



# Species Modeling Report

## **Green Water Snake**

Nerodia cyclopion

- Taxa: Reptilian
- Order: Squamata
- Family: Colubridae

#### **KNOWN RANGE:**

SE-GAP Spp Code: **rGWSN** ITIS Species Code: 174243 NatureServe Element Code: ARADB22010

### PREDICTED HABITAT:



 Range Map Link:
 http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Range\_rGWSN.pdf

 Predicted Habitat Map Link:
 http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Dist\_rGWSN.pdf

 GAP Online Tool Link:
 http://www.gapserve.ncsu.edu/segap/index2.php?species=rGWSN

 Data Download:
 http://www.basic.ncsu.edu/segap/datazip/region/vert/rGWSN\_se00.zip

#### **PROTECTION STATUS:**

Reported on March 14, 2011

Federal Status: ---

State Status: IL (LT), KY (E), MO (E), MS (Non-game species in need of management), TN (D) NS Global Rank: G5

NS State Rank: AL (S2), AR (S3), FL (S1), IL (S1), KY (S1), LA (S5), MO (SX), MS (S5), TN (S2), TX (S5)

#### SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

		US FWS	US Fores	US Forest Service Tenn. Valley Author. US DOD/ACOE					
	ha	%	ha	%	ha	%	ha	%	
Status 1	1,601.8	< 1	0.2	< 1	0.0	0	0.0	0	
Status 2	7,648.0	4	38.5	< 1	0.0	0	0.0	0	
Status 3	0.0	0	4,009.1	2	0.0	0	58.6	< 1	
Status 4	0.0	0	0.0	0	0.0	0	0.0	0	
Total	9,249.8	5	4,047.8	2	0.0	0	58.6	< 1	
			I		I		1		
	US Dept. c	of Energy	US Nat. Par	k Service		NOAA	Other Federal Lands		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	0.0	0	0.0	0	0.0	0	
Status 2	0.0	0	0.2	< 1	2.4	< 1	0.0	0	
Status 3	0.0	0	0.0	0	0.0	0	397.1	< 1	
Status 4	0.0	0	0.0	0	0.0	0	0.0	0	
Total	0.0	0	0.2	< 1	2.4	< 1	397.1	< 1	
			1		I		I		
	Native Am	. Reserv.	State Park/H	Hist. Park	State WMA/G	ameland	Stat	State Forest	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	6.3	< 1	0.0	0	0.0	0	
Status 2	0.0	0	0.0	0	12,842.9	6	0.0	0	
Status 3	0.0	0	282.1	< 1	3,750.7	2	0.0	0	
Status 4	0.0	0	0.0	0	174.8	< 1	0.0	0	
Total	0.0	0	288.4	< 1	16,768.4	8	0.0	0	
			1		'				
	State Coastal	Reserve	ST Nat.Area/	Preserve	Other Sta	ate Lands	Private Cons.	Easemt.	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	50.1	< 1	0.0	0	0.0	0	
Status 2	268.5	< 1	1,848.6	< 1	0.0	0	0.0	0	
Status 3	0.0	0	0.0	0	1.6	< 1	2,408.9	1	
Status 4	0.0	0	0.0	0	0.0	0	0.0	0	
Total	268.5	< 1	1,898.7	< 1	1.6	< 1	2,408.9	1	
			' 						
	Private Land	- No Res.		Water			Over	all Total	
	ha	%	ha	%			ha	%	
Status 1	0.0	0	0.0	0			1,658.4	< 1	
Status 2	0.0	0	0.0	0			22,649.1	11	
Status 3	0.0	0	0.0	0			10,907.9	8	
Status 4	153,945.5	78	4,546.8	2			158,841.8	80	
Total	153,945.5	78	4,546.8	2			194,057.3	100	
			•						

GAP Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, and intensity) are allowed to proceed without interference or are mimicked through management.

GAP Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive use or management practices that degrade the quality of existing natural communities.

GAP Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type or localized intense type. It also confers protection to federally listed endangered and threatened species throughout the area.

GAP Status 4: Lack of irrevocable easement or mandate to prevent conversion of natural habitat types to anthropogenic habitat types. Allows for intensive use throughout the tract. Also includes those tracts for which the existence of such restrictions or sufficient information to establish a higher status is unknown.

#### **PREDICTED HABITAT MODEL(S):**

#### Year-round Model:

#### Habitat Description:

Green water snakes are highly aquatic, seldom being found away from water. They prefer still or slowmoving waters such as sluggish streams, swamps, oxbows, floodplain sloughs, bayous and shallow lakes (Dundee & Rossman 1989, Wilson 1995). In Alabama, this species is most abundant in cypress-gum swamps and is scarce or absent from open marshes and grass flats of the Mobile Bay Delta (Mount 1975). Amy Silvano 23Aug05

> Ecosystem Classifiers: \*\*\*\*\*Ecosystem for zone 45 are not in Dbase, Selected MU's Floodplain/Riparian, open water

#### Hydrography Mask:

Freshwater Only

Slow Current Only

Utilizes flowing water features with buffers of 60m from and 120m into selected water features. Utilizes open water features with buffers of 60m from and 60m into selected water features.

ected Map Units:					
Functional Group	Map Unit Name				
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp				
Water	Open Water (Fresh)				
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier				
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier				
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest				
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest				
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier				
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier				
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest				
Wetlands	Mississippi River Riparian Forest				
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest				

#### Dundee, H. A., and D. A. Rossman. 1989. The amphibians and reptiles of Louisiana. Louisiana State Univ. Press, Baton CITATIONS: Rouge.

Mount, R. H. 1975. The Reptiles and Amphibians of Alabama. Auburn University Agricultural Experiment Station, Auburn, Alabama. vii + 347 pp.

Wilson, L. A. 1995. The Land Manager's Guide to the amphibians and reptiles of the South. Chapel Hill, NC: The Nature Conservancy.

For more information:: SE-GAP Analysis Project / BaSIC

127 David Clark Labs Dept. of Biology, NCSU Raleigh, NC 27695-7617 (919) 513-2853 www.basic.ncsu.edu/segap Compiled: 15 September 2011

This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University,