

VaFWIS Search Report Compiled on 10/31/2017, 3:59:22 PM

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Known or likely to occur within a **2 mile buffer around line beginning 37,33,02.7 -76,54,44.2**
in **101 King William County, 127 New Kent County, VA**

[View Map of Site Location](#)

511 Known or Likely Species ordered by Status Concern for Conservation
(displaying first 21) (21 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
060003	FESE	Ia	Wedgemussel, dwarf	Alasmidonta heterodon		BOVA
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes	BOVA,TEWaters,Habitat,HU6
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
040110	SE	Ia	Rail, black	Laterallus jamaicensis		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus lucifugus		BOVA
050034	SE	Ia	Bat, Rafinesque's eastern big-eared	Corynorhinus rafinesquii macrotis		BOVA,HU6
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
040379	ST	Ia	Sparrow, Henslow's	Ammodramus henslowii	Yes	BOVA,BBA,SppObs
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	Yes	BOVA,SppObs,HU6
030063	CC	IIIa	Turtle, spotted	Clemmys guttata	Yes	BOVA,SppObs,HU6
010174		Ia	Bass, Roanoke	Ambloplites cavifrons		BOVA
040052		IIa	Duck, American black	Anas rubripes	Potential	BOVA,BBA,HU6
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA

040320	IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140	IIa	Woodcock, American	Scolopax minor		BOVA,HU6
060071	IIa	Lampmussel, yellow	Lampsilis cariosa		BOVA
040203	IIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105	IIb	Rail, king	Rallus elegans	Potential	BOVA,Habitat,BBA,HU6
080336	IIc	Beetle, Gammon's stenelmis riffle	Stenelmis gammoni		BOVA
100003	IIc	Skipper, rare	Problema bulenta		BOVA,HU6

To view **All 511 species** [View 511](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need;
 II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;
 III=VA Wildlife Action Plan - Tier III - High Conservation Need;
 IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
 Virginia Wildlife Action Plan Conservation Opportunity Ranking:
 a - On the ground management strategies/actions exist and can be feasibly implemented.;
 b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
 c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (4 records)

[View Map of All Anadromous Fish Use Streams](#)

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE*	Highest Tier**	
C58	Pamunkey river	Confirmed	6		IV	Yes
P143	Sweet Hall marsh	Potential	0			Yes
P41	Couziac marsh	Potential	0			Yes
P74	Hill marsh	Potential	0			Yes

Impediments to Fish Passage (3 records)

[View Map of All Fish Impediments](#)

ID	Name	River	View Map
636	COOKS MILL DAM	MILL CREEK	Yes
640	FERN DAM	TR-MILL CREEK	Yes
857	HARRELL DAM	TR-PAMUNKEY RIVER	Yes

Colonial Water Bird Survey (1 records)

[View Map of All Query Results Colonial Water Bird Survey](#)

Colony_Name	N Obs	Latest Date	N Species			View Map
			Different Species	Highest TE*	Highest Tier**	
Western Shore, New Kent, New Kent	2	May 1 2013	1			Yes

Displayed 1 Colonial Water Bird Survey

Threatened and Endangered Waters (99 Reaches - displaying first 20)

[View Map of All Threatened and Endangered Waters](#)

Stream Name	Highest TE*	T&E Waters Species					View Map
		BOVA Code, Status*, Tier**, Common & Scientific Name					
Pamunkey River (0101027)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0102917)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0102920)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0103020)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0103834)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0103915)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0104825)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0104844)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0105219)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0105234)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

Pamunkey River (0105466)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0105937)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0106592)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0106675)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0106891)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0106897)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0106917)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0106938)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0107352)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0107353)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0107414)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Pamunkey River (0107899)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

To view All 99 Threatened and Endangered Waters records [View 99](#)

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests (14 records)

[View Map of All Query Results
Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map

KW1001	4	Apr 19 2011	UNKNOWN	Yes
KW8401	3	May 9 1986	HISTORIC	Yes
KW8501	4	Jan 1 1990	HISTORIC	Yes
KW8801	35	Apr 19 2011	Unknown	Yes
KW9601	10	Apr 24 2000	HISTORIC	Yes
NK0001	4	Jan 1 2001	HISTORIC	Yes
NK0002	4	Jan 1 2001	HISTORIC	Yes
NK0102	12	Apr 19 2011	Unknown	Yes
NK0201	9	Mar 10 2008	UNKNOWN	Yes
NK0303	14	Apr 19 2011	Unknown	Yes
NK0402	7	Apr 26 2007	HISTORIC	Yes
NK0801	8	Apr 19 2011	Unknown	Yes
NK9402	16	Jan 1 2002	HISTORIC	Yes
NK9804	21	Apr 19 2011	Unknown	Yes

Displayed 14 Bald Eagle Nests

Species Observations (60 records - displaying first 20 , 3
Observations with Threatened or
Endangered species)

[View Map of All Query Results
Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
664	SppObs	Jan 1 1900		1	ST	I	Yes
59799	SppObs	May 15 2000	Dr. William G. Reay, Virginia Institute of Marine Science	1	SS	II	Yes
29727	SppObs	Jan 1 1900	Mitchell, J. C.	1	SS	III	Yes
426188	SppObs	Aug 1 2007	VCU - INSTAR	15		III	Yes
340879	SppObs	Jun 1 2004	WWS DGIF Greenlee and crew	9		III	Yes
426184	SppObs	Jul 25 2003	VCU - INSTAR	9		III	Yes
52716	SppObs	Apr 26 1996	Mike Mulligan, Chesapeake Bay Foundation	3		III	Yes
52715	SppObs	Apr 25 1996	Mike Mulligan, Chesapeake Bay Foundation	3		III	Yes
6105	SppObs	May 1 1994	Joseph C. Mitchell	1		III	Yes
15930	SppObs	Sep 6 1978	VIMS	11		III	Yes
336513	SppObs	Jan 1 1978	VIMS-B-VA. INST. MARINE SCI.	12		III	Yes

334013	SppObs	Jan 1 1971	VPI-B-VA. POLY. INST.	4		III	Yes
334014	SppObs	Jan 1 1971	VPI-B-VA. POLY. INST.	4		III	Yes
331982	SppObs	Jan 1 1954	ECR-RANEY	4		III	Yes
331617	SppObs	Jan 1 1949	VIMS-VA. INST. MAR. SCI.	13		III	Yes
331613	SppObs	Jan 1 1949	VIMS-VA. INST. MAR. SCI.	22		III	Yes
612058	SppObs	May 4 2011	Tim; Savidge Tom ; Dickinson Chris ; Sheats	5		IV	Yes
614314	SppObs	Apr 24 2009	Travis ; Harrell Wade; Harrell Lindsey ; Pyne John ; White	1		IV	Yes
15932	SppObs	Sep 6 1978	VIMS	10		IV	Yes
15929	SppObs	Sep 6 1978	VIMS	9		IV	Yes

Displayed 20 Species Observations

Selected 60 Observations [View all 60 Species Observations](#)

Habitat Predicted for Aquatic WAP Tier I & II Species (1 Reach)

[View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species](#)

Stream Name	Tier Species						View Map
	Highest TE *	BOVA Code, Status *, Tier **, Common & Scientific Name					
Pamunkey River (20801061)		010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

Habitat Predicted for Terrestrial WAP Tier I & II Species

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040105		Ib	Rail, king	Rallus elegans	Yes

Virginia Breeding Bird Atlas Blocks (7 records)

[View Map of All Query Results](#)
[Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE *	Highest Tier **	
55094	New Kent, CE	49	ST	I	Yes
55093	New Kent, CW	1			Yes
55092	New Kent, NE	1			Yes

55091	New Kent, NW	1			Yes
55095	New Kent, SW	1			Yes
56093	West Point, CW	1			Yes
56091	West Point, NW	25		III	Yes

Public Holdings:

N/A

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
101	King William	406	FESE	I
127	New Kent	413	FESE	I

USGS 7.5' Quadrangles:

New Kent
West Point

USGS NRCS Watersheds in Virginia:

N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
YO36	Pamunkey River-Cohoke Mill Creek	64	FESE	I
YO37	Pamunkey River-Mill Creek	63	FESE	I
YO60	Mattaponi River-Heartquake Creek	58	SS	II

Compiled on 10/31/2017, 3:59:22 PM 1866479.0 report=all searchType=L dist= 3218 poi= 37,33,02.7 -76,54,44.2 siteDD= 37.5507750 -76.9122998;37.5581250 -76.9103248;;37.5776944 -76.9039387;
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Threatened and Endangered Waters where Sturgeon, Atlantic (010032) observed

37,33,02.7 -76,54,44.2 is the Search Point

Show Position Rings
 Yes No
 1 mile and 1/4 mile at the Search Point

Show Search Area
 Yes No
 2 Search distance miles buffer

Display Search Point is at center not at map center

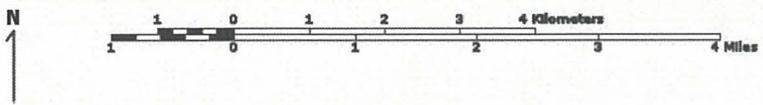
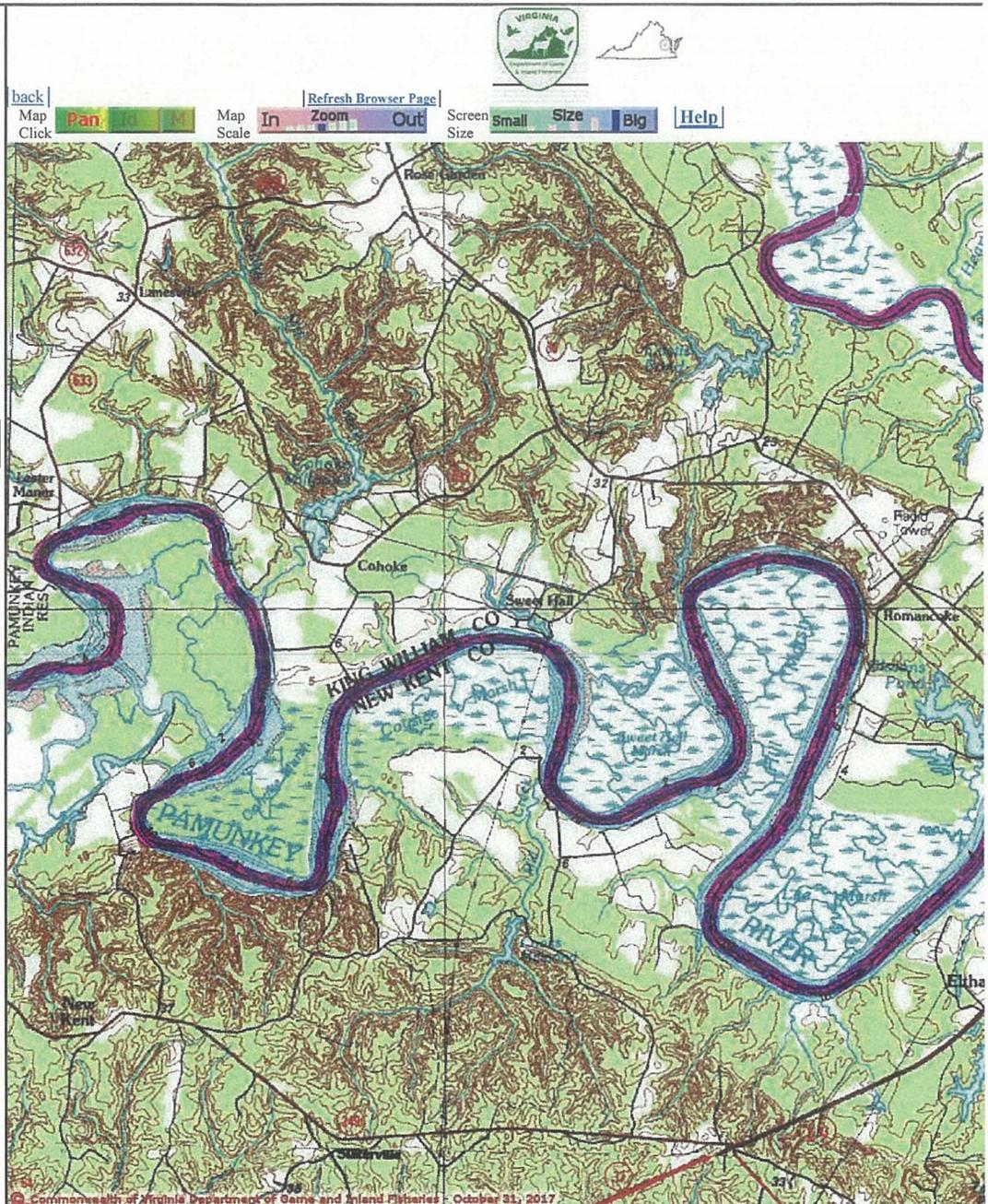
Base Map Choices
 Topography

Map Overlay Choices
 Current List: TEWaters

Map Overlay Legend

T & E Waters

- Federal
- State



Point of Search 37,33,02.7 -76,54,44.2
 Map Location 37,33,51.2 -76,54,29.1

Select Coordinate System: Degrees, Minutes, Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 323481 and top 4167178. Pixel size is 15. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map

display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

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map assembled 2017-10-31 16:00:13 (qa/qc March 21, 2016 12:20 - tn=866479.1 dist=3218
I)
\$poi=37.5507500 -76.9122778

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Species Observations where Sparrow, Henslow s (040379) observed 664

37,33,02.7 -76,54,44.2 is the Search Point

Display Item Location is at center not at map center

Show Position Rings
 Yes No
 1 mile and 1/4 mile at the Search Point

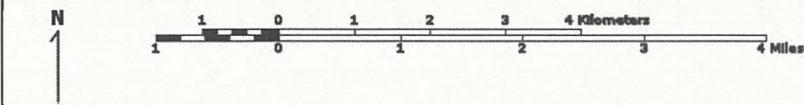
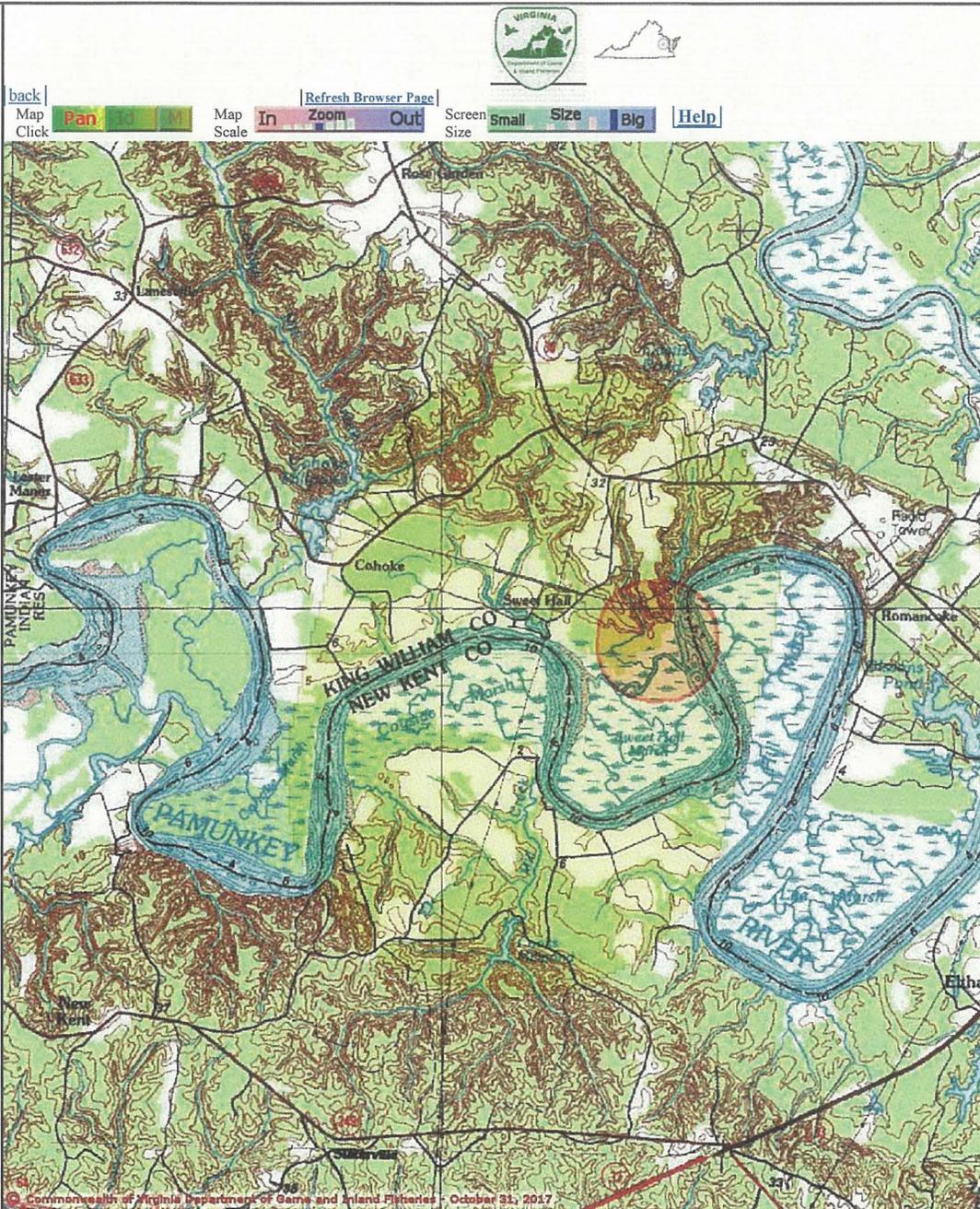
Show Search Area
 Yes No
 2 Search distance miles buffer

Display Search Point is at center not at map center

Base Map Choices
 Topography

Map Overlay Choices
 Current List: Search, Observation

Map Overlay Legend
 2 mile radius Search Area
 Data Observation Site



Point of Search 37,33,02.7 -76,54,44.2
 Map Location 37,33,51.2 -76,54,29.1

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 323481 and top 4167178. Pixel size is 15. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map

display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

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map assembled 2017-10-31 16:01:36 (qa/qc March 21, 2016 12:20 - tn=866479.1 dist=3218
1)

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xxvy256.Displace_Y, cc.High_TE, obs.FeatType from  
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obs.obsID = xy.obsID join vafwis_tables.dbo.cvSppObsSite256 s256 on s256.obsID =  
xy.obsID join vafwis_tables.dbo.cvSppObsSite256 xxvy256 on xxvy256.obsSite256  
= s256.obsSite256 join vafwis_tables.dbo.cvSppObs_CC cc on cc.obsID = xy.obsID  
JOIN vafwis_tables.dbo.udf_List2Table('664',') list on list.item = obs.obsID
```

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Species Observations where Terrapin, northern diamond-backed (030067) observed 59799

37,33,02.7 -76,54,44.2 is the Search Point

Display	Item Location is
at center	not at map center

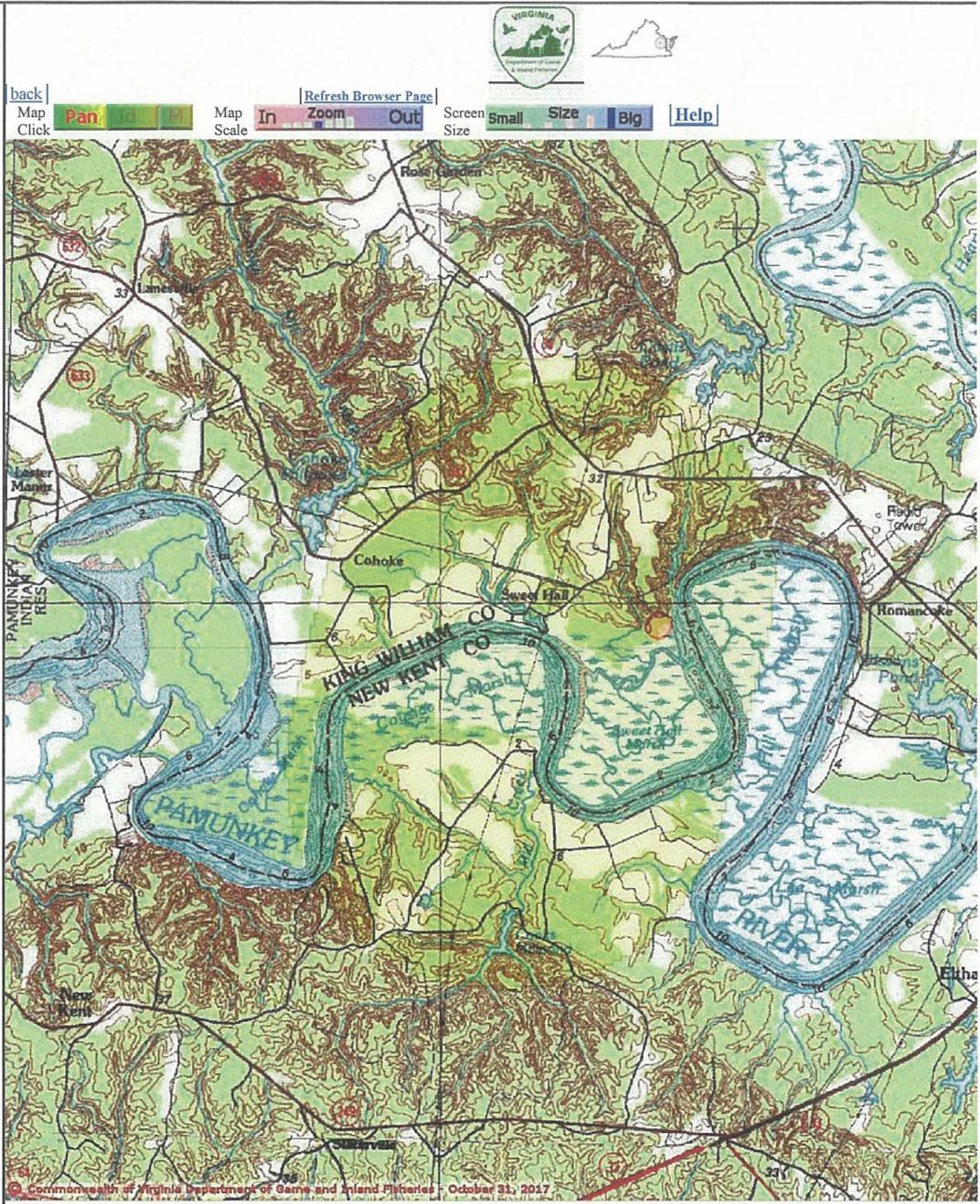
Show Position Rings
 Yes No
 1 mile and 1/4 mile at the Search Point

Show Search Area
 Yes No
 2 Search distance miles buffer

Display	Search Point is
at center	not at map center

Base Map Choices
 Topography

Map Overlay Choices
 Current List: Search, Observation



Map Overlay Legend

- 2 mile radius Search Area
- Data Observation Site

Commonwealth of Virginia Department of Game and Inland Fisheries - October 31, 2017

Point of Search 37,33,02.7 -76,54,44.2
 Map Location 37,33,51.2 -76,54,29.1

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 323481 and top 4167178. Pixel size is 15. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map

display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

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map assembled 2017-10-31 16:09:28 (qa/qc March 21, 2016 12:20 - tn=866479.1 dist=3218
1)

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xxvy256.Displace_Y, cc.High_TE, obs.FeatType from  
vafwis_tables.dbo.vcvSppObs_XY xy join vafwis_tables.dbo.cvSppObs obs on  
obs.obsID = xy.obsID join vafwis_tables.dbo.cvSppObsSite256 s256 on s256.obsID =  
xy.obsID join vafwis_tables.dbo.cvSppObsSite256 xxvy256 on xxvy256.obsSite256  
= s256.obsSite256 join vafwis_tables.dbo.cvSppObs_CC cc on cc.obsID = xy.obsID  
JOIN vafwis_tables.dbo.udf_List2Table('59799','') list on list.item = obs.obsID
```

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Species Observations
where Turtle, spotted
(030063) observed 29727

37,33,02.7 -76,54,44.2
is the Search Point

Display at center	Item Location is not at map center
-------------------	------------------------------------

Show Position Rings

Yes No
1 mile and 1/4 mile at the Search Point

Show Search Area

Yes No
2 Search distance miles buffer

Display at center	Search Point is not at map center
-------------------	-----------------------------------

Base Map Choices

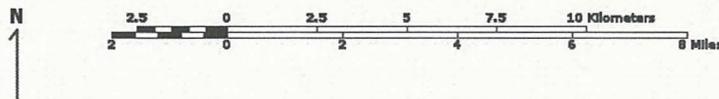
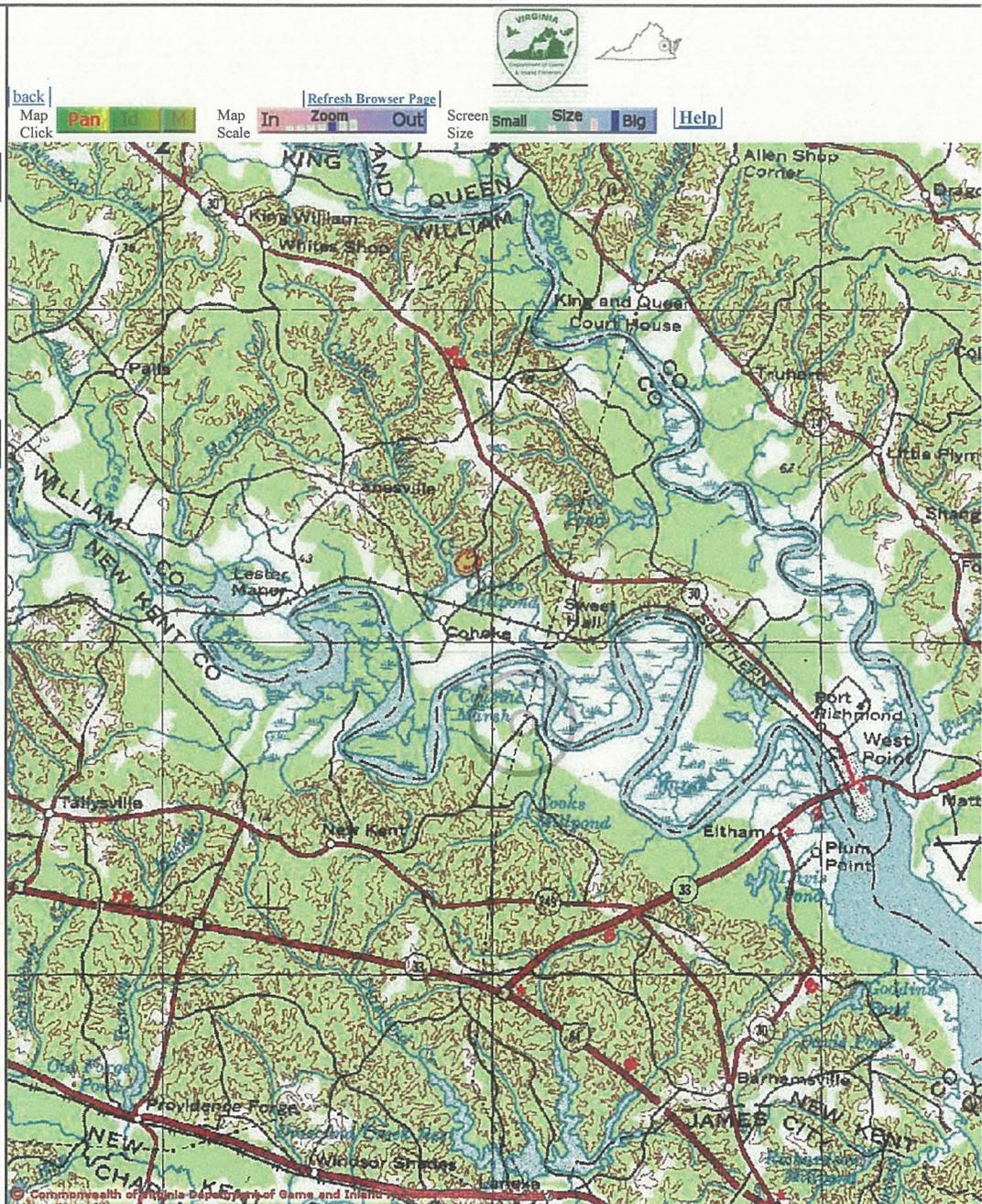
Topography

Map Overlay Choices

Current List: Observation, Position

Map Overlay Legend

-  Position Rings
1 mile and 1/4 mile at the Search Point
-  Data Observation Site



Point of Search 37,33,02.7 -76,54,44.2

Map Location 37,33,51.2 -76,54,29.1

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude

Decimal Degrees Latitude - Longitude

Meters UTM NAD83 East North Zone

Meters UTM NAD27 East North Zone

Base Map source: USGS 1:250,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 315481 and top 4175178. Pixel size is 32 meters. Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 32000 meters east to west by 32000 meters north to south for a total of 1024.0 square kilometers.

The map display represents 105004 feet east to west by 105004 feet north to south for a total of 395.5 square miles.

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map assembled 2017-10-31 16:10:39 (qa/qc March 21, 2016 12:20 - tn=866479.1 dist=3218
I)

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$poi=37.5507500 -76.9122778$query=select xy.x,xy.y, xxvy256.Displace_X,  
xxvy256.Displace_Y, cc.High_TE, obs.FeatType from  
vafwis_tables.dbo.vcvSppObs_XY xy join vafwis_tables.dbo.cvSppObs obs on  
obs.obsID = xy.obsID join vafwis_tables.dbo.cvSppObsSite256 s256 on s256.obsID =  
xy.obsID join vafwis_tables.dbo.cvSppObsSite256 xxvy256 on xxvy256.obsSite256  
= s256.obsSite256 join vafwis_tables.dbo.cvSppObs_CC cc on cc.obsID = xy.obsID  
JOIN vafwis_tables.dbo.udf_List2Table('29727','') list on list.item = obs.obsID
```

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Anadromous Fish Use Streams

37,33,02.7 -76,54,44.2 is the Search Point

Yes No
1 mile and 1/4 mile at the Search Point

Yes No
2 Search distance miles buffer

Display at center	Search Point is not at map center
-------------------	-----------------------------------

Base Map Choices
Topography

Map Overlay Choices
Current List: Position, Search, Anadromous

Map Overlay Legend

Anadromous Fish Reach

- Confirmed
- Potential
- Impediment

Position Rings

- 1 mile and 1/4 mile at the Search Point
- 2 mile radius Search Area

[back](#) | [Refresh Browser Page](#) | [Map Click](#) | [Map Scale](#) | [In](#) | [Zoom](#) | [Out](#) | [Screen Size](#) | [Small](#) | [Size](#) | [Big](#) | [Help](#)

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Point of Search 37,33,02.7 -76,54,44.2
Map Location 37,33,51.2 -76,54,29.1

Select Coordinate System: Degrees, Minutes, Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 323481 and top 4167178. Pixel size is 15. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map

<https://vafwis.dgif.virginia.gov/maps/zMapFormJava.asp?autoscale=14&coord=LL&disp...> 10/31/2017

display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

Topographic maps and Black and white aerial photography for year 1990+ are from the United States Department of the Interior, United States Geological Survey. Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.

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All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

map assembled 2017-10-31 16:13:36 (qa/qc March 21, 2016 12:20 - tn=866479.0 dist=3218

I)

\$poi=37.5507500 -76.9122778

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VaFWIS Search Report Compiled on 10/31/2017, 3:47:08 PM

[Help](#)

Known or likely to occur within a 2 mile buffer around line beginning 37,38,47.6 -76,52,57.3 in 097 King and Queen County, 101 King William County, VA

[View Map of Site Location](#)

484 Known or Likely Species ordered by Status Concern for Conservation (displaying first 20) (18 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
060003	FESE	Ia	Wedgemussel, dwarf	Alasmidonta heterodon		BOVA
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes	BOVA,TEWaters
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
040110	SE	Ia	Rail, black	Laterallus jamaicensis		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus lucifugus		BOVA
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
040379	ST	Ia	Sparrow, Henslow's	Ammodramus henslowii		BOVA
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin		BOVA,HU6
030063	CC	IIIa	Turtle, spotted	Clemmys guttata		BOVA,HU6
010174		Ia	Bass, Roanoke	Ambloplites cavifrons		BOVA
040052		IIa	Duck, American black	Anas rubripes		BOVA,HU6
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor		BOVA,HU6
060071		IIa	Lampmussel, yellow	Lampsilis cariosa		BOVA
040203		IIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans	Potential	BOVA,Habitat,HU6
010131		IIIa	Eel, American	Anguilla rostrata	Yes	BOVA,SppObs,HU6
020005		IIIa	Frog, carpenter	Lithobates virgatipes		BOVA

To view All 484 species [View 484](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
Virginia Wildlife Action Plan Conservation Opportunity Ranking:

- a - On the ground management strategies/actions exist and can be feasibly implemented.;
- b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
- c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (8 records)

[View Map of All Anadromous Fish Use Streams](#)

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			** View Map
			Different Species	Highest TE *	Highest Tier	
C182	Mattaponi river	Confirmed	6		IV	Yes
C81	York River	Confirmed	6		IV	Yes
P102	Mattaponi BW3	Potential	0			Yes
P106	Mitchell Hill creek	Potential	0			Yes

P159	Unnamed Tr. 3 of Mattaponi	Potential	0		Yes
P40	Courthouse creek	Potential	0		Yes
P63	Gleason marsh	Potential	0		Yes
P65	Grass creek	Potential	0		Yes

Impediments to Fish Passage (1 records)

[View Map of All Fish Impediments](#)

ID	Name	River	View Map
605	KING & QUEEN COURTHOUSE DAM	COURTHOUSE CREEK	Yes

Colonial Water Bird Survey (2 records)

[View Map of All Query Results Colonial Water Bird Survey](#)

Colony_Name	N Obs	Latest Date	N Species			View Map
			Different Species	Highest TE*	Highest Tier**	
Western Shore, King And Queen Court Hous, King and Queen	1	May 1 2013	1			Yes
Courthouse Creek	1	May 2 2003	1			Yes

Displayed 2 Colonial Water Bird Survey

Threatened and Endangered Waters (79 Reaches - displaying first 20)

[View Map of All Threatened and Endangered Waters](#)

Stream Name	Highest TE*	T&E Waters Species			View Map	
		BOVA Code, Status*, Tier**, Common & Scientific Name				
Mattaponi River (0115605)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0115730)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0115748)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0116202)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0118265)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0119418)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0120019)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0120159)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0120195)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0120470)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0121314)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0121607)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0122262)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0122265)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0122413)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0123524)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0123956)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0124030)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0124187)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0124194)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0124310)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes
Mattaponi River (0124484)	FESE	010032	FESE	Ib	Sturgeon, Atlantic Acipenser oxyrinchus	Yes

To view **All 79 Threatened and Endangered Waters records** [View 79](#)

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests (4 records)

[View Map of All Query Results](#)
[Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
KQ0801	8	Apr 19 2011	HISTORIC	Yes
KW0201	17	Apr 19 2011	Unknown	Yes
KW9501	4	Apr 24 1996	HISTORIC	Yes
KW9901	22	Apr 19 2011	Unknown	Yes

Displayed 4 Bald Eagle Nests

Species Observations (233 records - displaying first 20)

[View Map of All Query Results](#)
[Species Observations](#)

obsID	class	Date Observed	Observer	Different Species	N Species Highest TE*	Highest Tier**	View Map
605242	SppObs	Apr 21 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	4		III	Yes
340899	SppObs	Sep 23 2004	WWS DGIF greenlee and cole	15		III	Yes
426559	SppObs	Oct 4 2003	VCU - INSTAR	9		III	Yes
426554	SppObs	Jul 17 2003	VCU - INSTAR	16		III	Yes
602925	SppObs	May 20 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	3		IV	Yes
604729	SppObs	May 5 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	4		IV	Yes
603045	SppObs	Apr 28 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	4		IV	Yes
604416	SppObs	Apr 28 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	5		IV	Yes
607579	SppObs	Apr 28 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	5		IV	Yes
606470	SppObs	Apr 21 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	4		IV	Yes
606510	SppObs	Apr 21 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	4		IV	Yes
608069	SppObs	Apr 21 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	3		IV	Yes
601734	SppObs	Apr 21 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	3		IV	Yes
601780	SppObs	Apr 21 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	5		IV	Yes
602838	SppObs	Apr 21 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	3		IV	Yes
602633	SppObs	Apr 14 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	3		IV	Yes

606462	SppObs	Apr 14 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	4		IV	Yes
604478	SppObs	Apr 14 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	4		IV	Yes
604495	SppObs	Apr 7 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	6		IV	Yes
603078	SppObs	Apr 7 2008	Craig; Bruce Kathy; Dillow Dave; Wong William; Burton	5		IV	Yes

Displayed 20 Species Observations

Selected 233 Observations [View all 233 Species Observations](#)

Habitat Predicted for Aquatic WAP Tier I & II Species

N/A

Habitat Predicted for Terrestrial WAP Tier I & II Species

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040105		Iib	Rail. king.	Rallus elegans	Yes

Virginia Breeding Bird Atlas Blocks (5 records)

[View Map of All Query Results](#)
[Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE*	Highest Tier**	
55104	King and Queen Court House, CE	1			Yes
55106	King and Queen Court House, SE	39		III	Yes
55092	New Kent, NE	1			Yes
56105	Truhart, SW	10		III	Yes
56091	West Point, NW	25		III	Yes

Public Holdings:

N/A

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
097	King and Queen	397	FESE	I
101	King William	406	FESE	I

USGS 7.5' Quadrangles:

New Kent
King and Queen Court House
West Point
Truhart

USGS NRCS Watersheds in Virginia:

N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
YO59	Mattaponi River-Courthouse Creek	57	SS	II
YO60	Mattaponi River-Heartquake Creek	58	SS	II

Compiled on 10/31/2017, 3:47:08 PM 1866460 0 report=all searchType=L dist= 3218 poi= 37.38,47.6 -76.52,57.3 siteDD= 37.6465750 -76.8825998,37.6472472 -76.8823332,;37.6520527 -76.8804026,;37.6544750 -76.8794554,;37.6581277 -76.8780943,;37.6630972 -76.8761360,
PixelSize=64; Anadromous=0.033288; BBA=0.051207; BECAR=0.014916; Bats=0.014871; Buffer=0.144642; County=0.094331; HU6=0.102756; Impediments=0.029337; Init=0.226092; PublicLands=0.026408; Quad=0.054609; SppObs=0.422439; TEWaters=0.045777; TierReaches=0.026657; TierTerrestrial=0.053086; Total=1.488742; Tracking_BOVA=0.198369; Trout=0.024983; huva=0.045576

Threatened and Endangered Waters where Sturgeon, Atlantic (010032) observed

37,38,47.6 -76,52,57.3 is the Search Point

Show Position Rings

Yes No
1 mile and 1/4 mile at the Search Point

Show Search Area

Yes No
2 Search distance miles buffer

Display Search Point is at center not at map center

Base Map Choices

Topography

Map Overlay Choices

Current List: Position, Search, TEWaters

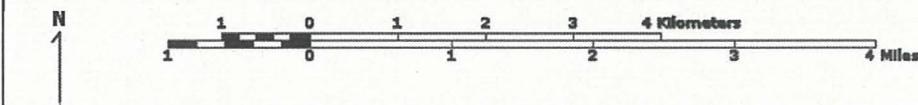
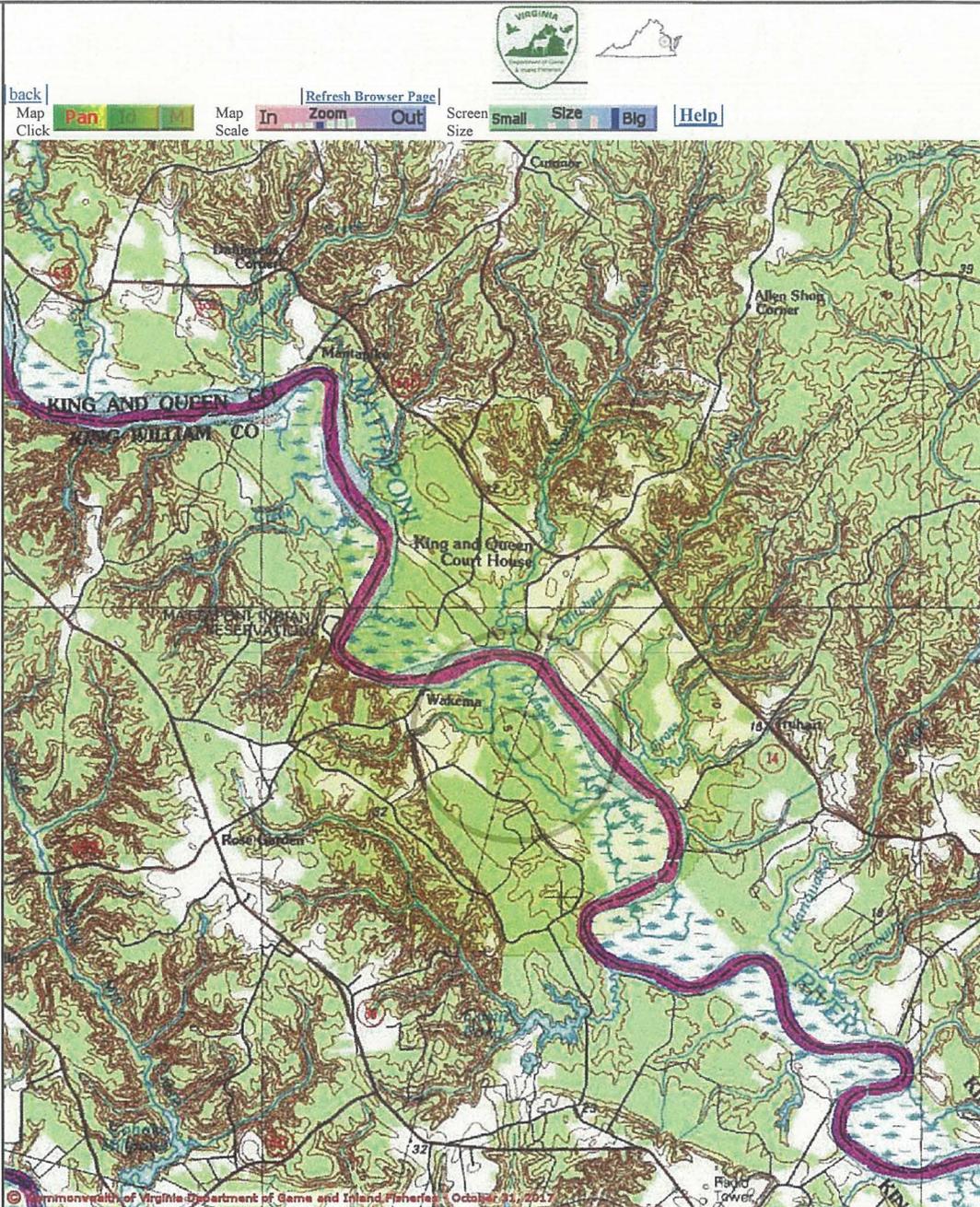
Map Overlay Legend

T & E Waters

 Federal
 State

 Position Rings
1 mile and 1/4 mile at the Search Point

 2 mile radius Search Area



Point of Search 37,38,47.6 -76,52,57.3
Map Location 37,39,17.3 -76,52,45.6

Select Coordinate System: Degrees, Minutes, Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 326221 and top 4177180. Pixel size is 13. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map

display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

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map assembled 2017-10-31 15:49:05 (qa/qc March 21, 2016 12:20 - tn=866460.1 dist=3218
1)
\$poi=37.6465556 -76.8825833

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4 Species Observations where Eel, American (010131) observed

37,38,47.6 -76,52,57.3 is the Search Point

back | Map Click | Pan | Map Scale | In Zoom Out | Refresh Browser Page | Screen Size | Small Size | Big | Help

Show Position Rings
 Yes No
 1 mile and 1/4 mile at the Search Point

Show Search Area
 Yes No
 2 Search distance miles buffer

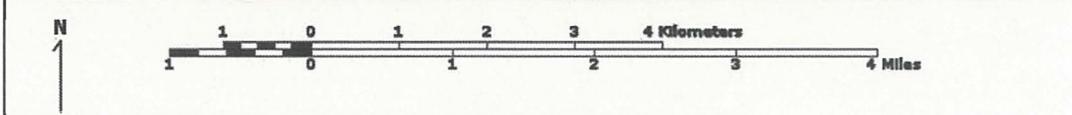
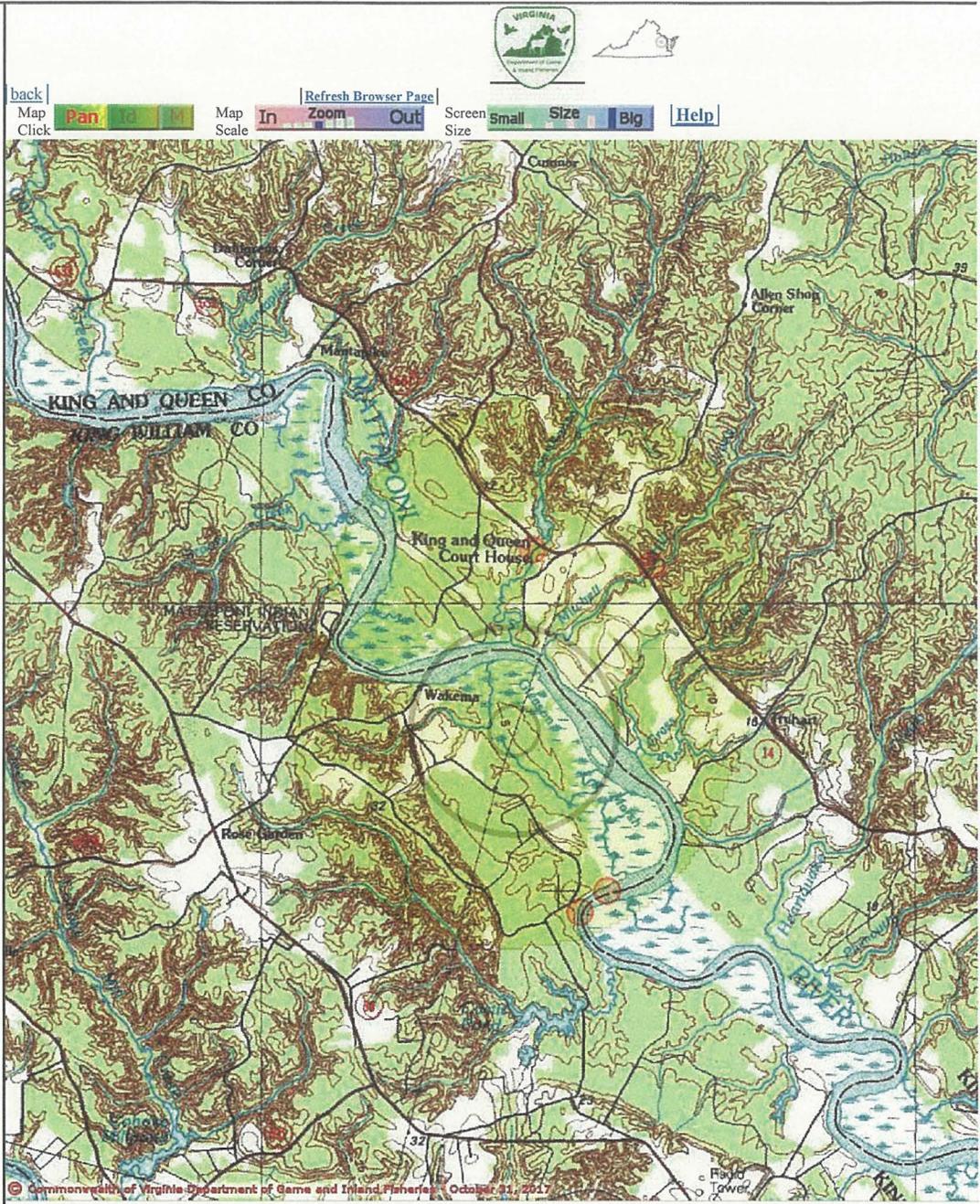
Display at center	Search Point is not at map center
-------------------	-----------------------------------

Base Map Choices
 Topography

Map Overlay Choices
 Current List: Position, Search, SppObs

Map Overlay Legend

- Position Rings 1 mile and 1/4 mile at the Search Point
- 2 mile radius Search Area
- Data Observation Site



Point of Search 37,38,47.6 -76,52,57.3
 Map Location 37,39,17.3 -76,52,45.6

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 326221 and top 4177180. Pixel size is 13. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map

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1)

\$poi=37.6465556 -76.8825833

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Anadromous Mattaponi river

37,38,47.6 -76,52,57.3 is the Search Point

Display Item Location is at center not at map center

Show Position Rings Yes No
1 mile and 1/4 mile at the Search Point

Show Search Area Yes No
2 Search distance miles buffer

Display Search Point is at center not at map center

Base Map Choices
Topography

Map Overlay Choices
Current List: Observation

Map Overlay Legend

Anadromous Fish Reach

- Confirmed
- Selected Confirmed
- Potential
- Selected Potential

● **Impediment Data**
○ **Observation Site**

Point of Search 37,38,47.6 -76,52,57.3
Map Location 37,39,17.3 -76,52,45.6

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 326221 and top 4177180. Pixel size is 13. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map

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map assembled 2017-10-31 15:51:22 (qa/qc March 21, 2016 12:20 - tn=866460.0 dist=3218
l)

\$poi=37.6465556 -76.8825833\$query=select min(b.minx),min(b.miny),max
(b.maxx),max(b.maxy) from vafwis_tables.dbo.cvAnadromous a join
vafwis_tables.dbo.cvAnadromous_XY b on b.anadromous = a.anadromous where
a.anadromous = 'C182'

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VaFWIS Search Report Compiled on 10/31/2017, 10:44:59 AM

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Known or likely to occur within a **2 mile buffer around line beginning 37,28,37.0 -76,55,32.7**
in **127 New Kent County, VA**

[View Map of Site Location](#)

472 Known or Likely Species ordered by Status Concern for Conservation
(displaying first 20) (19 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database (s)
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus		BOVA,HU6
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
040110	SE	Ia	Rail, black	Laterallus jamaicensis		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus lucifugus		BOVA
050034	SE	Ia	Bat, Rafinesque's eastern big-eared	Corynorhinus rafinesquii macrotis		BOVA,HU6
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
040379	ST	Ia	Sparrow, Henslow's	Ammodramus henslowii		BOVA
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin		BOVA,HU6
030063	CC	IIIa	Turtle, spotted	Clemmys guttata		BOVA,HU6
040052		IIa	Duck, American black	Anas rubripes		BOVA,HU6
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040181		IIa	Tern, common	Sterna hirundo		HU6
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor		BOVA,HU6
040203		IIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA,HU6
080336		IIc	Beetle, Gammon's stenelmis riffle	Stenelmis gammoni		BOVA
100003		IIc	Skipper, rare	Problema bulenta		BOVA,HU6
010131		IIIa	Eel, American	Anguilla rostrata		BOVA,HU6

To view **All 472 species** [View 472](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need;
 II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;
 III=VA Wildlife Action Plan - Tier III - High Conservation Need;
 IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
 Virginia Wildlife Action Plan Conservation Opportunity Ranking:
 a - On the ground management strategies/actions exist and can be feasibly implemented.;
 b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
 c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams

N/A

Impediments to Fish Passage

N/A

Colonial Water Bird Survey (3 records)

[View Map of All Query Results Colonial Water Bird Survey](#)

Colony_Name	N Obs	Latest Date	N Species			View Map
			Different Species	Highest TE*	Highest Tier**	
Western Shore, Walkers, New Kent	1	May 5 2013	1			Yes
Beaverdam Creek	1	May 3 2003	1			Yes
Beaverdam Creek at I-64	1	Jun 1 1993	1			Yes

Displayed 3 Colonial Water Bird Survey

Threatened and Endangered Waters

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests (2 records)

[View Map of All Query Results
Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
NK0701	10	Apr 18 2011	Unknown	Yes
NK0702	10	Apr 18 2011	Unknown	Yes

Displayed 2 Bald Eagle Nests

Species Observations (10 records)

[View Map of All Query Results
Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
426717	SppObs	Nov 1 2005	VCU - INSTAR	8			Yes
426714	SppObs	Nov 1 2005	VCU - INSTAR	5			Yes
426713	SppObs	Oct 6 2003	VCU - INSTAR	8			Yes
65152	SppObs	May 24 2000	JOSEPH C. MITCHELL (PRINCIPLE PERMITTEE), DEPT. BIOLOGY UNIV. RICHMOND	5			Yes
339918	SppObs	Jun 30 1999	FOWLER, COX, GREENLEE, CONNELLY, HANCOCK	4			Yes
339904	SppObs	Sep 16 1996	ADAMS, GONZALES	2			Yes
55028	SppObs	Aug 24 1996	DANIEL S. DOMBROWSKI, GRADUATE STUDENT, VIRGINIA COMMONWEALTH UNIVERSITY	1			Yes
339917	SppObs	Aug 20 1996	ADAMS, GONZALES	3			Yes
86109	SppObs	Apr 7 1996	Edward Stephens	1			Yes
17789	SppObs	Jan 1 1900		1			Yes

Displayed 10 Species Observations

Habitat Predicted for Aquatic WAP Tier I & II Species

N/A

Habitat Predicted for Terrestrial WAP Tier I & II Species

N/A

Virginia Breeding Bird Atlas Blocks (3 records)

[View Map of All Query Results](#)
[Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE*	Highest Tier**	
55095	New Kent, SW	1			Yes
55084	Walkers, CE	1			Yes
55083	Walkers, CW	1			Yes

Public Holdings:

N/A

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
127	New Kent	413	FESE	I

USGS 7.5' Quadrangles:

Walkers
New Kent

USGS NRCS Watersheds in Virginia:

N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
JL26	Diascund Creek-Diascund Creek Reservoir	63	SE	I
YO37	Pamunkey River-Mill Creek	63	FESE	I

Compiled on 10/31/2017, 10:44:59 AM 1866107.0 report=all searchType= L dist= 3218 poi= 37,28,37.0 -76,55,32.7 siteDD= 37.4769527 -76.9257721;37.4805083 -76.9254221;;37.4845527 -76.9250165;
PixelSize=64; Anadromous=0.018305; BBA=0.051291; BECAR=0.015206; Bats=0.014205; Buffer=0.11227; County=0.091601; HU6=0.092061; Impediments=0.015349; Inlt=0.219446; PublicLands=0.026392; Quad=0.048146; SppObs=0.356156; TEWaters=0.019559; TierReaches=0.020498; TierTerrestrial=0.041398; Total=1.255652; Tracking_BOVA=0.150242; Trout=0.02024; huva=0.037337

VaFWIS Search Report Compiled on 10/31/2017, 11:11:51 AM

[Help](#)

Known or likely to occur within a **2 mile buffer around line beginning 37,25,58.0 -76,54,52.6** in **036 Charles City County, 095 James City County, 127 New Kent County, VA**

[View Map of Site Location](#)

542 Known or Likely Species ordered by Status Concern for Conservation (displaying first 26) (26 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes	BOVA,TEWaters
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
040110	SE	Ia	Rail, black	Laterallus jamaicensis		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus lucifugus		BOVA
050034	SE	Ia	Bat, Rafinesque's eastern big-eared	Corynorhinus rafinesquii macrotis		BOVA,HU6
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
040096	ST	Ia	Falcon, peregrine	Falco peregrinus		BOVA
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA
040379	ST	Ia	Sparrow, Henslow's	Ammodramus henslowii		BOVA
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei	Potential	BOVA,Habitat
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin		BOVA,HU6
030063	CC	IIIa	Turtle, spotted	Clemmys guttata	Yes	BOVA,SppObs,HU6
010077		Ia	Shiner, bridle	Notropis bifrenatus	Yes	BOVA,Habitat,SppObs
040213		Ic	Owl, northern saw-whet	Aegolius acadicus		BOVA
040052		IIa	Duck, American black	Anas rubripes		BOVA,HU6
040033		IIa	Egret, snowy	Egretta thula		BOVA
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA

040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040181		IIa	Tern, common	Sterna hirundo		BOVA,HU6
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor		BOVA,HU6
040203		IIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans	Potential	BOVA,Habitat,HU6
080336		IIc	Beetle, Gammon's stenelmis riffle	Stenelmis gammoni		BOVA
100003		IIc	Skipper, rare	Problema bulenta		BOVA,HU6

To view **All 542 species** [View 542](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need;
 II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;
 III=VA Wildlife Action Plan - Tier III - High Conservation Need;
 IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
 Virginia Wildlife Action Plan Conservation Opportunity Ranking:
 a - On the ground management strategies/actions exist and can be feasibly implemented.;
 b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
 c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (3 records)

[View Map of All Anadromous Fish Use Streams](#)

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE*	Highest Tier**	
C17	Diascund Creek	Confirmed	3		IV	Yes
C90	Chickahominy River 1	Confirmed	6		IV	Yes
C91	Chickahominy River 2	Confirmed	4		IV	Yes

Impediments to Fish Passage (1 records)

[View Map of All Fish Impediments](#)

ID	Name	River	View Map

431 DIASCUND CREEK DAM DIASCUND CREEK Yes

Colonial Water Bird Survey (1 records)

[View Map of All Query Results
Colonial Water Bird Survey](#)

Colony_Name	N Obs	Latest Date	N Species			View Map
			Different Species	Highest TE *	Highest Tier **	
Western Shore, Walkers, New Kent	1	May 5 2013	1			Yes

Displayed 1 Colonial Water Bird Survey

Threatened and Endangered Waters (6 Reaches)

[View Map of All
Threatened and Endangered Waters](#)

Stream Name	Highest TE *	T&E Waters Species					View Map
		BOVA Code, Status *, Tier **, Common & Scientific Name					
Chickahominy River (0157765)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Chickahominy River (0164026)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Chickahominy River (0174852)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Chickahominy River (0175647)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Chickahominy River (0180457)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

To view All 6 Threatened and Endangered Waters records [View 6](#)

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests (3 records)

[View Map of All Query Results
Bald Eagle Nests](#)

--	--	--	--	--	--	--	--	--	--

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
NK0103	1	May 1 2001	Unknown	Yes
NK0104	10	Mar 10 2008	UNKNOWN	Yes
NK1103	1	Apr 18 2011	Unknown	Yes

Displayed 3 Bald Eagle Nests

Species Observations (111 records - displaying first 20 , 1
Observation with Threatened or
Endangered species)

[View Map of All Query Results](#)
[Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
29728	SppObs	Jan 1 1900	Mitchell, J. C.	1	SS	III	Yes
611956	SppObs	Jun 29 2011	Wayne; Starnes	23		I	Yes
339805	SppObs	Apr 27 2001	Greenlee, Blommel, Currier	19		III	Yes
339774	SppObs	Dec 1 2000	D. FOWLER, B. MEHL	9		III	Yes
339773	SppObs	Oct 6 2000	Fowler, Mehl	14		III	Yes
339814	SppObs	Sep 3 1996	ADAMS, GONZALES	9		III	Yes
55016	SppObs	Aug 2 1996	DANIEL S. DOMBROWSKI, GRADUATE STUDENT, VIRGINIA COMMONWEALTH UNIVERSITY	1		III	Yes
339786	SppObs	Nov 9 1994		17		III	Yes
339770	SppObs	May 23 1994	FOWLER, MEARS	13		III	Yes
339785	SppObs	Jun 15 1992		19		III	Yes
29372	SppObs	Jan 1 1900	Mitchell, J. C.	1		III	Yes
29371	SppObs	Jan 1 1900	Mitchell, J. C.	1		III	Yes
29817	SppObs	Jan 1 1900	Mitchell, J. C.	1		III	Yes
29816	SppObs	Jan 1 1900	Mitchell, J. C.	1		III	Yes
619325	SppObs	May 8 2013	Tom ; Dickinson Tim ; Savidge Chris ; Sheats	4		IV	Yes

339793	SppObs	Oct 25 2002	Greenlee, DMC	13		IV	Yes
339790	SppObs	Oct 26 2001	Greenlee, DMC	16		IV	Yes
339807	SppObs	Oct 25 2001	Greenlee, DMC	20		IV	Yes
339788	SppObs	May 16 2001		18		IV	Yes
339771	SppObs	Aug 15 1994	STEPHENS, FOWLER	15		IV	Yes

Displayed 20 Species Observations

Selected 111 Observations [View all 111 Species Observations](#)

Habitat Predicted for Aquatic WAP Tier I & II Species (1 Reach)

[View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species](#)

Stream Name	Tier Species		View Map
	Highest TE *	BOVA Code, Status *, Tier **, Common & Scientific Name	

Habitat Predicted for Terrestrial WAP Tier I & II Species (2 Species)

[View Map of Combined Terrestrial Habitat Predicted for 2 WAP Tier I & II Species Listed Below](#)

ordered by Status Concern for Conservation

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
020044	ST	Ila	Salamander, Mabee's	Ambystoma mabeei	Yes
040105		Iib	Rail, king	Rallus elegans	Yes

Virginia Breeding Bird Atlas Blocks (4 records)

[View Map of All Query Results](#)
[Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE *	Highest Tier **	
55084	Walkers, CE	1			Yes
55083	Walkers, CW	1			Yes
55086	Walkers, SE	34		IV	Yes
55085	Walkers, SW	3			Yes

Public Holdings:

N/A

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
036	Charles City	394	FTSE	I
095	James City	420	FESE	I
127	New Kent	413	FESE	I

USGS 7.5' Quadrangles:
Walkers

USGS NRCS Watersheds in Virginia:

N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
JL24	Chickahominy River-Big Swamp	70	SE	I
JL25	Chickahominy River-Barrows Creek	67	SE	I
JL26	Diascund Creek-Diascund Creek Reservoir	63	SE	I
JL27	Diascund Creek-Mill Creek	69	SE	I

Compiled on 10/31/2017, 11:11:52 AM I866114.0 report=all searchType= L dist= 3218 poi= 37,25,58.0 -76,54,52.6 siteDD= 37.4327916 -76.9146276;37.4327611 -76.9142637;37.4323722 -76.9143665;37.4323638 -76.9148637;37.4327138 -76.9150304;37.4328555 -76.9146276;

PixelSize=64; Anadromous=0.024922; BBA=0.048958; BECAR=0.013079; Bats=0.01423; Buffer=0.101528; County=0.091559; HU6=0.082761; Impediments=0.029008; Init=0.17813; PublicLands=0.025994; Quad=0.040542; SppObs=0.384054; TEWaters=0.035476; TierReaches=0.058423; TierTerrestrial=0.050827; Total=1.320493; Tracking_BOVA=0.178902; Trout=0.019573; huva=0.037344

Threatened and Endangered Waters where Sturgeon, Atlantic (010032) observed

37,25,58.0 -76,54,52.6 is the Search Point

Show Position Rings
 Yes No
1 mile and 1/4 mile at the Search Point

Show Search Area
 Yes No
2 Search distance miles buffer

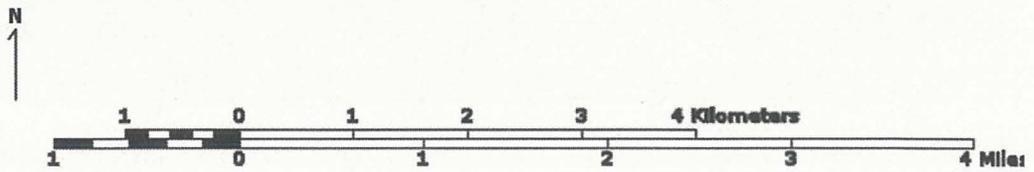
Search Point is at map center

Base Map Choices
Topography

Map Overlay Choices
Current List: Search, TEWaters

Map Overlay Legend

- T & E Waters**
- Federal
 - State
- 2 mile radius Search Area



Point of Search 37,25,58.0 -76,54,52.6
Map Location 37,25,57.3 -76,54,52.7

- Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 322606 and top 4152585. Pixel size is 10. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

Topographic maps and Black and white aerial photography for year 1990+- are from the United States Department of the Interior, United States Geological Survey. Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.

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map assembled 2017-10-31 11:24:44 (qa/qc March 21, 2016 12:20 - tn=866114.1 dist=3218
I)
\$poi=37.4327778 -76.9146111

| [DGIF](#) | [Credits](#) | [Disclaimer](#) | Contact shirl.dressler@dgif.virginia.gov | Please view our [privacy policy](#) |
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Species Observations
where Turtle, spotted
(030063) observed 29728

37,25,58.0 -76,54,52.6
is the Search Point

Display	Item Location is
<input type="checkbox"/> at center	<input type="checkbox"/> not at map center

Show Position Rings

Yes No
1 mile and 1/4 mile at the
Search Point

Show Search Area

Yes No
2 Search distance miles
buffer

Search Point is at
map center

Base Map Choices

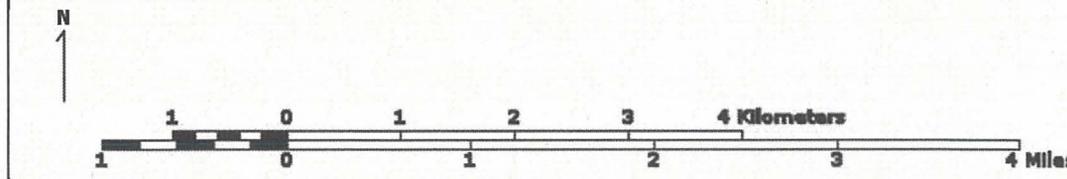
Topography

Map Overlay Choices

Current List: Observation

Map Overlay Legend

- Data
- Observation Site



Point of Search 37,25,58.0 -76,54,52.6
Map Location 37,25,57.3 -76,54,52.7

- Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 322606 and top 4152585. Pixel size is 10. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

Topographic maps and Black and white aerial photography for year 1990+- are from the United States Department of the Interior, United States Geological Survey. Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.

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map assembled 2017-10-31 11:39:12 (qa/qc March 21, 2016 12:20 - tn=866114.1 dist=3218
I)

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xxvy256.Displace_Y, cc.High_TE, obs.FeatType from  
vafwis_tables.dbo.vcvSppObs_XY xy join vafwis_tables.dbo.cvSppObs obs on  
obs.obsID = xy.obsID join vafwis_tables.dbo.cvSppObsSite256 s256 on s256.obsID =  
xy.obsID join vafwis_tables.dbo.cvSppObsSitexxvy256 xxvy256 on xxvy256.obsSite256  
= s256.obsSite256 join vafwis_tables.dbo.cvSppObs_CC cc on cc.obsID = xy.obsID  
JOIN vafwis_tables.dbo.udf_List2Table('29728','') list on list.item = obs.obsID
```

Species Observations
where Shiner, bridle
(010077) observed
611956

37,25,58.0 -76,54,52.6
is the Search Point

Display Item Location is
at center not at map center

Show Position Rings

Yes No
1 mile and 1/4 mile at the
Search Point

Show Search Area

Yes No
2 Search distance miles
buffer

Search Point is at
map center

Base Map Choices

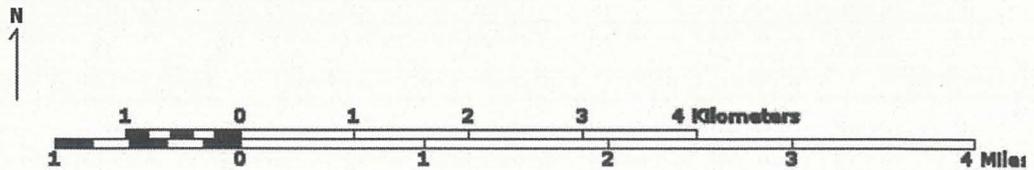
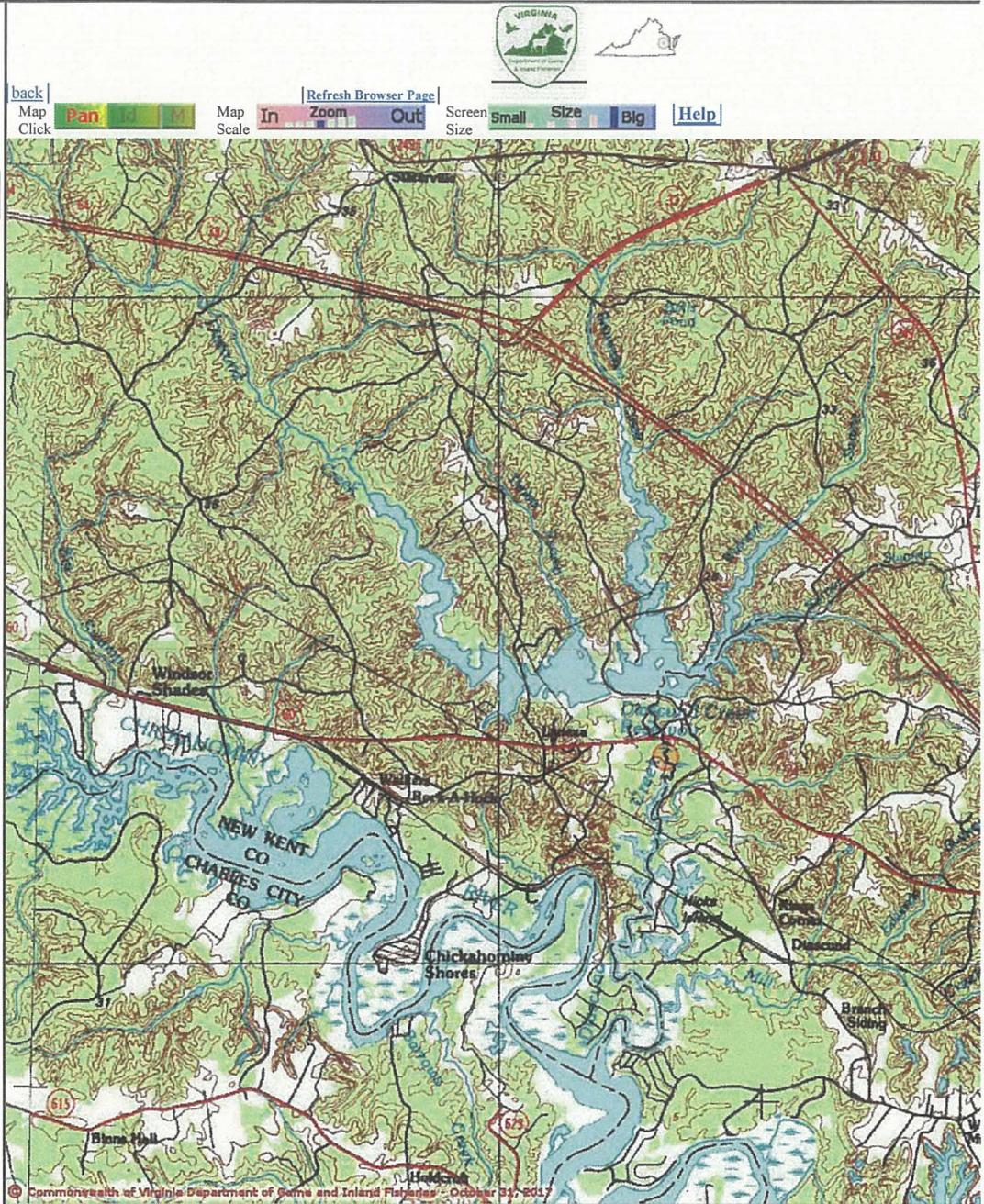
Topography

Map Overlay Choices

Current List: Observation

Map Overlay Legend

 Data
 Observation Site



Point of Search 37,25,58.0 -76,54,52.6

Map Location 37,25,57.3 -76,54,52.7

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude

Decimal Degrees Latitude - Longitude

Meters UTM NAD83 East North Zone

Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see Microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 322606 and top 4152585. Pixel size is 10. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 16000 meters east to west by 16000 meters north to south for a total of 256.0 square kilometers. The map display represents 52502 feet east to west by 52502 feet north to south for a total of 98.8 square miles.

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map assembled 2017-10-31 11:40:05 (qa/qc March 21, 2016 12:20 - tn=866114.1 dist=3218
1)

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xxvy256.Displace_Y, cc.High_TE, obs.FeatType from  
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obs.obsID = xy.obsID join vafwis_tables.dbo.cvSppObsSite256 s256 on s256.obsID =  
xy.obsID join vafwis_tables.dbo.cvSppObsSitexxvy256 xxvy256 on xxvy256.obsSite256  
= s256.obsSite256 join vafwis_tables.dbo.cvSppObs_CC cc on cc.obsID = xy.obsID  
JOIN vafwis_tables.dbo.udf_List2Table('611956','') list on list.item = obs.obsID
```

Anadromous Fish Use Streams

37,25,58.0 -76,54,52.6
is the Search Point

Show Position Rings
 Yes No
 1 mile and 1/4 mile at the Search Point

Show Search Area
 Yes No
 2 Search distance miles buffer

Search Point is at map center

Base Map Choices
 Topography

Map Overlay Choices
 Current List: Position, Search, Anadromous

Map Overlay Legend

Anadromous Fish Reach

- Confirmed
- Potential

423 Impediment

- Position Rings 1 mile and 1/4 mile at the Search Point
- 2 mile radius Search Area

Refresh Browser Page

Map Click **Pan** Map Scale **In Zoom Out** Screen Size **Small Size Big** [Help](#)

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N
↑

1 0 1 2 3 4 Kilometers

1 0 1 2 3 4 Miles

Point of Search 37,25,58.0 -76,54,52.6
 Map Location 37,25,57.3 -76,54,52.7

Select Coordinate System: Degrees, Minutes, Seconds Latitude - Longitude
 Decimal Degrees Latitude - Longitude
 Meters UTM NAD83 East North Zone
 Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see [Microsoft terraserver-usa.com](http://Microsoft.terraserver-usa.com) for details)

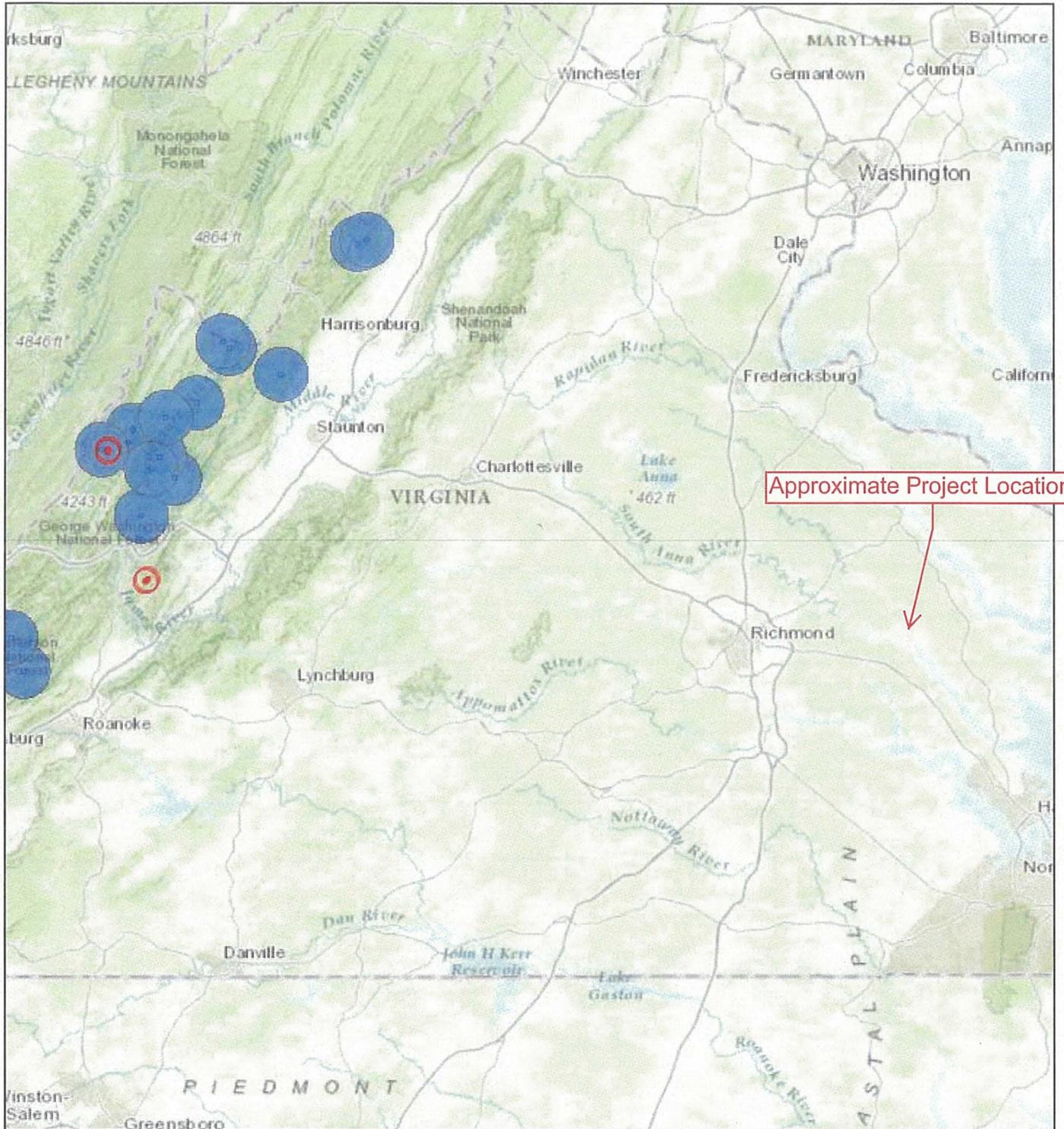
Map projection is UTM Zone 18 NAD 1983 with left 325806 and top 4149385. Pixel size is 10. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 600 columns by 600 rows for a total of 360000 pixels. The map display represents 9600 meters east to west by 9600 meters north to south for a total of 92.1 square kilometers. The map display represents 31501 feet east to west by 31501 feet north to south for a total of 35.5 square miles.

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map assembled 2017-10-31 11:42:48 (qa/qc March 21, 2016 12:20 - tn=866114.0 dist=3218 I)
 \$poi=37.4327778 -76.9146111

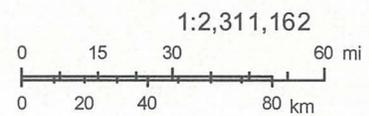
Virginia Department of Game and Inland Fisheries
NLEB Locations and Roost Trees

NLEB Locations and Roost Trees



May 23, 2017

- NLEB Known Occupied Maternity Roost (Summer Habitat)
- NLEB Hibernaculum 5.5 Mile Buffer
- NLEB Hibernaculum Half Mile Buffer



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Virginia Department of Conservation and Recreation
Natural Heritage Data Explorer

Natural Heritage Resources

No results for JL26

Your Criteria

Taxonomic Group: Select All

Global Conservation Status Rank: Select All

State Conservation Status Rank: Select All

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080106 - Pamunkey River

Subwatershed (12 digit HUC): YO37 - Pamunkey River-Mill Creek

Search Run: 5/15/2017 10:44:46 AM

Result Summary

Total Species returned: 1

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

Common Name/Natural Community	Scientific Name	<u>Global Conservation Status Rank</u>	<u>State Conservation Status Rank</u>	<u>Federal Legal Status</u>	<u>State Legal Status</u>	Statewide Occurrences	Virginia Coastal Zone
Pamunkey							
Pamunkey River-Mill Creek							
VASCULAR PLANTS							
Sensitive Joint-vetch	<u>Aeschynomene virginica</u>	G2	S2	LT	LT	22	Y

Note: On-line queries provide basic information from DCR's databases at the time of the request. They are NOT to be substituted for a project review or for on-site surveys required for environmental assessments of specific project areas.

For Additional Information on locations of Natural Heritage Resources please submit an [information request](#).

To Contribute information on locations of natural heritage resources, please fill out and submit a [rate species sighting form](#).

Natural Heritage Resources

Your Criteria

Taxonomic Group: Select All

Global Conservation Status Rank: Select All

State Conservation Status Rank: Select All

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080105 - Mattaponi River

Subwatershed (12 digit HUC): YO59 - Mattaponi River-Courthouse Creek

Search Run: 5/15/2017 10:40:00 AM

Result Summary

Total Species returned: 1

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

Common Name/Natural Community	Scientific Name	<u>Global Conservation Status Rank</u>	<u>State Conservation Status Rank</u>	<u>Federal Legal Status</u>	<u>State Legal Status</u>	Statewide Occurrences	Virginia Coastal Zone
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Mattaponi

Mattaponi River-Courthouse Creek
 VASCULAR PLANTS

Sensitive Joint-vetch	<u>Aeschynomene virginica</u>	G2	S2	LT	LT	22	Y
-----------------------	-------------------------------	----	----	----	----	----	---

Note: On-line queries provide basic information from DCR's databases at the time of the request. They are NOT to be substituted for a project review or for on-site surveys required for environmental assessments of specific project areas.

For Additional Information on locations of Natural Heritage Resources please submit an information request.

To Contribute information on locations of natural heritage resources, please fill out and submit a rate species sighting form.

Natural Heritage Resources

Your Criteria

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080105 - Mattaponi River

Subwatershed (12 digit HUC): YO60 - Mattaponi River-Heartquake Creek

Search Run: 3/12/2018 10:00:54 AM

Result Summary

Total Species returned: 1

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

Common Name/Natural Community	Scientific Name	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
Mattaponi							
Mattaponi River-Heartquake Creek							

Common Name/Natural Community	Scientific Name	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
VASCULAR PLANTS	Sensitive Joint-veitch	G2	S2	LT	LT	22	Y
	<i>Aeschynomene virginica</i>						

Note: On-line queries provide basic information from DCR's databases at the time of the request. They are NOT to be substituted for a project review or for on-site surveys required for environmental assessments of specific project areas.

For Additional Information on locations of Natural Heritage Resources please submit an [information request](#).

To Contribute information on locations of natural heritage resources, please fill out and submit a [rare species sighting form](#).

Center for Conservation Biology
Bald Eagle Nest Locator



The CENTER for
CONSERVATION
BIOLOGY

[About Us](#)
[What We Do](#)
[Resources](#)
[News Room](#)
[Give to CCB](#)

CCB MAPPING PORTAL

[Help / FAQ](#)

Toggle Draw Tools | Generate Link | Print Report | Search

Layers

- Bald Eagle
 - VA Eagle Nest Locator
 - Zoom to Extent
- Most recent data CCB has on bald eagle nest locations in Virginia. Data is largely from two annual aerial flights conducted in winter and spring of all tributaries of the lower Chesapeake Bay and other prominent bodies of water. Reported ground survey data is also included.
 - More info
- VA Eagle Nest Buffers
 - The smaller 330' "primary buffer" is where human activities are considered to be detrimental to breeding pairs (e.g. residential/commercial development). The larger 660' "secondary buffer" is where human activities are considered to impact the integrity of the "primary buffer" (e.g. construction, multi-story buildings, new roadways).
 - More info
- Eagle Roosts
- Eagle Roost Polygons
- Eagle Roost Buffers
- Eagle Roosts by Topoquad
- Waterbirds



● BALD EAGLE

VIA Eagle Nest Locator

200 ft | 2000 ft

Map navigation controls: zoom in (+), zoom out (-), home, pan, measure, info, print, close.

Leaflet | CCB/CCB Attribution, Terra © Esri — Source: Esri, DeLorme, USGS, AEX, GeoEye, GeoMapping, AeroGRID, IGN, Esri, UPR-ESR, and the GIS User Community



Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Mr. Troy Andersen
U.S. Fish and Wildlife Service
Ecological Services Virginia Field Office
6669 Short Lane
Gloucester, Virginia 23061

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. Andersen,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

STANTEC CONSULTING SERVICES

A handwritten signature in black ink, appearing to read "Jennifer Johnson".

Jennifer Johnson
Project Manager
Phone: (757) 220-6869
jennifer.johnson@stantec.com

CC: John Mulligan, Dominion

Design with community in mind



Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Ms. Amy Ewing
Virginia Department of Game and Inland Fisheries
7870 Villa Park Drive, Suite 400
Henrico, Virginia 23228

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Ms. Ewing,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

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STANTEC CONSULTING SERVICES

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Jennifer Johnson
Project Manager
Phone: (757) 220-6869
jennifer.johnson@stantec.com

CC: John Mulligan, Dominion

Design with community in mind



Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Ms. Robbie Rhur
Virginia Department of Conservation and Recreation
Planning Bureau
600 East Main Street, 17th Floor
Richmond, Virginia 23219

**Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)**

Dear Ms. Rhur,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

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Regards,

STANTEC CONSULTING SERVICES

A handwritten signature in black ink, appearing to read "Jennifer Johnson".

Jennifer Johnson
Project Manager
Phone: (757) 220-6869
jennifer.johnson@stantec.com

CC: John Mulligan, Dominion

Design with community in mind



Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Mr. Keith Tignor
Virginia Department of Agriculture and Consumer Services
Endangered Species Coordinator
102 Governor Street
Richmond, Virginia 23219

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. Tignor,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

STANTEC CONSULTING SERVICES

A handwritten signature in black ink, appearing to read "Jennifer Johnson".

Jennifer Johnson
Project Manager
Phone: (757) 220-6869
jennifer.johnson@stantec.com

CC: John Mulligan, Dominion

Design with community in mind

From: Rhur, Roberta
To: [Johnson, Jennifer](#)
Subject: DOM: line #224 rebuild
Date: Friday, April 20, 2018 2:19:56 PM

Afternoon Jennifer;

I have reviewed the above referenced project for Planning and recreation Resources, per a letter dated April 4, 2018. This rebuild project impacts two potentially scenic rivers, the Mattaponi and the Pamunkey. Since Dominion is not building outside their ROW we do not anticipate additional impacts to the resources. I recommend that you contact the Division of Natural Heritage - Data Management for a review of their resources as well at <http://www.dcr.virginia.gov/natural-heritage/infoservices>.

Best

--

Robbie Rhur
DCR VOP Project Planner and Environmental Review Coordinator
600 East main Street
Richmond VA 23219
804-371-2594

Rouse Environmental Services

Environmental Consultation & Permitting

November 1, 2017

Stantec Consulting Services, Inc.
5209 Center Street
Williamsburg, Virginia 23188

Attn: Mr. Kenrick Presgraves, PWD

Subject: Project R17005b, Survey for Sensitive Joint-Vetch (*Aeschynomene virginica*), Dominion Energy Line 224 Rebuild - Pamunkey River Crossing, King William and New Kent Counties, Virginia.

Gentlemen:

Included here are our findings in connection with a survey for potential populations of *Aeschynomene virginica* within the above referenced project site. This report represents the completion of our services per our Subconsultant Agreement, effective September 6, 2017.

1. BACKGROUND

Dominion Energy Virginia is planning the rebuilding of an existing transmission line (Line 224) where it crosses the Pamunkey River, King William and New Kent Counties, Virginia. The location of this segment of the transmission line rebuild, in relation to surrounding topographic and other physical features, is provided on our *Vicinity Map* included as Figure 1.

We understand that surveys for *Aeschynomene virginica* (Sensitive Joint-Vetch) are being required in connection with permitting for this portion of the project. *A. virginica* is a rare plant found only from fresh to slightly brackish, tidal marshes of the mid-Atlantic region and has historically been documented from upriver locations on the Pamunkey and Mattaponi Rivers. Due to its rarity and highly restricted distribution, *A. virginica* has been federally listed as *Threatened* by the US Fish & Wildlife Service (USFWS). The plant has also received formal recognition as *Threatened* by the Virginia Department of Agriculture & Consumer Services under the Commonwealth of Virginia's Endangered Plant & Insect Act.

DOMINION ENERGY LINE 224
REBUILD - PAMUNKEY RIVER
KING WILLIAM AND
NEW KENT COUNTIES, VA

VICINITY MAP

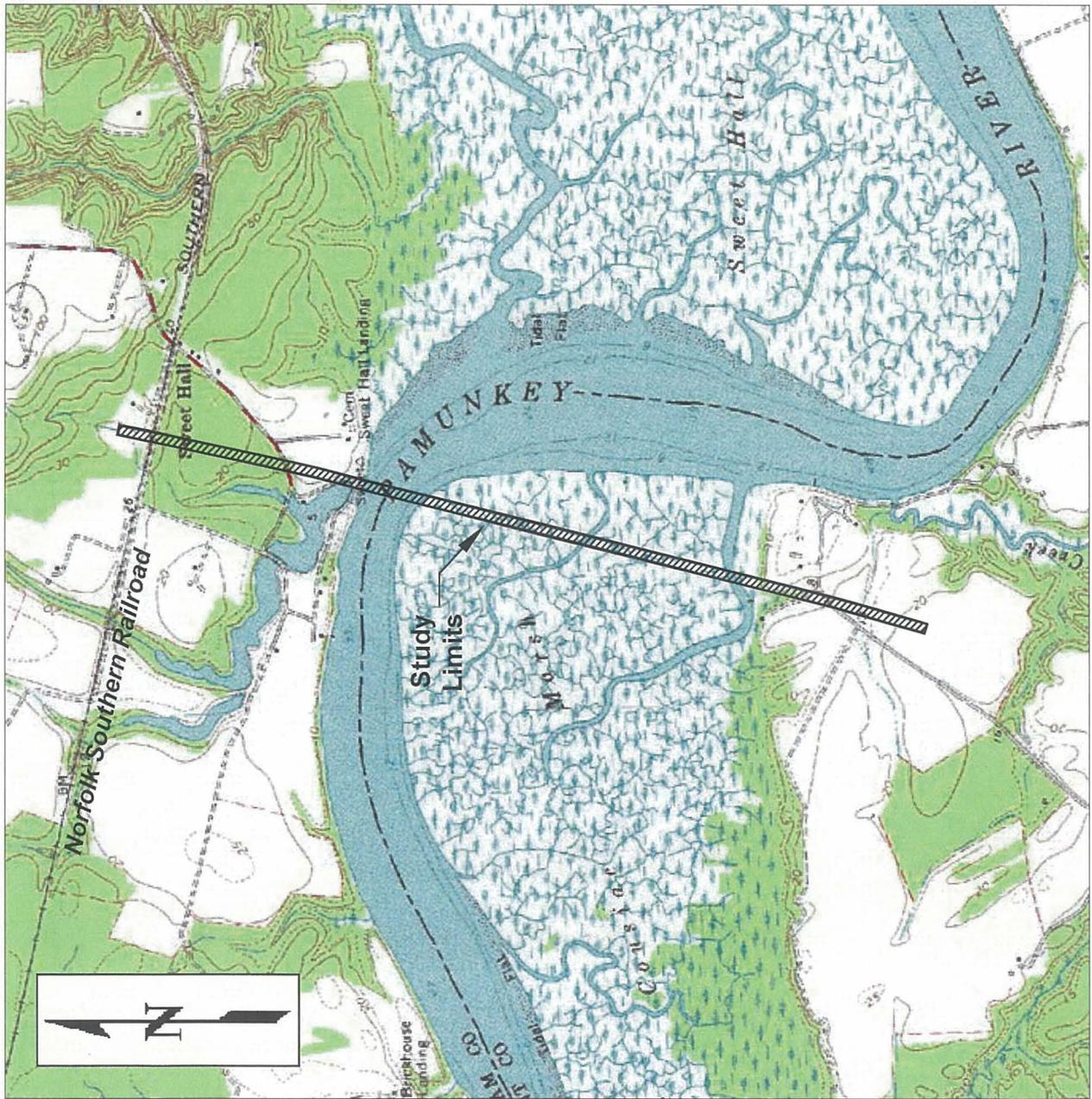
FIGURE 1

SCALE: 1" \approx 2000'

SOURCE: USGS 7.5' TOPOGRAPHIC MAP
- NEW KENT QUADRANGLE
(Photinspected 1978)

October 2017

R17005b



Project R17005b
Page 2
November 1, 2017

The objective of our study was to conduct a survey for potential populations of *Aeschynomene virginica* within areas of the project alignment specified by Stantec for survey. Per email correspondence with Stantec, the area of investigation for *A. virginica* at the Pamunkey River crossing was limited to a 125-foot wide swath along an approximately 2.0 mile section of existing transmission line, stretching from an upland terrace near Sweet Hall in King William County, southwestward across the open waters of the Pamunkey River, through the eastern edge of Cousiac Marsh, and terminating on an upland terrace near Cousiac Manor in New Kent County, Virginia. The precise limits of study were provided in shapefile format by Stantec on September 7, 2017. The study area, in relation to the existing marshes and other area features, is shown on our *Survey Location Map* included as Figure 2.

2. DATA REVIEW

A desktop review was conducted to preliminarily identify areas of potential habitat for *Aeschynomene virginica*. Our review included the following sources of information:

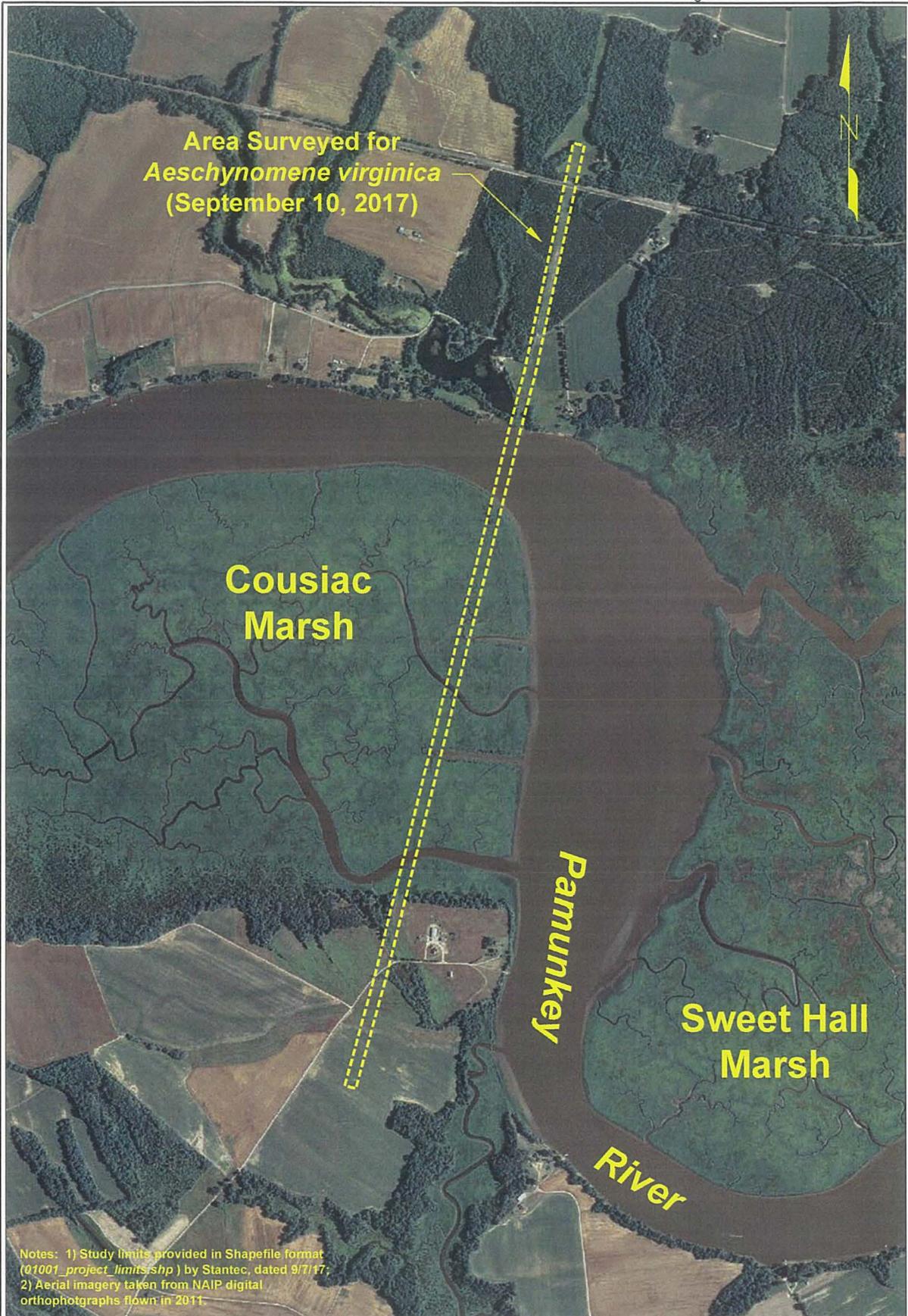
- Digital Raster Graphic (DRG) USGS topographic quadrangles covering the areas of study,
- Aerial infrared imagery available on US Geological Survey Digital Orthographic Quarter Quadrangles (DOQQs),
- USDA National Agricultural Imagery Program (NAIP) digital orthophotographs (visible spectrum) flown in 2011.

Information from the above listed sources was incorporated onto field maps and used to prioritize follow-up field surveys for the target plant species.

3. FIELD STUDY

A field survey was conducted by a crew of two personnel on September 10, 2017, a time of year when both vegetative and reproductive portions of *Aeschynomene virginica* are considered to be readily observable. The field work was led by Garrie Rouse, a botanist recognized by the USFWS as qualified to conduct surveys for the plant.

Access to the study area was made via a motorized skiff at or near the top of the high tide cycle. Our survey was limited to tidal shorelines and associated tidal wetlands within the above-mentioned study area. The shoreline interface between Cousiac Marsh and the Pamunkey River, as well as all navigable tributaries on the interior of the marsh, were canvassed at the time of our site visit. Identified tidal habitat within these areas was evaluated with regard to its potential to support populations of *Aeschynomene virginica* on the basis of the following criteria:



**Rouse
Environmental
Services**

Survey Location Map
Dominion Energy Line 224 Rebuild
- Pamunkey River Crossing,
King William & New Kent Cos., VA

Figure 2

SCALE: 1"= 1000'

DRAWN BY: G. Rouse DATE: 10/26/17

Project R17005b
Page 3
November 1, 2017

- 1) **Potentially Suitable Habitat** – Open, fresh to slightly brackish, tidal margins with emergent marsh development.
- 2) **Marginally Suitable Habitat** – Tidal shorelines that support gravelly shores, scrub-shrub wetlands, slightly more brackish tidal marshes or a combination of the above.
- 3) **Little or No Suitable Habitat** – Hardened tidal shorelines, uplands, non-tidal wetlands, forested tidal wetlands, the overwhelming presence of aggressively competing plant species (such as Reed Grass), significant disturbance to the soil layer, or a combination of the above.

We documented plant species as they were encountered during the course of our survey. A listing of these taxa is provided as an attachment to this report. In addition, salinity levels within surface waters of the Pamunkey River at Cousiac Marsh, and tributaries within Cousiac Marsh itself, were measured using a YSI Model 30 specific conductance meter during the course of our field visit.

4. SUMMARY OF FINDINGS

Salinity readings were made near high tide within the areas of the existing transmission line crossing of Cousiac Marsh, yielding readings that ranged from 2.3 to 2.8 ppt. Based upon our past experiences with long-term population monitoring of *Aeschynomene virginica* on the Mattaponi and Rappahannock Rivers, such readings are within the normal range of surface water salinities documented at known sites for the plant (generally 0.0 to 3.5 ppt at high tide).

Fringing tidal marshes along and within Cousiac Marsh in the vicinity of the existing transmission line crossing supported relatively undisturbed, emergent, oligohaline wetlands as evidenced by the salinity readings and the predominance of typically freshwater to slightly brackish water species often associated with *Aeschynomene virginica*, including *Peltandra virginica* (Arrow Arum), *Pontederia cordata* (Pickerelweed), *Polygonum punctatum* (Dotted Smartweed) and *Zizania aquatica* (Wild Rice). Because of the relatively fresh nature of these marshes, and the predominance of species often associated with *A. virginica*, we are of the opinion that these wetlands did present potentially suitable habitat for supporting populations of the target species.

Despite systematic searches of all identified potential habitat, no individuals of *Aeschynomene virginica* were observed during the course of our field surveys on September 10, 2017. Given that the plant had not been previously documented at this location, and that no individuals were found in spite of our searches at a time of year when it is generally readily observable, we consider there to be a low potential for the occurrence of *A. virginica* in the vicinity of the designated study area for the planned transmission line rebuild crossing of the Pamunkey River and its associated wetlands.

Project R17005b
Page 4
November 1, 2017

5. LIMITATIONS

Our study was limited to the survey of *Aeschynomene virginica* and did not include searches for potential populations of other rare, threatened or endangered species which may occur within the project area. In addition, our study did not include the processing of permits, meetings with local, state or federal officials, land surveying and environmental concerns or services that were not specifically described herein. Ecological conditions and species distributions represent dynamic processes. The findings of this survey, therefore, are valid only for the time at which this study was performed.

We appreciate the opportunity to have been of service to you on this project. Please do not hesitate to contact us should you have any questions regarding our findings.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Garrie D. Rouse', with a long horizontal flourish extending to the right.

Garrie D. Rouse
Consulting Scientist

Attachment: Checklist of Plant Species Encountered During *Aeschynomene virginica*
Surveys (9/10/17)

Attachment

**PARTIAL CHECKLIST OF PLANT SPECIES ENCOUNTERED
DURING AESCHYNOMENE VIRGINICA SURVEYS,
DOMINION ENERGY LINE 224 REBUILD - PAMUNKEY RIVER CROSSING,
KING WILLIAM AND NEW KENT COUNTIES, VIRGINIA
(September 10, 2017)**

**PARTIAL CHECKLIST OF PLANT SPECIES ENCOUNTERED
DURING *AESCHYNOMENE VIRGINICA* SURVEYS,
DOMINION ENERGY LINE 224 REBUILD - PAMUNKEY RIVER CROSSING,
KING WILLIAM AND NEW KENT COUNTIES, VIRGINIA
(September 10, 2017)**

Scientific Name:

Amaranthus cannabinus (L.) Sauer
Baccharis halimifolia L.
Bidens laevis (L.) B.S.P.
Cephalanthus occidentalis L.
Echinochloa walteri (Pursh) Heller
Eupatorium serotinum Michx.
Hibiscus moscheutos L.
Leersia oryzoides (L.) Sw.
Peltandra virginica (L.) Schott
Phragmites australis (Cav.) Trin. ex Steud.
Polygonum arifolium L.
Polygonum punctatum Ell.
Pontederia cordata L.
Rumex verticillatus L.
Sacciolepis striata (L.) Nash
Sagittaria latifolia Willd.
Schoenoplectus pungens (Vahl) Palla
Schoenoplectus robustus (Pursh) M. Strong
Spartina cynosuroides (L.) Roth
Typha angustifolia L.
Vernonia noveboracensis (L.) Michx.
Zizania aquatica L.
Zizaniopsis miliacea (Michx.) Doell & Asch.

Common Name:

tidalmarsh amaranth
eastern baccharis
smooth beggartick
common buttonbush
coast cockspur grass
lateflowering thoroughwort
crimson-eyed rosemallow
rice cutgrass
arrow arum
common reed
halberdleaf tearthumb
dotted smartweed
pickerelweed
swamp dock
American cupscale
broadleaf arrowhead
common threesquare
sturdy bulrush
big cordgrass
narrowleaf cattail
New York ironweed
annual wildrice
giant cutgrass

Rouse Environmental Services

Environmental Consultation & Permitting

November 4, 2017

Stantec Consulting Services, Inc.
5209 Center Street
Williamsburg, Virginia 23188

Attn: Mr. Kenrick Presgraves, PWD

Subject: Project R17005a, Survey for Sensitive Joint-Vetch (*Aeschynomene virginica*), Dominion Energy Line 224 Rebuild - Mattaponi River Crossing, King & Queen and King-William Counties, Virginia.

Gentlemen:

Included here are our findings in connection with a survey for potential populations of *Aeschynomene virginica* within the above referenced project site. This report represents the completion of our services per our Subconsultant Agreement, effective September 6, 2017.

1. BACKGROUND

Dominion Energy Virginia is planning the rebuilding of an existing transmission line (Line 224) where it crosses the Mattaponi River, King & Queen and King William Counties, Virginia. The location of this segment of the transmission line rebuild, in relation to surrounding topographic and other physical features, is provided on our *Vicinity Map* included as Figure 1.

We understand that surveys for *Aeschynomene virginica* (Sensitive Joint-Vetch) are being required in connection with permitting for this portion of the project. *A. virginica* is a rare plant found only from fresh to slightly brackish, tidal marshes of the mid-Atlantic region and has historically been documented from nearby locations, both upstream and downstream of the project site on the Mattaponi River. Due to its rarity and highly restricted distribution, *A. virginica* has been federally listed as *Threatened* by the US Fish & Wildlife Service (USFWS). The plant has also received formal recognition as *Threatened* by the Virginia Department of Agriculture & Consumer Services under the Commonwealth of Virginia's Endangered Plant & Insect Act.

DOMINION ENERGY LINE 224
REBUILD - MATTAPONI RIVER
KING & QUEEN AND
KING WILLIAM COUNTIES, VA

VICINITY MAP

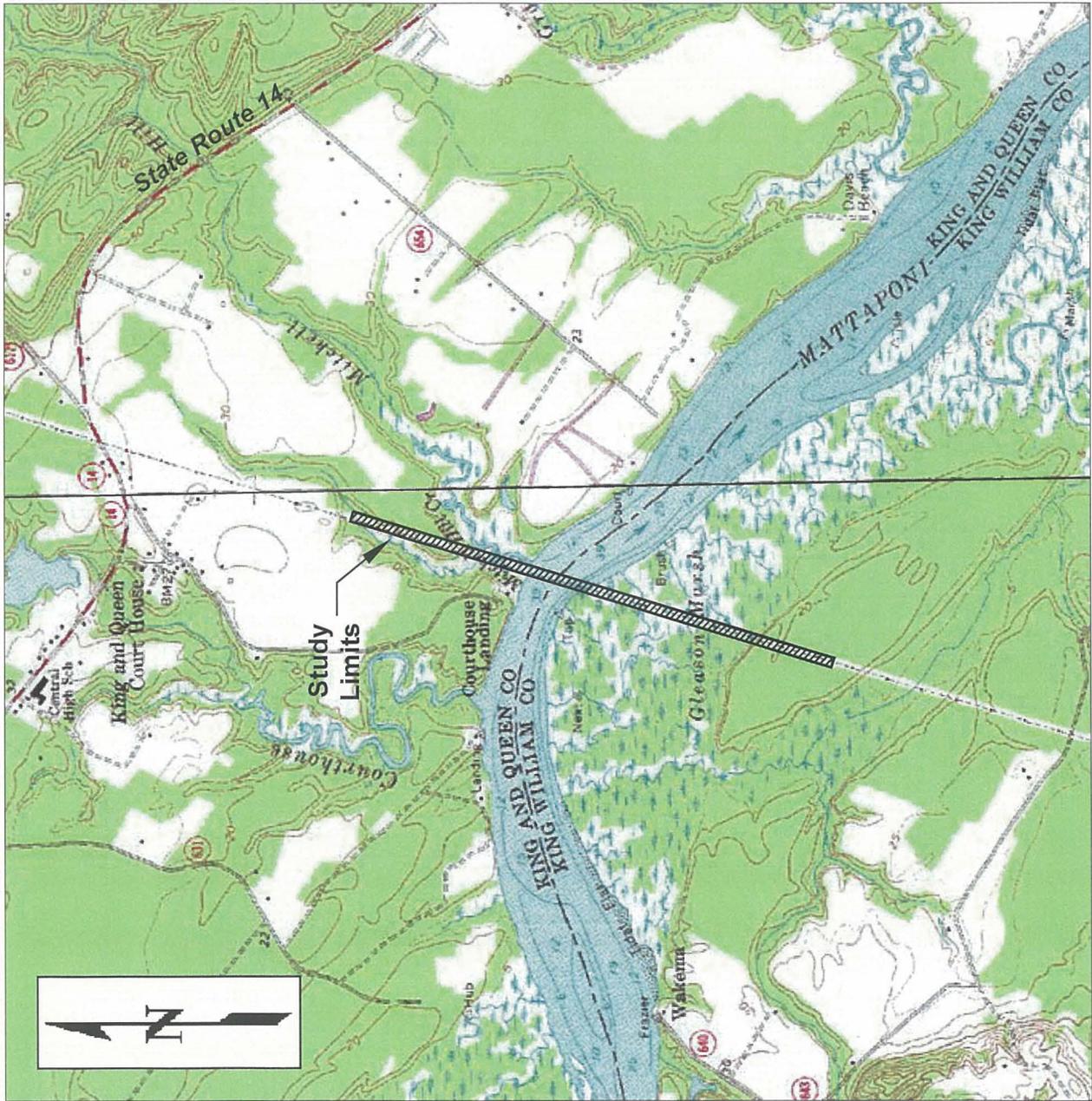
FIGURE 1

SCALE: 1" ≈ 2000'

SOURCE: USGS 7.5' TOPOGRAPHIC MAPS
- KING & QUEEN COURTHOUSE AND
TRUHART QUADRANGLES
(Photoinspected 1981 & 1989)

R17005a

October 2017



Project R17005a
Page 2
November 3, 2017

The objective of our study was to conduct a survey for potential populations of *Aeschynomene virginica* within areas of the project alignment specified by Stantec for survey. Per email correspondence with Stantec, the area of investigation for *A. virginica* at the Mattaponi River crossing was limited to a 125-foot wide swath along an approximately 1.2 mile section of existing transmission line, stretching from the upper reaches of an unnamed tributary to Mitchell Hill Creek in King & Queen County, southwestward across tidal portions of Mitchell Hill Creek, the open waters of the Mattaponi River, through the tidal wetlands of Gleason Marsh, and terminating on an upland terrace just to the southwest of Gleason Marsh in King William County, Virginia. The precise limits of study were provided in shapefile format by Stantec on September 7, 2017. The study area, in relation to the existing marshes and other area features, is shown on our *Survey Location Map* included as Figure 2.

2. DATA REVIEW

A desktop review was conducted to preliminarily identify areas of potential habitat for *Aeschynomene virginica*. Our review included the following sources of information:

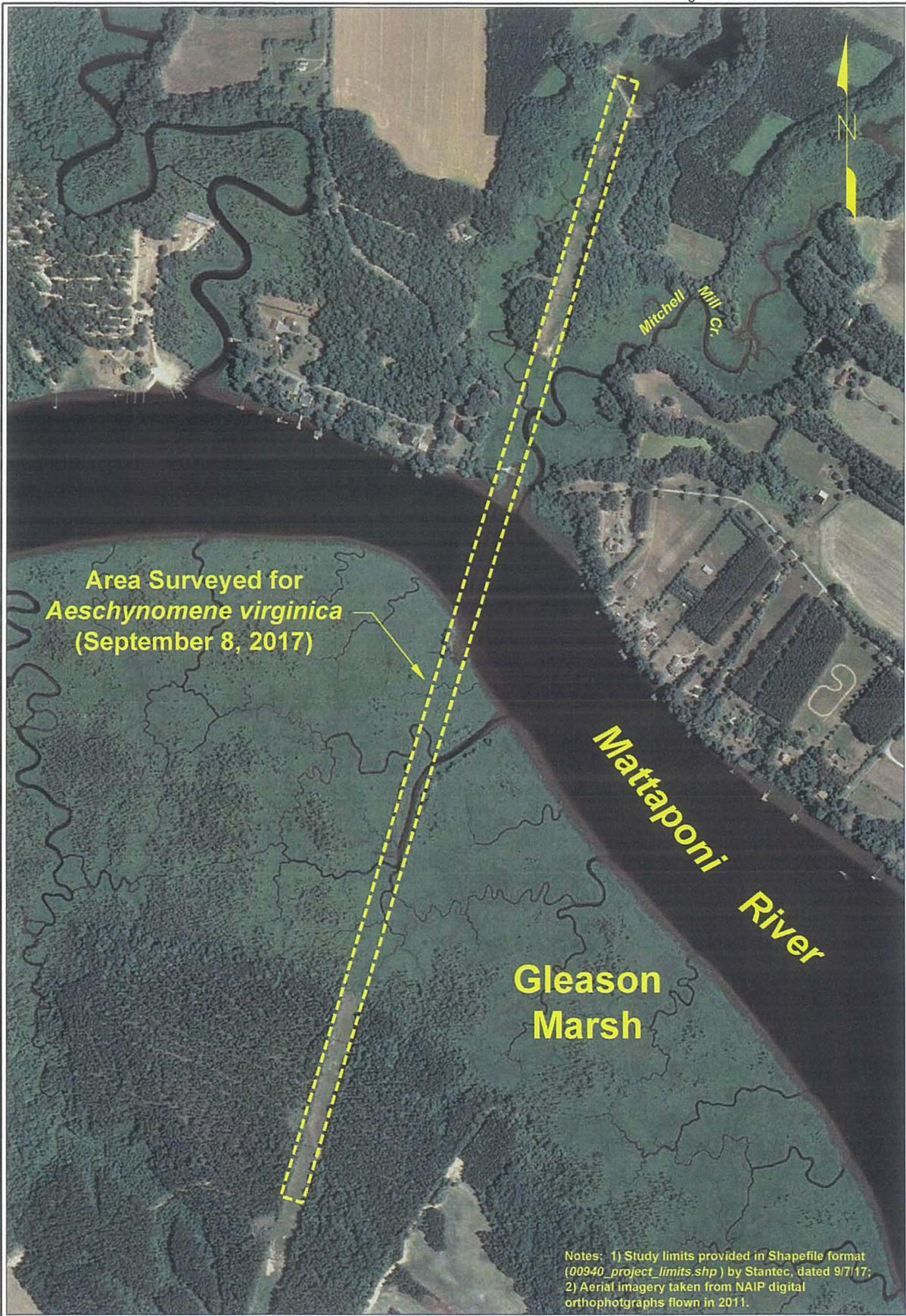
- Digital Raster Graphic (DRG) USGS topographic quadrangles covering the areas of study,
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- USDA National Agricultural Imagery Program (NAIP) digital orthophotographs (visible spectrum) flown in 2011.

Information from the above listed sources was incorporated onto field maps and used to prioritize follow-up field surveys for the target plant species.

3. FIELD STUDY

A field survey was conducted by a crew of two personnel on September 8, 2017, a time of year when both vegetative and reproductive portions of *Aeschynomene virginica* are considered to be readily observable. The field work was led by Garrie Rouse, a botanist recognized by the USFWS as qualified to conduct surveys for the plant.

Access to the study area was made via a motorized skiff at or near the top of the high tide cycle. Our survey was limited to tidal shorelines and associated tidal wetlands within the above-mentioned study area. The shoreline interface between Gleason Marsh and the Mattaponi River, all navigable tributaries on the interior of this marsh, and tidal wetlands flanking Mitchell Hill Creek were canvassed at the time of our site visit. Identified tidal habitat within these areas was evaluated with regard to its potential to support populations of *Aeschynomene virginica* on the basis of the following criteria:



Notes: 1) Study limits provided in Shapefile format (00940_project_limits.shp) by Stantec, dated 9/7/17;
2) Aerial imagery taken from NAIP digital orthophotographs flown in 2011.

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Survey Location Map
Dominion Energy Line 224 Rebuild
- Mattaponi River Crossing,
King & Queen/King William Cos., VA

Figure 2
SCALE: 1"= 500'
DRAWN BY: G. Rouse DATE: 10/26/17

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- 1) **Potentially Suitable Habitat** – Open, fresh to slightly brackish, tidal margins with emergent marsh development.
- 2) **Marginally Suitable Habitat** – Tidal shorelines that support gravelly shores, scrub-shrub wetlands, slightly more brackish tidal marshes or a combination of the above.
- 3) **Little or No Suitable Habitat** – Hardened tidal shorelines, uplands, non-tidal wetlands, forested tidal wetlands, the overwhelming presence of aggressively competing plant species (such as Reed Grass), significant disturbance to the soil layer, or a combination of the above.

We documented plant species as they were encountered during the course of our survey. A listing of these taxa is provided as an attachment to this report. In addition, salinity levels within surface waters of the Mattaponi River at Gleason Marsh and the mouth of Mitchell Hill Creek were measured using a YSI Model 30 specific conductance meter during the course of our field visit.

4. SUMMARY OF FINDINGS

Salinity readings were made near high tide within the areas of the existing transmission line crossing of the Mattaponi River (north and south banks), yielding readings that ranged from 0.6 to 0.7 ppt. Based upon our past experiences with long-term population monitoring of *Aeschynomene virginica* on the Mattaponi and Rappahannock Rivers, such readings are well within the normal range of surface water salinities documented at known sites for the plant (generally 0.0 to 3.5 ppt at high tide).

Fringing tidal marshes along and within Gleason Marsh and Mitchell Hill Creek, in the vicinity of the existing transmission line crossing, supported relatively undisturbed, emergent, freshwater tidal wetlands as evidenced by the salinity readings and the predominance of typically freshwater water species often associated with *Aeschynomene virginica*, including *Impatiens capensis* (Spotted Touch-Me-Not), *Leersia oryzoides* (Rice Cutgrass), *Pontederia cordata* (Pickerelweed), *Polygonum punctatum* (Dotted Smartweed) and *Zizania aquatica* (Wild Rice). Because of the relatively fresh nature of these marshes, and the predominance of species often associated with *A. virginica*, we are of the opinion that these wetlands did present potentially suitable habitat for supporting populations of the target species.

Despite systematic searches of all identified potential habitat, no individuals of *Aeschynomene virginica* were observed during the course of our field surveys on September 8, 2017. Given that the plant had not been previously documented at this location, and that no individuals were found in spite of our searches at a time of year when it is generally readily observable, we consider there to be a low potential for the occurrence

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of *A. virginica* in the vicinity of the designated study area for the planned transmission line rebuild crossing of the Mattaponi River and its associated wetlands.

5. LIMITATIONS

Our study was limited to the survey of *Aeschynomene virginica* and did not include searches for potential populations of other rare, threatened or endangered species which may occur within the project area. In addition, our study did not include the processing of permits, meetings with local, state or federal officials, land surveying and environmental concerns or services that were not specifically described herein. Ecological conditions and species distributions represent dynamic processes. The findings of this survey, therefore, are valid only for the time at which this study was performed.

We appreciate the opportunity to have been of service to you on this project. Please do not hesitate to contact us should you have any questions regarding our findings.

Sincerely,



Garrie D. Rouse
Consulting Scientist

Attachment: Checklist of Plant Species Encountered During *Aeschynomene virginica*
Surveys (9/8/17)

Attachment

**PARTIAL CHECKLIST OF PLANT SPECIES ENCOUNTERED
DURING AESCHYNOMENE VIRGINICA SURVEYS,
DOMINION ENERGY LINE 224 REBUILD - MATTAPONI RIVER CROSSING,
KING & QUEEN AND KING WILLIAM COUNTIES, VIRGINIA
(September 8, 2017)**

**PARTIAL CHECKLIST OF PLANT SPECIES ENCOUNTERED
DURING *AESCHYNOMENE VIRGINICA* SURVEYS,
DOMINION ENERGY LINE 224 REBUILD - MATTAPONI RIVER CROSSING,
KING & QUEEN AND KING WILLIAM COUNTIES, VIRGINIA
(September 8, 2017)**

Scientific Name:

Alnus serrulata (Ait.) Willd.
Amaranthus cannabinus (L.) Sauer
Asclepias incarnata L.
Bidens aristosa (Michx.) Britt.
Calystegia sepium (L.) R. Br.
Cephalanthus occidentalis L.
Cuscuta gronovii Willd. ex J.A. Schultes
Echinochloa walteri (Pursh) Heller
Eryngium aquaticum L.
Helenium autumnale L.
Hibiscus moscheutos L.
Impatiens capensis Meerb.
Leersia oryzoides (L.) Sw.
Lobelia cardinalis L.
Lonicera japonica Thunb.
Mikania scandens (L.) Willd.
Nuphar lutea (L.) Sm.
Nyssa biflora Walt.
Onoclea sensibilis L.
Peltandra virginica (L.) Schott
Platanus occidentalis L.
Pluchea odorata (L.) Cass.
Polygonum arifolium L.
Polygonum punctatum Ell.
Polygonum sagittatum L.
Pontederia cordata L.
Rumex verticillatus L.
Sagittaria latifolia Willd.
Schoenoplectus pungens (Vahl) Palla
Schoenoplectus robustus (Pursh) M.Strong
Schoenoplectus tabernaemontani Palla
Smilax rotundifolia L.
Spartina cynosuroides (L.) Roth
Strophostyles helvula (L.) Ell.
Typha angustifolia L.
Viburnum nudum L.
Zizania aquatica L.
Zizaniopsis miliacea (Michx.) Doell

Common Name:

hazel alder
tidalmarsh amaranth
swamp milkweed
bearded beggarticks
hedge false bindweed
common buttonbush
scaldweed
coast cockspur grass
rattlesnakemaster
common sneezeweed
crimson-eyed rosemallow
jewelweed
rice cutgrass
cardinalflower
Japanese honeysuckle
climbing hempvine
yellow pond-lily
swamp tupelo
sensitive fern
arrow arum
American sycamore
sweetscent
halberdleaf tearthumb
dotted smartweed
arrowleaf tearthumb
pickerelweed
swamp dock
broadleaf arrowhead
common threesquare
sturdy bulrush
softstem bulrush
roundleaf greenbrier
big cordgrass
trailing fuzzybean
narrowleaf cattail
possumhaw
annual wildrice
giant cutgrass