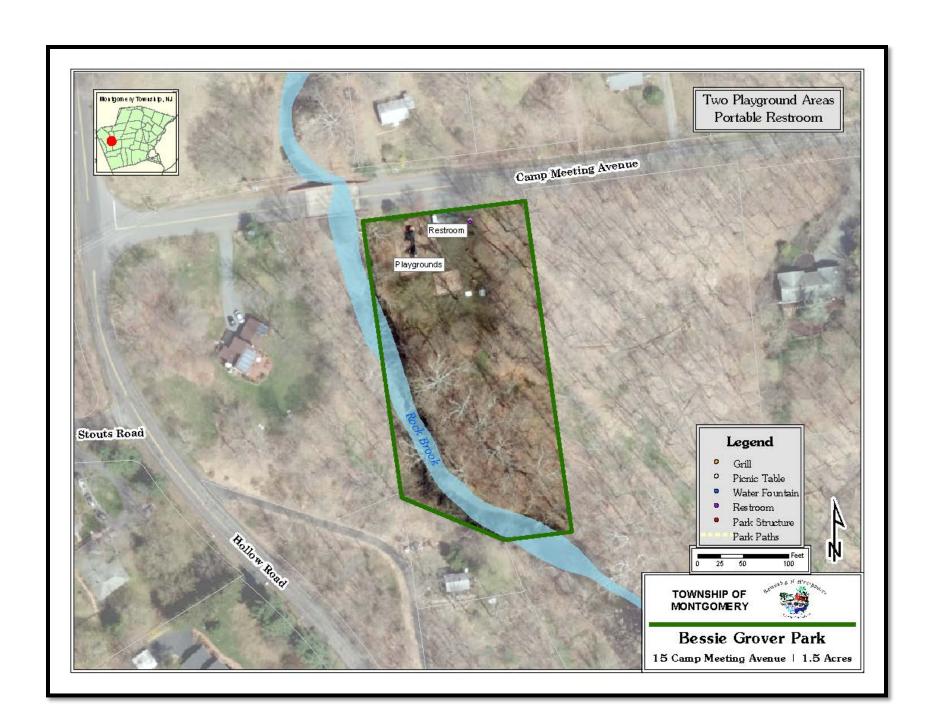
Map LU-2: Land Use/Land Cover	

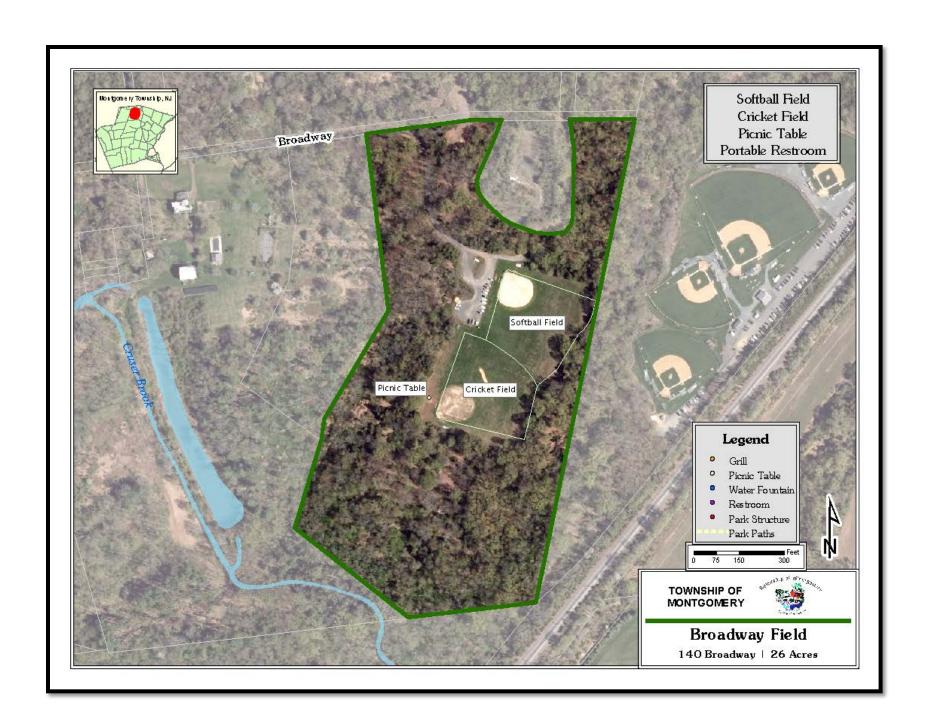


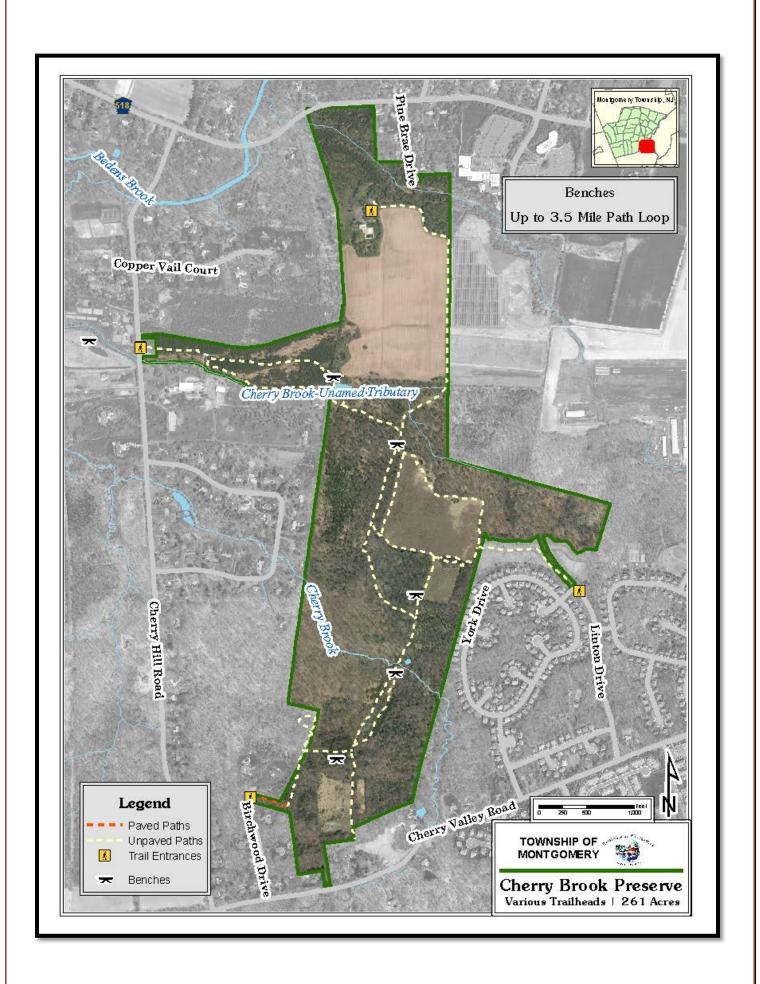


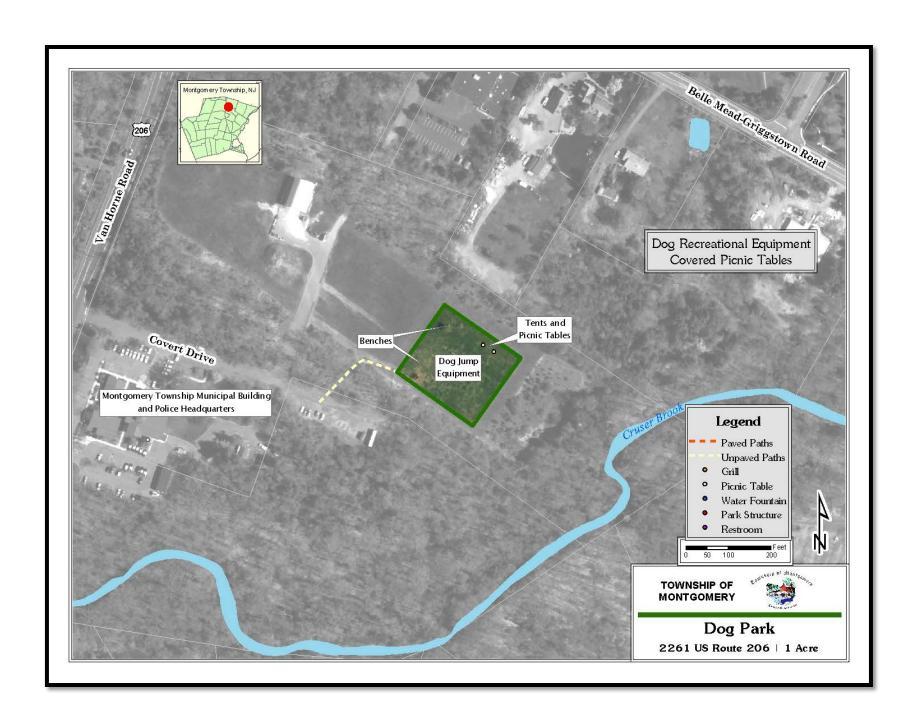


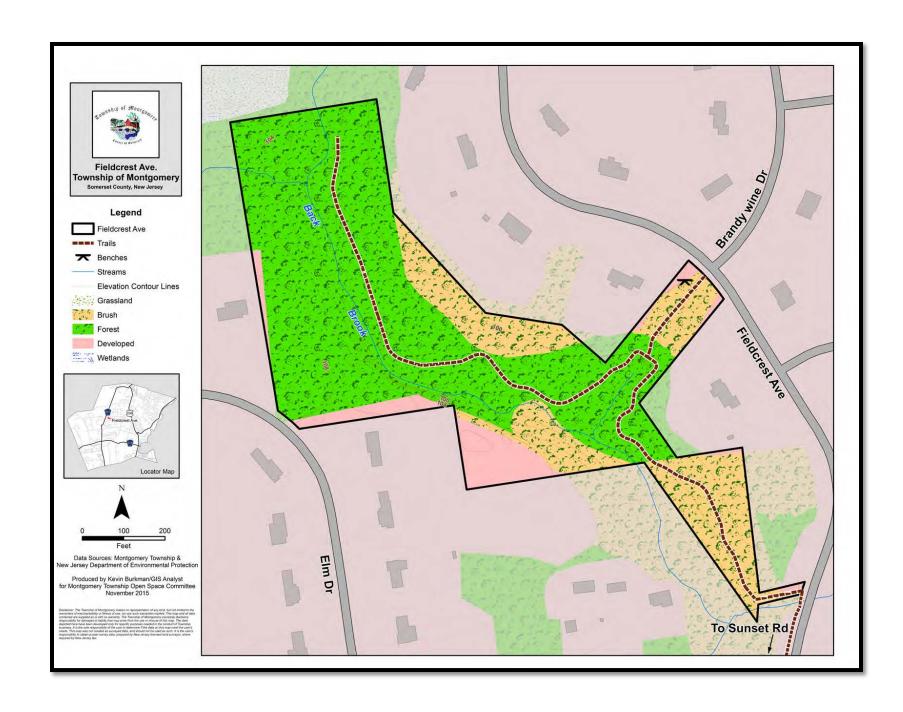
Map Compendium PL-2: Trail and Parks Maps	







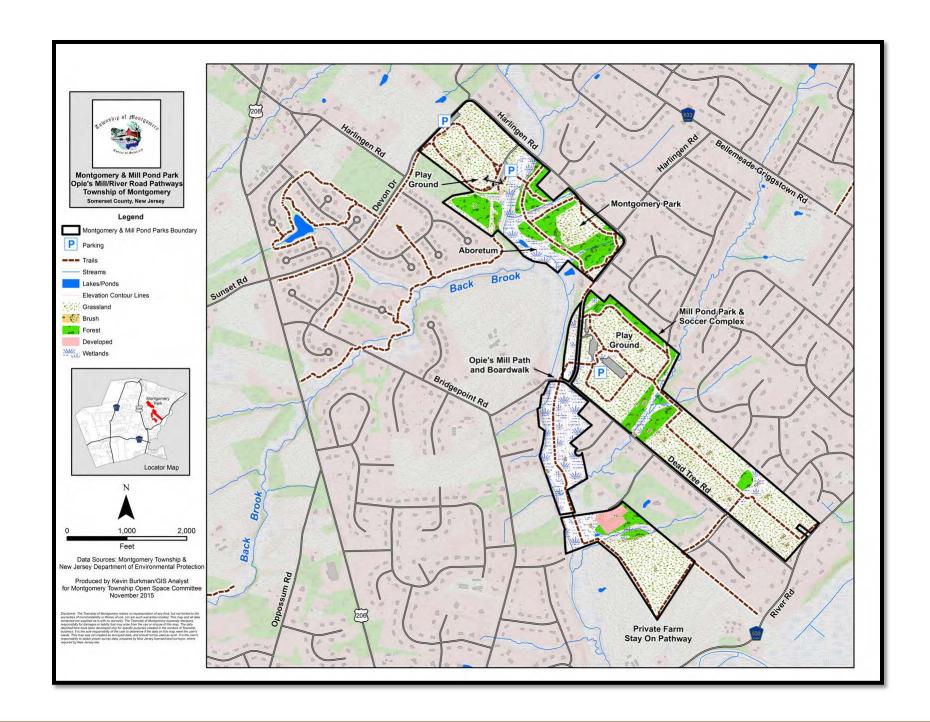


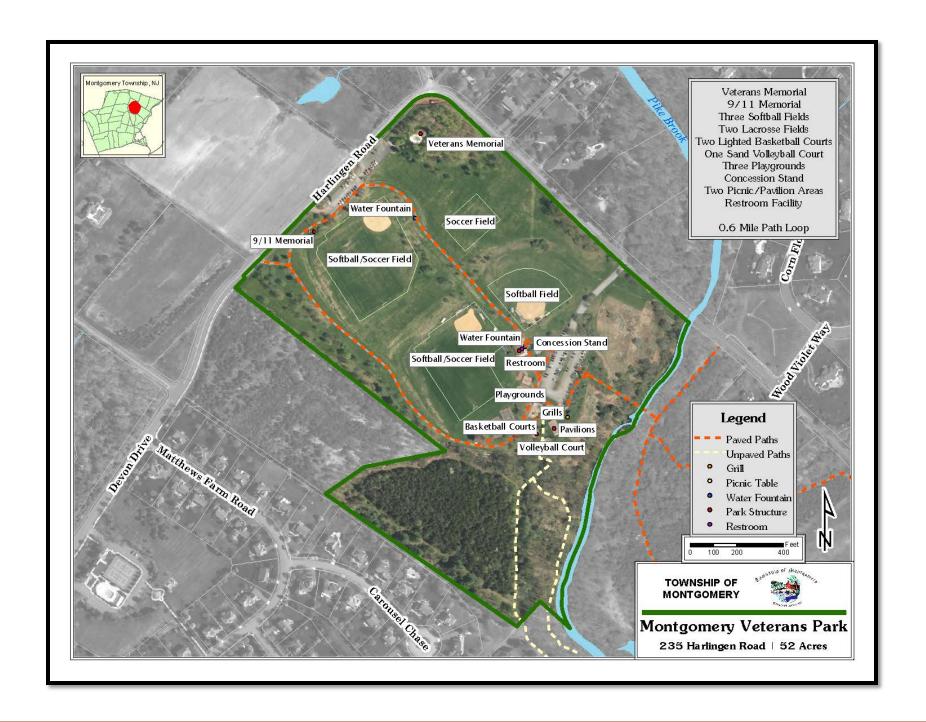
















---- Paved Trail

Skillman Park

Village Elementary School

Local Preserved Land
Preserved Farms

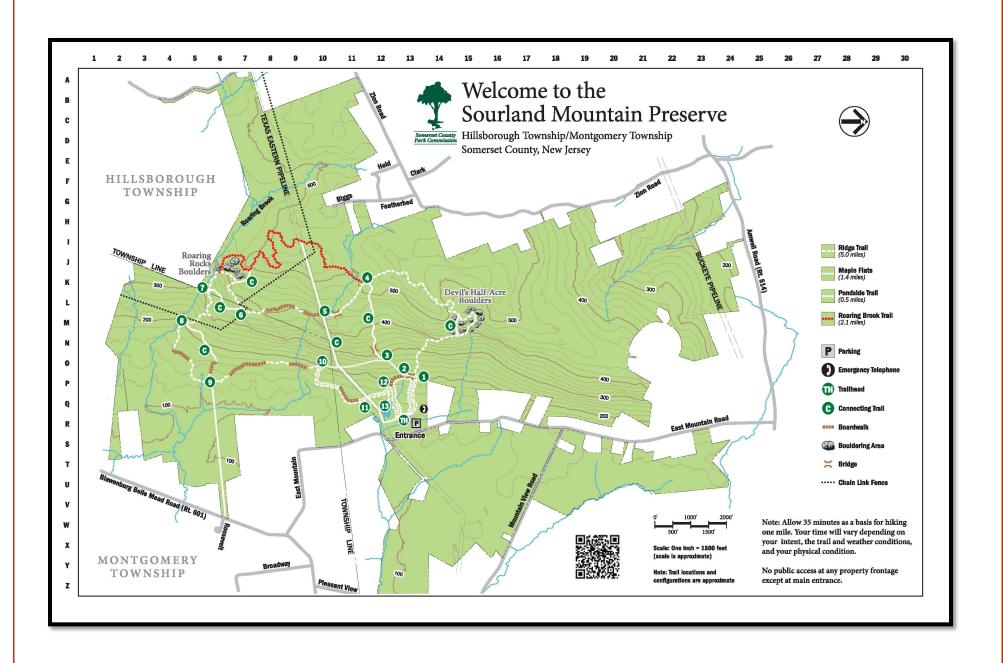


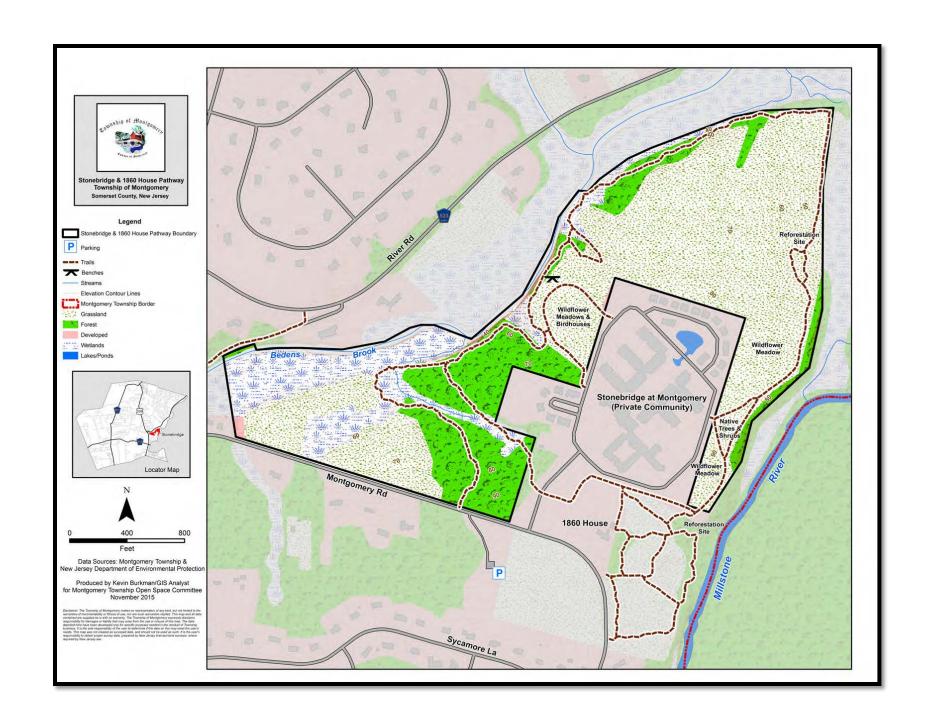
# SKILLMAN PARK MONTGOMERY TOWNSHIP Somerset County Somerset County Park Commission June, 2017

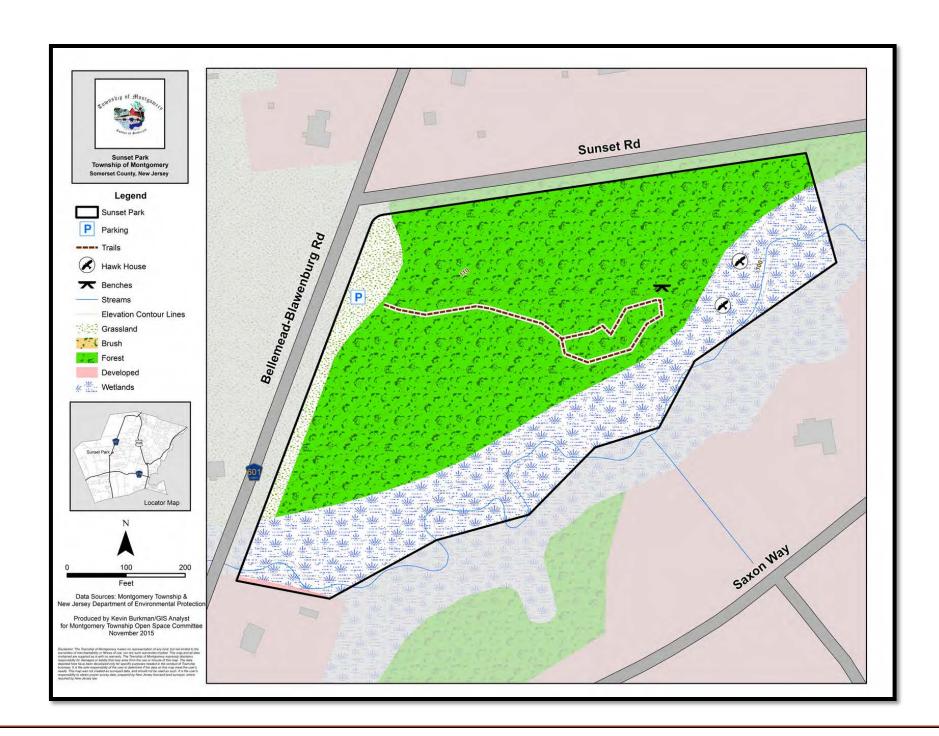


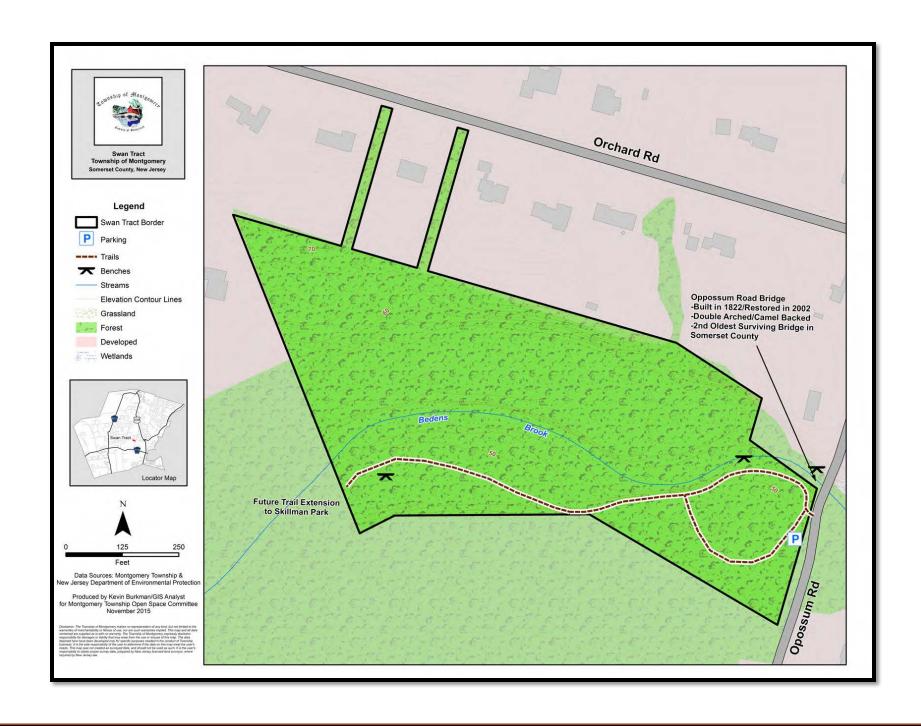


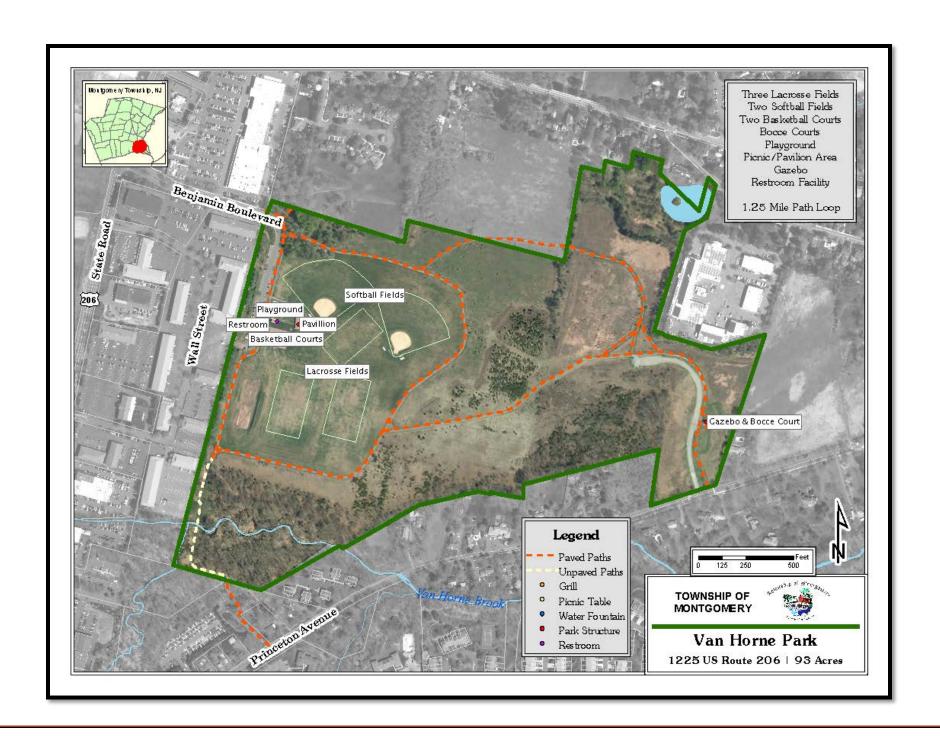


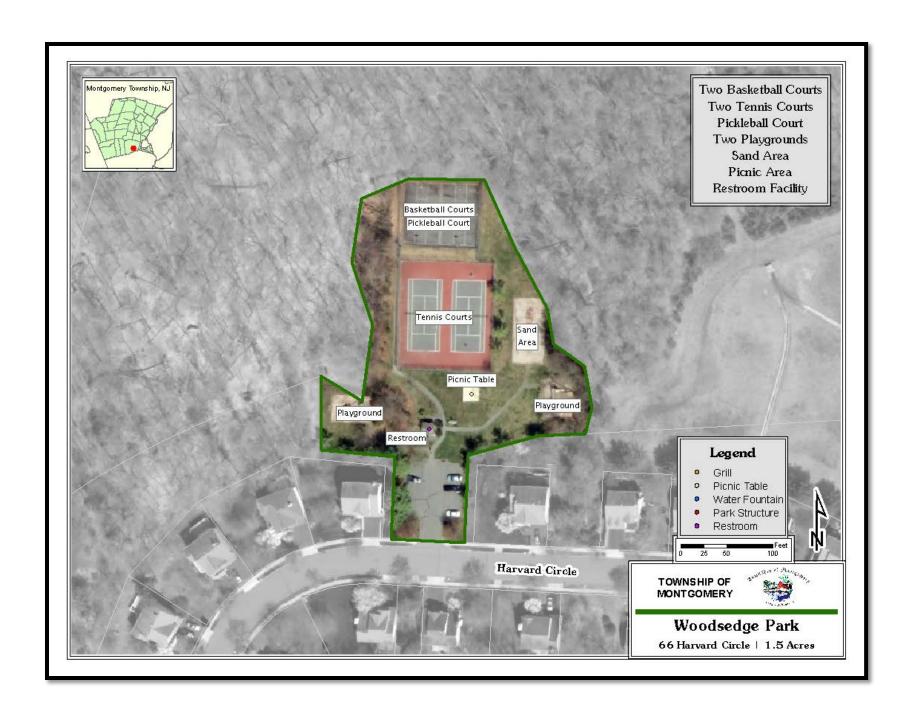




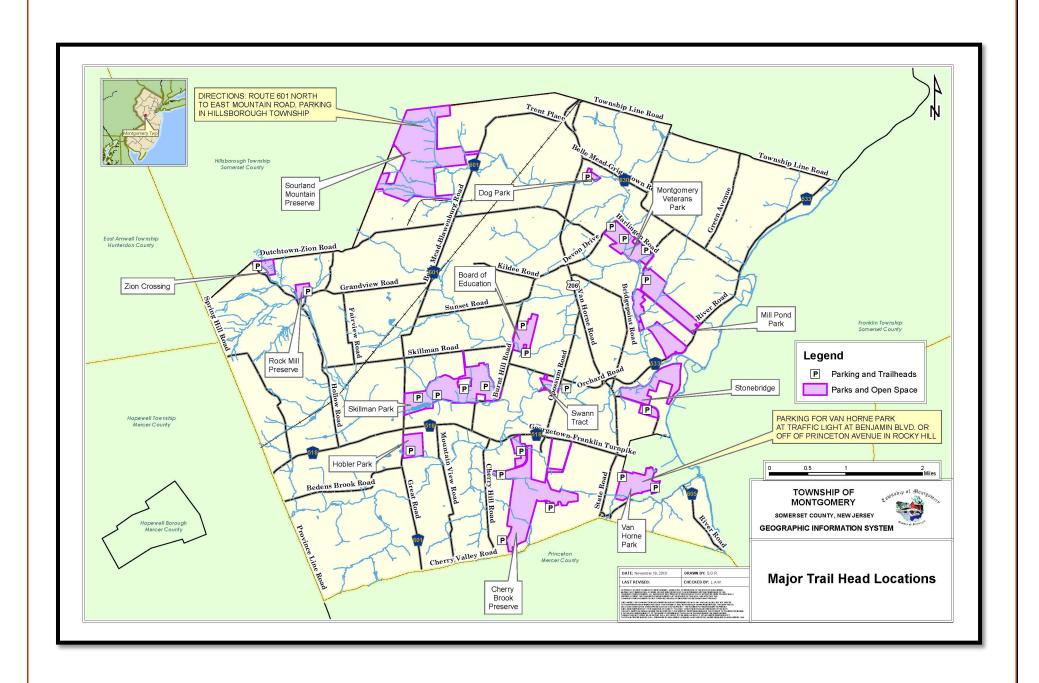




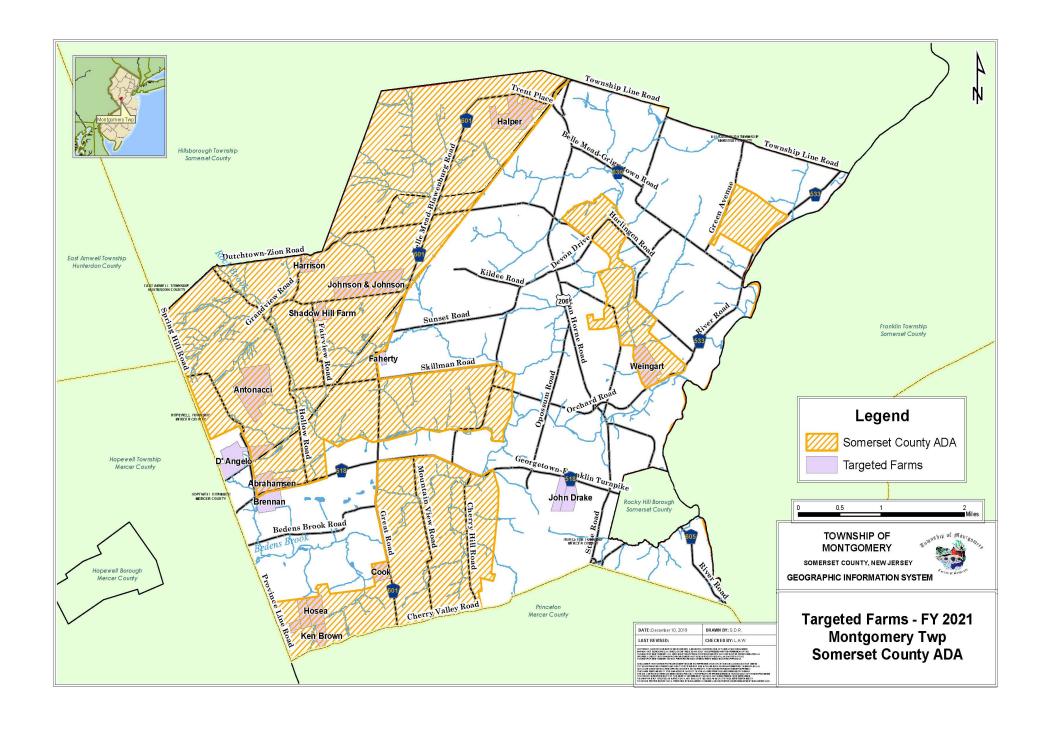




Map PL-3: Trail Heads	







TSS-1: Critical Areas Ordinance (#16-1534)

### TOWNSHIP OF MONTGOMERY

## ORDINANCE NO. 16-1534

AN ORDINANCE OF THE TOWNSHIPOF MONTGOMERY IN SOMERSET COUNTY, NEW JERSEY AMENDING SUBSECTIONS 16-3.3 AND 16-6.4 OF THE CODE OF THE TOWNSHIP OF MONTGOMERY (1984), REGARDING CRITICAL AREAS.

**BE IT ORDAINED** by the Township Committee of the Township of Montgomery in Somerset County, New Jersey as follows:

# Section 1. Subsection 16-6.4 a. through d. Critical Areas of Code Amended.

Subparagraphs a through d of Subsection 16-6.4 of the Code of the Township of Montgomery (1984) are amended in their entirety to read as follows:

#### 16-6.4 Critical Areas

a. Basis for Establishing Critical Areas. The mapping of the critical areas within Montgomery Township is indicated on the map entitled Critical Areas, dated August, 2007, which is part of this chapter and may be supplemented from time to time. As noted on the map, the basis for the delineation of special flood hazard areas was the Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (FEMA) and dated November 4, 2016; the basis for the delineation of steep slope areas was the Township's 1996 Digital Elevation Model; and the basis for the mapping of wetlands was the New Jersey Department of Environmental Protection's (NJDEP), 2002 Land Use/Land Cover GIS Dataset. For parcels of land where Wetlands Letters of Interpretation have issued by the NJDEP, the wetlands and transition areas established by the said NJDEP Letter of Interpretation shall take precedence over the Land Use/Land Cover Wetlands Areas, as long as the NJDEP Letter of Interpretation is still valid. If the NJDEP Letter of Interpretation is no longer valid, a new NJDEP Letter of Interpretation will be required to establish the wetlands and transition areas on the said parcel. Wetlands and transition areas established by NJDEP Letters of Interpretation are not shown on the Township Critical Areas Map.

In addition to freshwater wetlands, Flood Hazard Areas or Special Flood Hazard Areas, and topographic slopes fifteen (15%) percent and greater, critical areas also include stream corridors, wetlands transition areas and any land exhibiting Bowmansville, Cokesbury, Croton, Elkton, Fluvaquents, Lamington, Parsippany, Parsippany Variant, or Watchung soils (Hydric soils). The mapped Hydric soils were extracted from the 1998 SSURGO Database prepared by the United States Department of Agriculture-Natural Resource Conservation Service.

The basis for the delineation of the stream corridors is the Montgomery Township Hydrography Map, dated August, 2007, as may be amended from time to time. The Township GIS (geographic information system) and Natural Resource Inventory may provide the basis for additional or more accurate mapping of critical areas within the Township.

Regarding special flood hazard areas, flood hazard areas and areas of special flood hazard, it is recognized that more such areas might exist in the Township than those already mapped. Moreover, the NJDEP, in accordance with the Flood Hazard Area Control Act (N.J.S.A. 58-16A 50 *et seq.*), has adopted N.J.A.C. 7:13 and has mapped certain flood hazard areas in

Montgomery Township. In cases where multiple sources of mapping exist, the latest information shall take precedence, subject to verification by the Township. In any event, the special flood hazard areas, flood hazard areas and areas of special flood hazard shall not be reduced from the adopted FEMA mapping.

Additionally, while information depicted on the map has been prepared as accurately as possible; nevertheless, it must be understood that detailed information mapped at such a small scale may not represent the actual conditions on any particular parcel of land. Therefore, the information is not intended to take the place of specific on-site engineering data presented to and subjected to independent verification by the Township at the time applications are submitted for approval of a subdivision, site plan, construction permit, and/or any other application which considers construction permits, and/or any other application which considers the "critical areas" categories of information depicted on the map. (The Critical Areas Map may be found at the end of this chapter.)

b. Purpose of Regulations for Critical Areas.

The purpose of these regulations is:

- 1. To protect special flood hazard areas and stream corridors so that floodwater may have a natural course to follow and so that the watercourse is not constricted or altered in a manner that will increase water velocities or create a dam.
- To allow water levels to rise without danger to persons, animals or property and cover larger land surfaces for the purposes of greater water percolation and recharge of the underground water supply.
- 3. To promote the development of a parklike network throughout Montgomery Township along watercourses.
- 4. To permit only that development of flood prone areas and stream corridors within Montgomery Township which:
  - (a) Is appropriate in light of the probability of flood damage and the need to reduce flood losses;
  - (b) Represents an acceptable social and economic use of the land in relation to the hazards involved;
  - (c) Does not increase the danger to human, plant or animal life; and
  - (d) Provides that no decreases in the amount of available storage for flood waters within the special flood hazard areas results from any development.
- 5. To prohibit any other types of development including, without limitation, the dumping of solid or hazardous waste, the construction of subsurface sewage disposal systems, the storage of any petroleum products, the addition or removal of fill and the altering of watercourses, temporary roadways and grading, and to retain areas adjacent to streams free from structures and other obstructions.
- 6. To protect property from the adverse effects of flooding, erosion, loss of vegetation, seepage, and downstream deposits of silt, gravel and stone, and to prevent burdensome costs to the public arising from such damage and its repair.
- 7. To protect other municipalities within the same watersheds from improper stream corridor development and the increased potential for flooding or for reduced stream flows in dry weather.
- 8. To prevent disturbance to the ecological balance between wildlife, plant and marine life,

- which are dependent upon watercourses, and their protective special flood hazard areas and slopes.
- 9. To maintain the quality of streams in the Township, and to the extent any streams are impaired, improve their quality.
- 10. To prevent the destruction of riparian areas and removal of riparian vegetation by development which can result in the deterioration of aquatic ecosystems and the impairment of healthy streams and waterways.
- 11. To prevent excessive soil erosion and stormwater runoff.
- 12. To protect environmentally fragile lands.

## c. Definitions.

- 1. AO Zone shall mean areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet.
- 2. AH Zone shall mean areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between one and three feet. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown in this zone.
- 3. Appeal shall mean a request for the review of the Township Engineer's interpretation of any provision of this section or a request for a variance from the Planning Board.
- 4. Area of shallow flooding shall mean a designated AO or VO Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one (1) to three (3) feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident.
- 5. Area of special flood hazard shall mean land in the flood plain within the Township subject to a one (1%) percent of greater chance of flooding in any given year, and is also referred to as special flood hazard. It is shown on the FIRM as Zone V, VE, V1-30, A, AO, A1-A30, AE, A99, or AH.
- 6. Base Flood Elevation (BFE) shall mean the flood elevation shown on a published Flood Insurance Study (FIS) including the Flood Insurance Rate Map (FIRM). For zones AE, AH, AO, and A1-30 the elevation represents the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.
- 7. *Basement* shall mean the area of any building having its floor subgrade (below ground level) on all sides.
- 8. *Breakaway wall* shall mean a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or supporting foundation system.
- 9. Channel shall mean a linear topographic depression that continuously or intermittently confines and/or conducts surface water, not including transient erosional gullies and other ephemeral features that temporarily form after heavy rainfall. A channel can be naturally occurring or can be of human origin through excavation or construction. A channel includes both bed and banks.
- 10. Delineated stream shall mean a stream that has a delineated floodway officially adopted

- by NJDEP pursuant to N.J.A.C. 7:13.
- 11. *Design flood profile* shall mean the elevations of the water surface of the floodway design flood and the flood hazard area design flood.
- 12. Development shall mean, for the purposes of this section, any manmade change to improved or unimproved real estate including, but not limited to, buildings or other structures, sanitary sewage systems, wells, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials located within the area of special flood hazard. The repair, alteration and/or replacement of existing malfunctioning sanitary sewage systems serving existing structures is deemed to be in the best interest of public health, safety and welfare and shall not be considered development for the purposes of this section, provided that the repair, alteration and/or replacement does not include an expansion of the design capacity of the sanitary sewage system, and provided further that any repair, alteration or replacement does not further disturb "critical areas," except where the Township Health Officer, or his/her designee, determines that such location is the only reasonably available and suitable location on the subject site for such system, based upon the results of soil and engineering data. No disturbance of "critical areas" shall be permitted until so authorized by the Township Health Officer, or his/her designee. The applicant or property owner shall revegetate abandoned sanitary sewage systems within any "critical area," subject to the Township Health Department review and
  - approval and pursuant to a standard prototype developed by the Township Landscape Architect which is on file with the Township Health Department.
- 13. *Elevated building* shall mean a non-basement building built to have the top of the elevated floor elevated above the base flood elevation plus freeboard by means of piling, columns (posts and piers) or shear walls parallel to the flow of the water and adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. "Elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters.
- 14. Existing Manufactured Home Park or Subdivision shall mean a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.
- 15. Flood elevation determination shall mean the determination of the water surface elevations of the design flood, i.e., the flood level that has a one (1%) percent or greater chance of occurrence in any given year.
- 16. Flood fringe area shall mean the portion of the flood hazard area not designated as the floodway (see diagram "Flood Plain and Stream Corridor Components" which may be found at the end of this chapter).
- 17. Flood hazard area shall mean land, and the space above that land, which lies below the flood hazard area design flood elevation. Structures, fill and vegetation that are situated on land that lies below the flood hazard area design elevation are described as being "in" or "within" the flood hazard area. The inner portion of the flood hazard area is called the floodway and the outer portion of the flood hazard area is called the flood fringe. The special flood hazard area is included in the flood hazard area. (See diagram "Flood Plain and Stream Corridor Components" which may be found at the end of this chapter).

- 18. Flood hazard area design flood shall mean a flood equal to the 100-year flood plus an additional amount of water in fluvial areas to account for possible future increases in flows due to development or other factors. This additional amount of water also provides a factor of safety in cases when the 100-year flood is exceeded. N.J.A.C. 7:13-3 describes the various methods of determining the flood hazard area design flood for a particular water as well as the additional amount of water to be added in various situations.
- 19. Flood insurance rate map (FIRM) shall mean the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- 20. Flood insurance study shall mean the official report provided in which the Federal Insurance Administration has provided flood profiles, as well as the Flood Insurance Rate Map(s) and the water surface elevation of the base flood.
- 21. *Flood or flooding* shall mean general and temporary condition of partial or complete inundation of normally dry areas from:
  - (a) The overflow of inland or tidal waters; and/or
  - (b) The unusual and rapid accumulation or run-off of surface waters from any source.
- 22. *Flood plain* shall mean the relatively flat area adjoining the channel of a natural stream which has been or may be hereafter covered by floodwater.
- 23. Flood Plain Administrator shall mean the Township Engineer, or his/her designee.
- 24. Flood plain management regulations shall mean zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as flood plain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such State or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.
- 25. *Floodproofing* shall mean any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- 26. Floodway shall mean the channel of a natural stream and portions of the flood hazard area adjoining the channel which are reasonably required to carry and discharge the floodwater or flood flow of any natural stream without accumulatively increasing the water surface elevation any more than two-tenths (.2) feet. (See diagram "Flood Plain and Stream Corridor Components" which may be found at the end of this chapter.)
- 27. Freeboard shall mean a factor of safety usually expressed in feet above a flood level for purposes of flood plain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.
- 28. *Hydric soil* shall mean a soil that, in its undrained condition, is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation.
- 29. *Highest adjacent grade* shall mean the highest natural elevation of the ground surface prior to construction next to the proposed or existing walls of a structure.
- 30. Historic structure shall mean any structure that is:

- (a) Listed individually in the Natural Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a State inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either;
  - (1) By an approved State program as determined by the Secretary of the Interior; or
  - (2) Directly by the Secretary of the Interior in states without approved programs.
- 31. *Intermittent stream* shall mean a surface water drainage channel with definite bed and banks in which there is not a permanent flow of water.
- 32. Lowest floor shall mean the lowest floor of the lowest enclosed area, including a basement. An unfinished or flood resistant enclosure, usable solely for the parking of vehicles, building access or storage in an area other than a basement is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other applicable non-elevation design requirements of 44 <u>C.F.R.</u> § 60.3.
- 33. *Manufactured home* shall mean a structure, transportable in one (1) or more sections which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For the purposes of flood plain management the term "manufactured home" includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, recreational vehicles or other similar vehicles.
- 34. *Manufactured home park or manufactured home subdivisions* shall mean a parcel (or contiguous parcels) of land divided into two (2) or more manufactured homes lots for rent or sale.
- 35. *New construction* shall mean structures for which the start of construction commenced on or after the effective date of this section and includes any subsequent improvements to such structures.
- 36. New manufactured home park or subdivision shall mean a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the flood plain management regulations adopted by the municipality.
- 37. Recreational vehicle shall mean a vehicle which is [i] built on a single chassis; [ii] four hundred (400) square feet or less when measured at the longest horizontal projections; [iii] designed to be self-propelled or permanently towable by a light duty truck; and [iv] designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

- 38. Special flood hazard area(s). See definition for Area of special flood hazard, above.
- 39. Start of construction for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. No. 97-348) shall mean and include substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement commenced within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as cleaning, grading and filling nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footing, piers or foundations or the erection of temporary forms, nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
- 40. *State open waters* shall mean all waters of the State as defined in N.J.A.C. 7:7A, including waters of the United States as defined in N.J.A.C. 7:7A, but excluding ground water as defined at N.J.A.C. 7:14A, and excluding freshwater wetlands as defined in N.J.A.C. 7:7A.
- 41. *Stream* shall mean a waterway depicted on the Montgomery Township Hydrography Map, dated August, 2007, as may be amended from time to time, on file in the Office of the Township Community Development Office and Township Engineer.
- 42. Stream corridor shall mean and include the area within a floodway, flood plain, flood hazard area, special flood hazard area, buffer strips one hundred (100) feet from the top of the channel banks of the stream, intermittent stream and/or State open water, and the area that extends one hundred (100) feet from the flood hazard area or special flood hazard area line on both sides of the stream. If there is no flood hazard area or special flood hazard area line delineated, the distance of one hundred (100) feet shall be measured outward from the top of the banks of the stream channel on both sides of the stream, intermittent stream and/or State open water. If slopes greater than fifteen (15%) percent abut the outer boundary of the stream corridor, the area of such slopes shall also be included as the stream corridor. If the flood plain, flood hazard area or special flood hazard area extends for more than one hundred (100) feet from the top of the channel bank, said larger area shall be the stream corridor (see diagram "Flood Plain and Stream Corridor Components" which may be found at the end of this chapter).
- 43. *Structure* shall mean for flood plain management purposes, a walled or roofed building, including without limitation, gas or liquid storage tanks, that are principally above ground. For insurance purposes, "structure" means a walled and roofed building, other than a gas or liquid storage tank that is principally above ground and affixed to a permanent site. For the latter purpose, the term includes a building while in the course of construction, alteration or repair but does not include building materials or supplies intended for use in such construction, alteration or repair, unless such material or supplies are within an enclosed building on the premises.
- 44. Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50%) percent of the market value of the structure before the damage occurred.

- 45. Substantial improvement shall mean any repair, reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds fifty (50%) percent of the market value of the structure on an equalized basis either:
  - (a) As determined before the improvement or repair is started; or
  - (b) As determined before the damage occurred, if the structure has been damaged and is being restored. For the purpose of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, floor or other structural part of the floor commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:
    - (1) Any project for improvement of a structure to comply with existing State or local health, sanitary or safety code specifications which is solely necessary to assure safe living conditions; or
    - (2) Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."
- 46. *Variance* shall mean a grant of relief by the Planning Board, or Zoning Board, as the case may be, from the requirements of this subsection permitting construction in a manner otherwise prohibited by this subsection because the literal enforcement would result in unnecessary hardship.
- 47. *Violation shall* mean the failure of a structure or other development to be fully compliant with this ordinance. A new or substantially improved structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 <u>C.F.R.</u> §60.3(b)(5), (c)(4), (c)(10), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.
- d. Flood Hazard Areas, Special Flood Hazard Areas and Stream Corridors.
  - 1. Applicability and Interpretation of This Subsection.
    - (a) This subsection regulates development in the following two (2) ways:
      - (1) By protecting stream corridors from the type and intensity of development which would be destructive to their special environmental importance and harmful to the health and general welfare and to properties downstream; and
      - (2) By mitigating flood hazards within flood hazard areas pursuant to the requirements of the National Flood Insurance Program. These regulations are, in part, intended to satisfy Federal requirements in order to make flood insurance available within Montgomery Township.
    - (b) Except in limited cases, the stream corridor requirements of subsection 16-6.4 do not permit structures and development within the flood plain, special flood hazard areas, and/or stream corridor as defined in subsection 16-6.4c. above.
  - 2. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard for the Township of Montgomery, Community No. 340439, are identified and defined on the following documents prepared by the Federal Emergency Management Agency:
    - (a) A scientific and engineering report "Flood Insurance Study, Somerset County, New Jersey (All Jurisdictions)" dated November 4, 2016.
    - (b) Flood Insurance Rate Map for Somerset County, New Jersey (All Jurisdictions) as shown on Index and panel numbers 34035C0217E, 34035C0227E, 34035C0228E,

34035C0229E, 34035C0231E, 34035C0232E, 34035C0233E, 34035C0234E, 34035C0236E, 34035C0237E, 34035C0238E, 34035C0239E, 34035C0241E, 34035C0242F, 34035C0243E, 34035C0244F, 34035C0253F, 34035C0261F, and 34035C0263F, and having an effective date is November 4, 2016.

The above documents are hereby adopted and declared to be a part of this subsection. The Flood Insurance Study and maps are on file with the Township Engineer's Office at the Municipal Building, 2261 Van Horne Rd., Belle Mead, New Jersey 08502-4012, or at such other location as the Municipal Building may be situated. Other data available through Federal, State, County and local services and additional reports such as but not limited to the following, may be used to supplement the flood insurance study.

- (a) Soil Survey of Somerset County, New Jersey, U.S. Department of Agriculture, Soil Conservation Service, December, 1976.
- (b) Delineation of flood hazard areas, Raritan River Basin, as established for Bedens Brook, Rock Brook, Pike Run and Cruser Brook by N.J.A.C. 7:13-7.1(d), last amended.
- (c) United States Geological Survey, Rocky Hill Quadrangle Map, 1995, Monmouth Junction Quadrangle Map, 1954, Photorevised 1981 and Hopewell Quadrangle Map 1954, Photorevised 1970.
- (d) Montgomery Township Hydrography Map, dated August, 2007, last amended.
- 3. Penalties for Noncompliance. No structure or land shall hereafter be constructed, relocated to, extended, converted, or altered without full compliance with the terms of this subsection, and other applicable regulations. Violation of the provisions of this subsection by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this subsection or fails to comply with any of
- its requirements shall, upon conviction thereof, be fined not more than one thousand two hundred fifty (\$1,250.00) dollars or imprisoned for not more than ninety (90) days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the Township of Montgomery from taking such other lawful action as is necessary to prevent or remedy any violation.
- 4. Abrogation and Greater Restrictions. This subsection is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this subsection and other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- 5. Interpretation. In the interpretation and application of this subsection, all provisions shall be:
  - (a) Considered as minimum requirements;
  - (b) Literally construed in favor of the Governing Body; and
  - (c) Deemed neither to limit nor repeal any other powers granted under State statutes.
- 6. Uses in a Stream Corridor. Unless otherwise permitted herein, stream corridors shall remain in their natural state, with no clearing or cutting of trees and brush (except for removal in accordance with the New Jersey Strategic Management Plan for Invasive Species, New Jersey Invasive Species Council, 2009, Trenton, NJ of invasive species, and pruning and/or removal of dead vegetation for reasons of public safety), altering of watercourses, dumping of trash or debris, regrading, or construction.

- (a) Prohibited Uses in Stream Corridors. No person shall hereafter engage in, cause or permit other persons to engage in prohibited uses in the floodway, flood fringe, flood plain, flood hazard areas, special flood hazard areas and stream corridor areas. All uses not specifically permitted by this subsection are prohibited.
- (b) Permitted Uses in Floodways. The following uses shall be permitted in floodways, subject to the approval of NJDEP, if applicable, and all other authorities having jurisdiction, provided the requirements of N.J.A.C. 7:13, as may be amended and/or supplemented from time to time, and this subsection are satisfied:
  - (1) Channel improvements or changes may be permitted only in connection with stream improvements and stabilization, which improvements or changes have the approval of NJDEP, the Somerset County Planning Board and/or Montgomery Township. Prior to any channel improvement or change, the applicant must notify adjacent communities and submit evidence of such notification to the Federal Insurance Administration;
  - (2) Agricultural uses, as well as recreational uses in the nature of parks, wildlife preserves, undeveloped common open space, picnic areas, and boat landings, provided a maintenance program to promote stabilization of stream banks is established:
  - (3) Installation, repairs or replacement of sanitary sewers and appurtenances, and other utility lines and appurtenances;
  - (4) Culverts, bridges, road or driveway crossings where no other locations are reasonably feasible;
  - (5) Unpaved pathways and pedestrian bridges, provided that the lowest member of a pedestrian bridge shall be set at a minimum of one (1) foot above the 10-year storm event water surface level;
  - (6) Stormwater management facilities, where no other locations are reasonably feasible; and
  - (7) Reconstruction of a structure that predates the adoption of this subsection in the event of damage or destruction by fire, storms, natural hazards, or other acts of God, provided that the reconstruction does not have a greater footprint or total area than that of the damaged structure and that no change in land use occurs; and further provided that the reconstruction shall be permitted only if no more than fifty (50%) percent of the structure is destroyed. Reconstruction, when it is reasonably feasible, shall comply with the provisions of this subsection, particularly 16-6.4d.7(d).
- (c) Permitted Uses in a Flood Hazard Area or Special Flood Hazard Area. The following uses shall be permitted in flood hazard areas or special flood hazard areas outside of the floodway, subject to the approval of NJDEP, if applicable, and all other authorities having jurisdiction, provided the requirements of N.J.A.C. 7:13, as may be amended and/or supplemented from time to time, and this subsection are satisfied:
  - (1) All uses permitted within floodways;
  - (2) Woodland preserves and arboretums, but excluding enclosed structures;
  - (3) Public parks;
  - (4) Unpaved and pervious surface hiking, bicycle and bridle trails;

- (5) Fishing areas and game farms, fish hatcheries and fishing reserves operated for the protection and propagation of wildlife, but excluding enclosed structures;
- (6) Agricultural production consistent with agricultural management practices developed by:
  - (i) The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) and contained in the NRSC Field Office Technical Guide;
  - (ii) Recommendations by New Jersey Agricultural Experiment Station (NJAES), or
  - (iii) Rules promulgated by the New Jersey State Agricultural Development Committee.
- (7) Routine property maintenance reasonably necessary to maintain a lawfully existing structure, lawn, and/or garden;
- (8) Building additions of not more than three hundred (300) square feet of total building coverage to a lawfully existing structure or structures;
- (9) Construction or reconstruction of structures of not more than one hundred fifty (150) square feet in total area covering a lot that are accessory to a lawfully existing structure or structures;
- (10) Construction or reconstruction of decks or patios of not more than three hundred (300) square feet in total area covering a lot that are connected to a lawfully existing structure or structures;
- (11) Fences;
- (12) Elevation of existing structures to reduce flood damage potential; and
- (13) Demolition of an existing structure.
- (d) Permitted Uses in Stream Corridors Outside the Flood Hazard Area or Special Flood Hazard Area, and Floodway. The following uses shall be permitted in stream corridors outside of the flood hazard area or special flood hazard area and floodway, subject to the approval of NJDEP, if applicable, and all other authorities having jurisdiction, provided the requirements of N.J.A.C. 7:13, as may be amended and/or supplemented from time to time, and this subsection are satisfied:
  - (1) All uses permitted with floodways and flood hazard areas or special flood hazard areas;
  - (2) Building additions of not more than five hundred (500) square feet of total building coverage to a lawfully existing structure or structures;
  - (3) Construction or reconstruction of structures, including patios, of not more than five hundred (500) square feet of total area covering a lot that are accessory to a lawfully existing structure or structures;
  - (4) Construction or reconstruction of decks of not more than seven hundred fifty (750) square feet of total area covering a lot that are accessory to a lawfully existing structure or structures;
  - (5) Provided no clearing of trees or vegetation, other than lawn, is required, pools and pool related appurtenances, such as walkways, patios, decks and fences, adjacent to a lawfully existing structure;

- (6) No more than seven hundred fifty (750) square feet of total lot coverage is permitted for any of the uses listed above, excluding the pool footprint but including pool related appurtenances.
- (e) Permitted Uses in Stream Corridor Outside the Flood Hazard Area or Special Flood Hazard Area and Floodway When There Is No Reasonable or Prudent Alternative Location. The following uses are permitted in a stream corridor outside the flood hazard area or special flood hazard area and floodway,
  - provided the uses cannot be placed in any other reasonable or prudent alternate location, subject to the approval of NJDEP, if applicable, and all other authorities having jurisdiction, provided the requirements of N.J.A.C. 7:13, as may be amended and/or supplemented from time to time, and this subsection are satisfied:
  - (1) Recreational uses, whether open to the public or restricted to private membership, such as parks, camps, picnic areas, golf courses (provided same are maintained in accordance with the most current Integrated Pest Management practices and standards recommended by NJAES), sports or boating clubs, not to include enclosed structures, but permitting piers, docks, foot bridges, floats or pavilions usually found in developed outdoor recreational areas:
  - (2) Outlets from sewage treatment plants and sewage pumping stations and the expansion of existing sewage treatment facilities;
  - (3) Private or public water supply wells that have a sanitary seal, flood-proofed water treatment facilities or pumping facilities;
  - (4) Dredging or grading when incidental to permitted structures or uses, including stream cleaning and stream rehabilitation work undertaken to improve hydraulics or to protect public health;
  - (5) Dams, culverts, bridges and roads provided that they cross the corridor as directly as practical;
  - (6) Publicly owned sanitary or storm sewers;
  - (7) Utility transmission lines installed during periods of low stream flow in accordance with soil erosion and sediment control practices and approved by the Somerset-Union Soil Conservation District in a manner which will not impede flows or cause ponding of water;
  - (8) Structures comprising part of a regional flood detention project;
  - (9) Detention or retention basins and related outfall facilities;
  - (10) Best Management Practices (BMPs), provided the design meets the requirements for stormwater management, subsection 16-5.2g. and soil testing subsection 16-5.2n.; and
  - (11) Where otherwise permitted by the applicable zoning district regulations, the construction of a single-family, detached dwelling on a pre-existing vacant lot, provided the dwelling and all associated development is located in an area outside of the floodway and the flood hazard area or special flood hazard area.
- (f) Location of Activities on Tracts Partially within Stream Corridors:
  - (1) All new lots in major and minor subdivisions and new site plans shall be

designed to provide sufficient areas outside of stream corridors to accommodate principal and accessory uses and structures regardless of the maximum building coverage, lot coverage or floor area ratio otherwise

permitted by the subject zoning district. Lands remaining after subdivision that are predominately under agricultural production after the creation of lots through minor subdivision shall be exempt from the provisions of this subsection, provided that the agricultural lands are managed in accordance with subsection 16-6.4d.6(c)(6).

- (2) In evaluating all major and minor subdivisions, site plans, and variances the Planning Board or Zoning Board of Adjustment ("Zoning Board") as the case may be, may allow an average stream corridor width of one hundred (100) feet from the 100-year flood line or the top of bank of the stream channel, whichever the case may be, thus allowing reasonable flexibility to accommodate site planning when necessitated by the size and shape of the tract and physical conditions thereon. The stream corridor width may be reduced to a minimum of fifty (50) feet from the 100-year flood line provided there is an increase at a two-to-one (2:1) ratio in the width elsewhere on site and all other relevant permits, e.g., Stream Encroachment, Freshwater Wetlands, are obtained.
- 7. Development. A zoning permit shall be obtained prior to any construction or development within a stream corridor. Where development in a stream corridor is proposed in a site plan, subdivision, or variance application, the Montgomery Township Planning Board or Zoning Board, whichever board has jurisdiction over the application, shall ensure the applicant meets the requirements of this subsection. The fee for the zoning permit, pursuant to subsection 16-9.1 of this chapter, shall be remitted at the time the application for the permit is submitted. There shall be no additional fee for the issuance of a zoning permit if the development in the stream corridor is proposed in a site plan, subdivision or variance application that has been approved by the Planning Board or Zoning Board.
  - (a) For all subdivision, site plan and variance applications, in addition to the applicable information required for Board approval stipulated in subsection 16-8.4 of this chapter, the following information shall be provided:
    - (1) Proposed finished grade elevations at the corners of any structure or structures;
    - (2) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures, existing and proposed;
    - (3) Elevation in relation to mean sea level to which any structure, existing or proposed, has been or will be flood-proofed;
    - (4) Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria established by this section;
    - (5) Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development. Where alteration or relocation of a watercourse is proposed, prior notification of the proposed alteration or relocation must be provided to adjacent municipalities, the New Jersey Department of Environmental Protection, Dam Safety and Flood Control Section and the Land Use Regulation Program, and proof of such

- notification submitted to the Federal Insurance Administration;
- (6) The extent of proposed or previous filling, cutting or regrading of the land, if any;
- (7) Proof of flood hazard area and, if applicable, floodway delineation obtained from NJDEP. Where a flood hazard area and floodway delineation has not been established by NJDEP, methods detailed in N.J.A.C. 7:13-3, as may be amended and/or supplemented from time to time, shall be utilized to determine the flood hazard area and floodway delineation;
- (8) The applicant shall furnish information relating to subsurface conditions based on percolation tests and soil borings or probes. Test borings or probes shall be performed by a licensed professional engineer and shall be in accordance with acceptable engineering standards and practices. Written notification of intention to conduct such tests shall be forwarded to and received by the Planning Board or Zoning Board Engineer, as the case may be, at least two (2) working days prior to testing. A detailed report of the test shall be submitted to the Planning Board or Zoning Board, as the case may be, for review; and
- (9) Base flood elevation data.
- (b) For all other applications for development in a stream corridor, including applications for zoning permits and variances from the provision of this subsection, a plot plan shall be prepared in sufficient detail to show the proposed development, as applicable, to determine compliance with this chapter and shall include the following information:
  - (1) Items listed under paragraph 7(a)(1-9) above, as applicable, to the proposed development;
  - (2) The zoning district name and requirements, including a building coverage and lot coverage calculation;
  - (3) The exact location of the proposed dwelling, driveway and any accessory structure(s) in relation to the zoning district setbacks and property lines, which are to be shown on the plan, and to any existing and proposed buildings, driveways, sidewalks, septic systems, utilities or other structures on the lot;
  - (4) The location, type and width of all easements, including but not limited to conservation, drainage, utility, and emergency access, all covenants and all deed restrictions on the property, with metes and bounds description, where applicable;
  - (5) Existing and proposed contours with intervals of one (1) foot where slopes are less than two (2%) percent in grade and/or lots are less than one-half (1/2) acre in size or intervals of two (2) feet where slopes are more than two (2%) percent and/or lots are greater than one-half (1/2) acre in size.
    - All contour information shall refer to a known datum. Existing contours shall be shown as a dashed line; finished grades shall be shown as a solid line;
  - (6) Spot elevations at dwelling and/or accessory structure(s) corners, driveway, first floor, garage floor and basement floor elevations, lot corners, centerline of street, edge of pavement and any other locations as necessary;

- (7) The height, number of stories and size of all existing and proposed building(s) and accessory structures and their existing or intended use, including the number of dwelling units within the building;
- (8) Number and location of off-street parking spaces, a detail of driveway and street intersection, including any sight triangles, and a profile and slope of the proposed driveway and typical pavement detail. Any proposed driveway shall comply with the provisions of subsection 16-5.8 of this chapter;
- (9) The location of all critical areas as identified in subsection 16-6.4 of this chapter. Where 100-year flood plain exists on site, a written certification by the engineer or surveyor is required stating that the lowest floor elevation, including the basement, is at least one (1) foot above the flood elevation;
- (10) Limits of disturbance. All wooded areas and any existing trees having a caliper of six (6) inches or more measured four and one-half (4½) feet above the ground level, which trees are located within the area of the property to be disturbed and twenty (20) feet beyond the outer limits of the disturbed area and all areas to be rehabilitated, together with the method of rehabilitation, shall be shown;
- (11) A delineation and description of any proposed extension(s) of public utilities;
- (12) Soil erosion and sediment control plans shall include but not be limited to wheel cleaning blankets, location of sediment filter fences, and temporary and permanent seeding.
- (13) The existing surface drainage pattern shall include but not be limited to swales, ditches, brooks or other drainage patterns, and how it affects the subject property. Any proposed changes in the existing surface drainage pattern which will result from the construction of the structure proposed for the subject property shall be shown;
- (14) The proposed location of roof leader drains and sump pump discharge pipe outlet;
- (15) The location of any existing or proposed stormwater sewer system;
- (16) The location and grading of sanitary sewerage or an on-site sewage disposal system in accordance with Chapter BH: VI of the Township of Montgomery Board of Health Code and approved by the Health Department (a copy of the approved sewage system shall accompany the plan);
- (17) The location of any retaining walls with top and bottom of wall elevations. Plans, profiles, cross-sections, and details of all retaining walls showing the height of wall, the elevation at the top and bottom of each wall, the materials to be used, a profile and cross-section of the wall, any proposed plantings, any safety barriers, calculations of anticipated earth and hydrostatic pressures and surcharges, and calculations detailing the wall design shall be provided unless such documents were reviewed and approved as part of a subdivision or site plan application. All plans, details, and calculations shall be prepared, signed, and sealed by a licensed professional engineer;
- (18) Lot and block numbers as per the Township Tax Assessor or most current Tax Assessment Maps, and reference to the Township of Montgomery, in Somerset County;
- (19) Name, title, address, telephone number, license number, seal and signature of

the professional or professionals who prepared the plat or plan; and

- (20) Name, address and phone number of the owner or owners of record.
- (c) The Township Engineer is hereby appointed to administer and implement this section by granting or denying development permit applications in accordance with its provisions. Duties of the Township Engineer shall include, but not be limited to:
  - (1) Review all development permits to determine that the permit requirements of this section have been satisfied.
  - (2) Review all development permits to determine that all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.
  - (3) Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the provisions of d.6 are met.
  - (4) Review plans for enclosure openings to automatically equalize hydrostatic flood forces on exterior walls, by allowing for the entry and exit of floodwater in enclose space below the base flood level in accordance with section d.7.(e)(1)(v).
- (d) Provisions Governing Activities in Stream Corridors:
  - (1) For any construction or development in a stream corridor, the applicant shall rehabilitate any degraded or disturbed areas of the stream corridor, unless the applicant demonstrates that it is not reasonably feasible to do so. The rehabilitated area shall be within or adjacent to the same tract and shall be at least equivalent in size to the permitted stream corridor reduction.
  - (2) Should the above not be possible, the applicant shall rehabilitate or expand a stream corridor of such size within a nearby tract and, if available, within the same watershed.
  - (3) Rehabilitation shall include reforestation, stream bank stabilization and removal of debris. The applicant also shall:
    - (i) Rehabilitate or cure the effects of the disturbance caused during construction;
    - (ii) Maintain the integrity of the surrounding habitat; and
    - (iii) Maintain the existing ability of the stream corridor to buffer the stream.
  - (4) The Township Engineer or applicable development board may require additional measures or impose reasonable conditions on the development to promote the public safety, health and welfare, to protect public and private property, wildlife and fisheries, and to preserve and enhance the natural environment of the stream corridor and may consult with other Township representatives for guidance. Such measures and conditions may include, but are not limited to, stormwater management measures, relocating the proposed structure to avoid tree disturbance, removal of existing, nonconforming structures within the stream corridor, and improvements to promote water quality.
  - (5) Conservation easements or conservation deed restrictions in accordance with subsection 16-5.6e. of this chapter shall be required for the remaining area of the stream corridor, provided there is a minimum twenty (20) foot unrestricted area between the proposed structure and the easement.

- (6) No certificate of occupancy shall be issued unless all conditions of approval have been satisfied.
- (e) Design Criteria. The following design criteria shall be utilized in all development in a stream corridor. All development shall be in compliance with the applicable requirements of the Uniform Construction Code (N.J.A.C. 5:23) and the following standards, whichever is more restrictive:
  - (1) General Criteria:
    - (i) Anchoring:
      - [a] All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
      - [b] All manufactured homes shall be anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include but are not limited to, the use of over the top or frame ties to ground anchors. This requirement is in addition to applicable anchoring requirements for resisting wind forces.
    - (ii) Construction Materials and Methods:
      - [a] All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
      - [b] All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
    - (iii) Utilities, for all new construction and substantial improvement:
      - [a] All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
      - [b] All new and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharges from the system into the floodwaters.
      - [c] On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
      - [d] Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or located as to prevent water from entering or accumulating within the components during conditions of flooding.
    - (iv) Subdivision Applications and other proposed new development:
      - [a] All subdivision applications shall be consistent with the need to minimize flood damage.
      - [b] All subdivision applications shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
      - [c] All subdivision applications shall have adequate drainage provided to reduce exposure to flood damage.

[d] Base flood elevation data.

# (v) Enclosure Openings:

All new construction and substantial improvements with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls, by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect and must meet or exceed the following minimum criteria: a minimum of two (2) openings in at least two exterior walls of each enclosed area, having a total net area of not

less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.

## (vi) Miscellaneous:

- [a] The applicant shall be required to obtain all necessary permits from those Federal, State or local governmental agencies from which prior approval is required.
- [b] The applicant shall be required to file a completed elevation certificate with the Township.
- [c] Fill shall be no lower than one (1) foot above the flood hazard area design flood elevation and shall extend at such height for a distance of at least fifteen (15) feet beyond the limits of any structure erected thereon. No fill shall be permitted in floodways.
- [d] Structures on fill shall be so built that the lowest floor is at a minimum of one (1) foot above the flood hazard design flood elevation.
- [e] In all areas of special flood hazard in which base flood elevation data has been provided and no floodway has been designated, the cumulative effect of any proposed development, when combined with all other existing development, shall not increase the water surface elevation of the base flood more than two-tenths (0.2) of a foot at any point.

#### (2) Specific Criteria:

### (i) Residential Construction:

[a] New construction or substantial improvement of any structure located in or adjacent to an A or AE zone\_shall have the lowest floor, including a cellar or basement together with the attendant utilities and sanitary facilities, elevated at or above the base flood elevation plus one (1) foot or as required by ASCE/SEI 24-14, Table 2-1, whichever is more restrictive [to one (1) foot above the flood hazard area design flood elevation] and/or the 100-year storm elevation in any stormwater management facility within one

hundred (100) feet of said structure, and a limit of disturbance shall be established a minimum of twenty (20) feet from the stream corridor.

[b] Within any AO or AH zone on the Township's FIRM all new construction and substantial improvement of any residential structure shall have its lowest floor, including basement together with the attendant utilities and sanitary facilities,

elevated above the depth number specified in feet plus one (1) foot, above the highest adjacent grade at least as high as the depth number specified in feet (at least three (3)[(2)] feet if no depth is specified). Adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures are required.

## (ii) Nonresidential Construction:

New construction or substantial improvement of any commercial, industrial or other nonresidential structure located in an A or AE zone shall have the lowest floor, including a cellar or basement together with the attendant utilities and sanitary facilities, either elevated to or above the base flood elevation plus one (1) foot or as required by ASCE/SEI 24-14, Table 2-1, whichever is more restrictive; and require within any AO or AH zone on the municipality's DFIRM to elevate above the depth number specified in feet plus one (1) foot, above the highest adjacent grade (at least three feet if no depth number is specified). And, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures or, be floodproofed so that below the design flood level plus one (1) foot or as required by ASCE/SEI 24-14, Table 6-1, whichever is more restrictive, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A licensed professional engineer or architect shall certify that the standards and methods of construction of this subsection are satisfied. Such certification shall be provided to the Township Engineer. Any or all of the following floodproofing measures may be required:

- [a] Installation of watertight doors, bulkheads and shutters, or similar devices.
- [b] Reinforced walls to resist water pressure.
- [c] Use of paints, membranes or mortars to reduce seepage of water through walls.
- [d] Addition of weights to structures to resist flotation.
- [e] Installation of pumps to lower water levels of structures.
- [f] Pumping facilities or comparable measures for the subsurface drainage systems of the building to relieve external foundation wall and basement flood pressures. Over the sidewalk and under the sidewalk gravity or sump pump drains are not permitted. All such drains shall outlet into an existing adequate watercourse or

- drainage system.
- [g] Construction that resists rupture or collapse caused by water pressure or floating debris.
- [h] Installation of valves or controls on sanitary and storm drains which will permit the drains to be closed to prevent backup of sewage or stormwater into the structure; gravity drainage of basements may be eliminated by mechanical devices.
- [i] Location of all electrical equipment, circuits and installed electrical appliances in a manner which will assure they are not subject to inundation and flooding.

#### (iii) Manufactured Homes:

- [a] All manufactured homes shall be anchored in accordance with 16-6.4d.7(d)(1)(i)[b].
- [b] All manufactured homes to be placed or substantially improved within an area of special flood hazard shall be consistent with the need to minimize flood damage, be constructed to minimize flood damage, have adequate drainage provided to reduce exposure to flood damage; and, be elevated on a permanent foundation such that the finished floor elevation of the lowest floor is at or above the base flood elevation plus one (1) foot or as required by ASCE/SEI 24-14, Table 2-1, whichever is more restrictive.

#### 8. Variances.

## (a) Appeal Board:

- (1) Except where the Planning Board has jurisdiction pursuant to N.J.S.A. 40:55D-25a.(6), variances from the criteria set forth in this subsection may only be granted by the Zoning Board. The fee for a variance from the criteria of this subsection, pursuant to subsection 16-9.1 of this chapter, shall be remitted at the time of the application for the variance.
- (2) The Zoning Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Township Engineer in the enforcement or administration of this subsection.
- (3) Those aggrieved by the decision of the Zoning Board, or any taxpayer, may appeal such decision to the Superior Court.
- (4) In passing upon such applications, the Zoning Board, shall consider all technical evaluations, all relevant factors, standards specified in other sections of this subsection, and:
  - (i) The danger that materials may be swept onto other lands to the injury of others;
  - (ii) The danger to life and property due to flooding or erosion damage;
  - (iii) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - (iv) The importance of the services provided by the proposed facility to the community;

- (v) The necessity to the facility of a waterfront location, where applicable;
- (vi) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- (vii) The compatibility of the proposed use with existing and anticipated development;
- (viii) The relationship of the proposed use to the comprehensive plan and flood plain management program of that area;
- (ix) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (x) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
- (xi) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (5) Upon consideration of the above factors and the purposes set forth in subsection 16-6.4d, the Zoning Board may attach such conditions to the granting of variances, as it deems necessary to further the purposes of this subsection.
- (6) The Zoning Officer shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Insurance Administration upon request.

# (b) Conditions for Variances:

- (1) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the criteria in subsection 16-6.4d.8(a)(4) have been fully considered. As the lot size increases beyond the one-half (1/2) acre, the technical justification required for issuing the variance increases.
- (2) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (3) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (5) Variances shall only be issued upon:
  - (i) A showing of good and sufficient cause;
  - (ii) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and,
  - (iii) A determination that the granting of a variance will not result in

increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

- (6) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- 9. Flood Insurance. Flood insurance in accordance with the Federal Insurance Agency shall be required for developments in the special flood hazard areas or flood plain.
- 10. Warning and Disclaimer. The degree of flood protection required herein is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This subsection does not imply that land outside flood hazard areas will be free from flooding or flood damage. This subsection shall not create liability on the part of the Township of Montgomery or by any other officer or employee thereof for any flood damages that result from reliance on this subsection or any administrative decision lawfully made thereunder.

### 11. Flood Hazard Area Searches.

- (a) Official Designated to Make Flood Hazard Searches. The Township Committee shall, annually, designate an official of the Township to make and prepare flood hazard area searches. Such official shall thereafter be vested with the power to make certificates with respect to flood hazard areas on behalf of the Township.
- (b) Issuance of Certificates. The official appointed to make such searches shall issue certificates within a reasonable time after receipt of the following:
  - (1) A written request for a flood hazard area search containing a diagram or description showing the location and dimensions of the tract of land to be covered by the certificate, and the name of the owner of the tract of land; and
  - (2) The total fees as herein provided.
- (c) Fees for Certificates. The following fee shall be received prior to the issuance of any certificate: twenty-five (\$25.00) dollars.

## 12. Substantial Damage Review

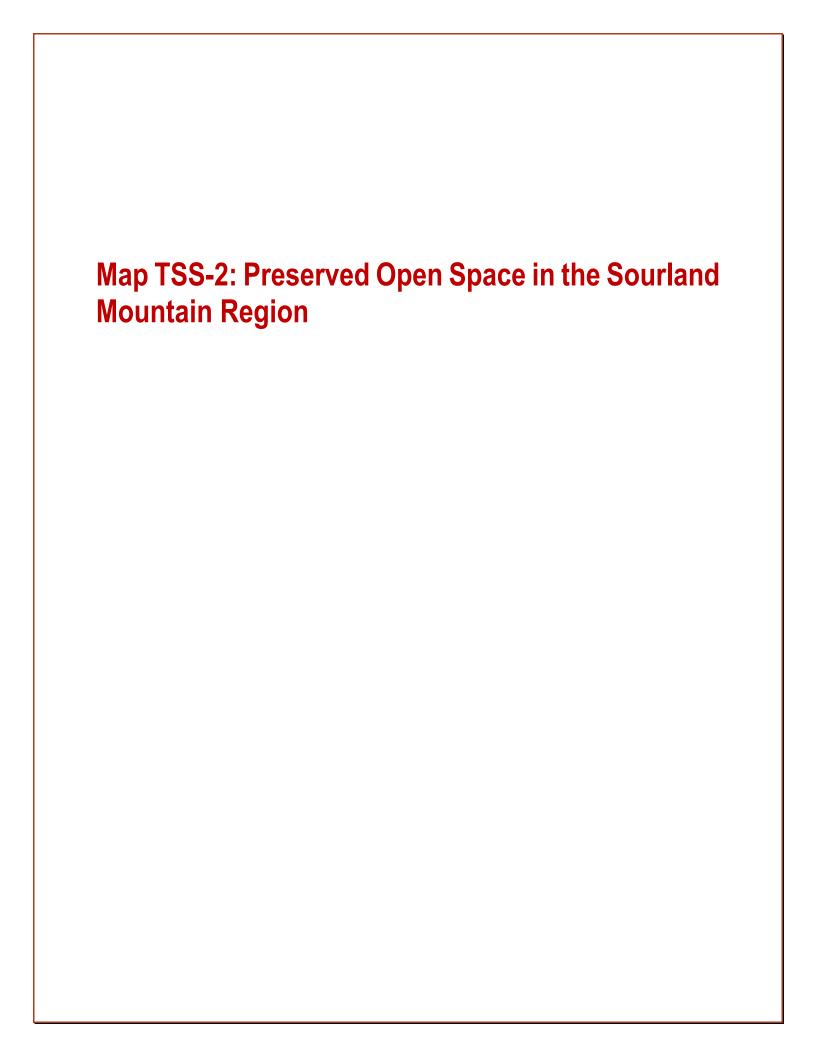
- (a) After an event resulting in building damages, the Township will assess the damage to structures due to flood and non-flood causes.
- (b) The Township will record and maintain the flood and non-flood damage of substantial damage structures and provide a letter of Substantial Damage Determination to the owner and the New Jersey Department of Environmental Protection, Dam Safety and Flood Control Section
- (c) The Township will ensure substantial improvements meet the requirements of sections 6.4d.7.(d)2(i), Specific Criteria, Residential Construction and 6.4d.7.(d)2(ii), Specific Criteria, Nonresidential Construction.

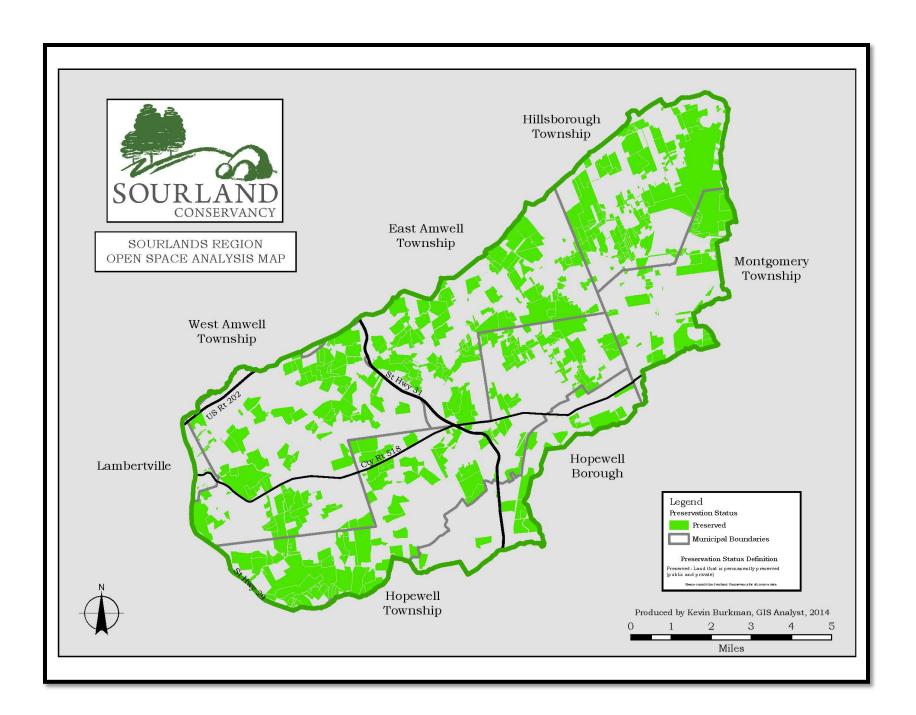
# 13. Interpretation of Firm Boundaries

(a) Make interpretations where needed, as to the exact location of the boundaries of the

areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in 6.4d.8.

- **Section 3. Repealer.** All ordinances and resolutions or parts thereof inconsistent with this ordinance are hereby repealed.
- Section 4. Severability. If any section, paragraph, subsection, clause or provision of this ordinance shall be adjudged by the courts to be invalid, such adjudication shall only apply to the section, paragraph, subsection, clause or provision so adjudged and the remainder of this ordinance shall be deemed valid and effective.
- **Section 5. Effective Date.** This ordinance shall take effect upon final adoption, publication and its filing with the Somerset County Planning Board in accordance with law.





Map TSS-3: Contours of the Sourland Mountain Region

# Figure 24 Ridgelines and Contours

The Sourland Mountain A Portion of Central New Jersey



## Legend

Ridgelines
----- 20 Foot Contour

- 100 Foot Contour

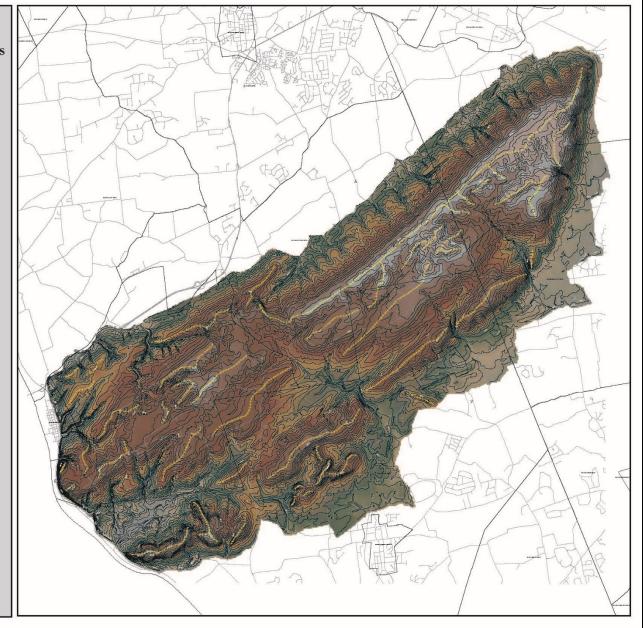
This map was developed using New Jersey Department o Environmental Protection Geographic Information System digital date, but this secondary product has not been NUDEF werified and is not State-authorized.

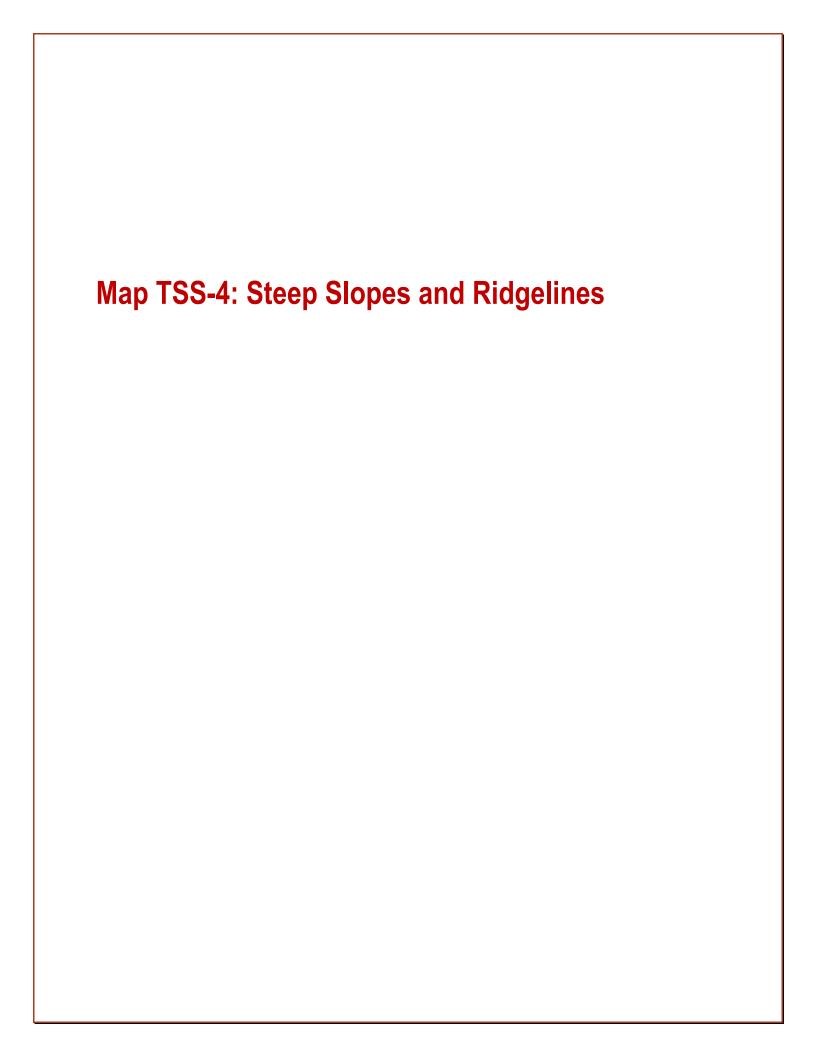
Data Sources: GIS DEM (10 Foot Grid), NAVD 88, derived fromTN interpolated from 2 foot DTM based on 1996 1"=100' groundscale orthophotography by ProMaps, Inc.

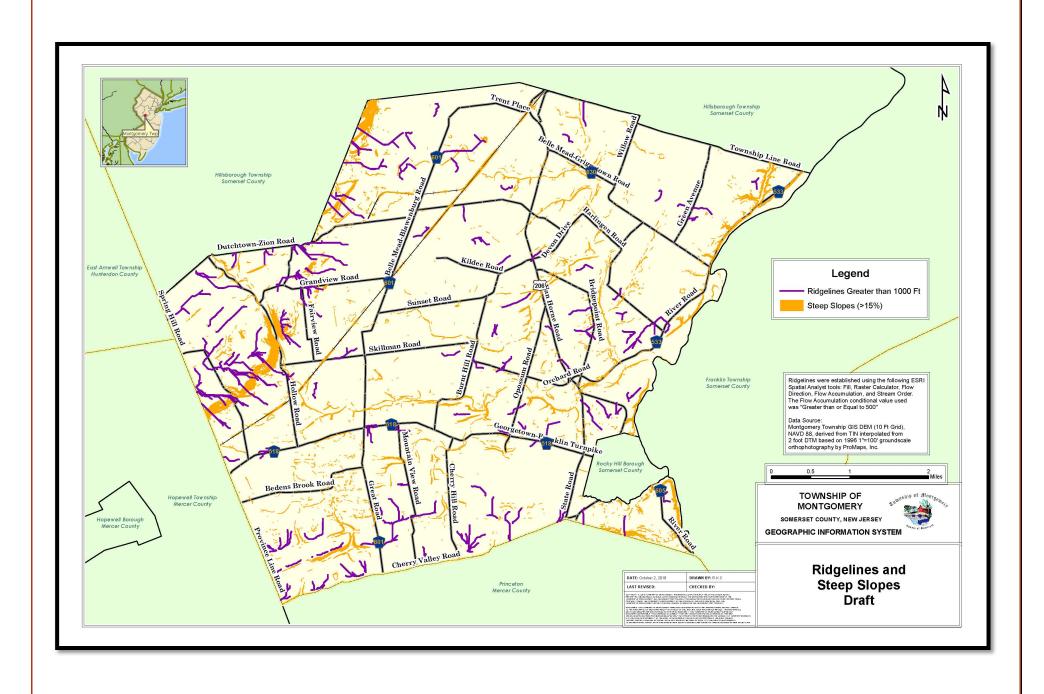
Note:

Ridgelines were established manually using 3-dimensional DEM and contour information.

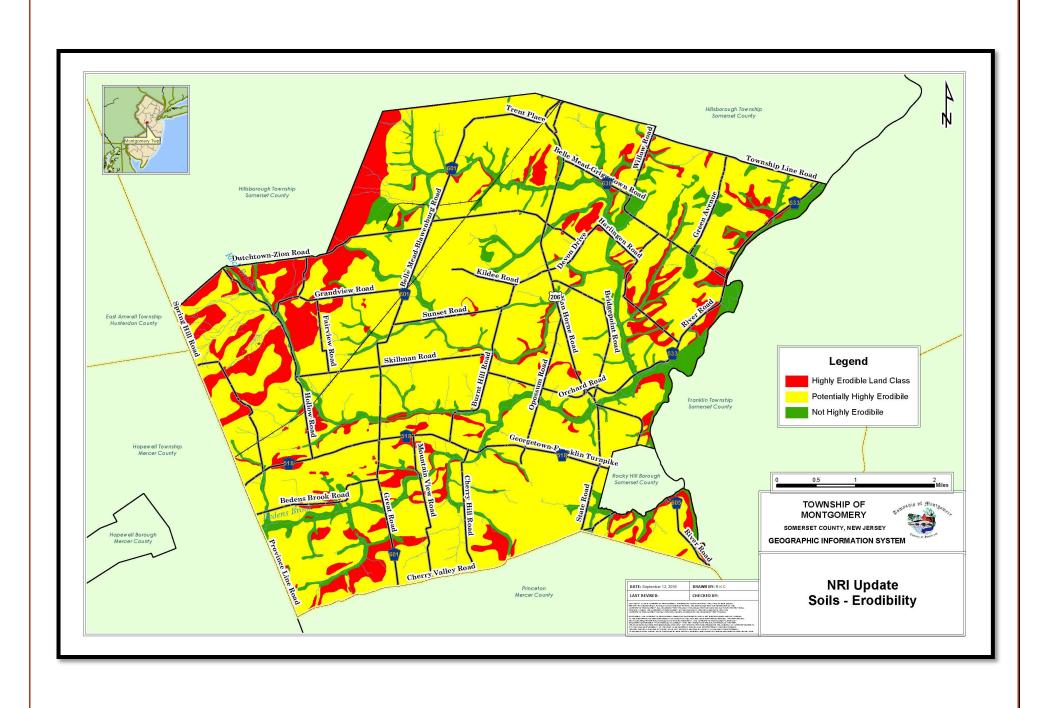
 $\frac{B \ A \ N \ I \ S \ C \ H}{\text{\tiny ASSOCIATES, IN C.}}$ 







Map S-1: Soil Erodibility	



Map W-1: Wetlands	

