## **Species Conclusions Table**

Project Manager: Julie Hamilton	Project Name:Curles Neck Farm Mining
Date: September 25, 2017	Project Number: NAO-2016-1228

Project Description: Construction of a sand and gravel pit to mine materrials for construction. Materials will leave the site via barge on the James River or

## Species Under the Jurisdiction of FWS:

Species/Resource		ESA Section 7 / Eagle		
Name	Conclusion	Act Determination	Species Info / Habitat Description	Notes / Determination
			"Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They typically use large caves or mines with large passages and entrances; constant temperatures; and high humidity with no air currents. Specific areas where they hibernate have very high humidity, so much so that droplets of water are often seen on their fur. Within hibernacula, surveyors find them in small crevices or cracks, often with only the nose and ears visible.	
Northern long-eared bat (Myotis septentrionalis)	Potential habitat present and no current survey conducted	May affect	During summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on suitability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures like barns and sheds."	Relying upon the findings of the 1/5/2016 Programatic Biological Opinion for Final4(d) Rule on the Northern Long-eared Bat and Activities Excepted from Take Prohibitions to fulfill our project-specific section 7 responsibilities. Approximately 1 acres of forested area will be cut.

## **Species Conclusions Table**

Date: September 25, 2017		Project Number: NAO-2016-1228		
Sensitive joint-vetch (Aeschynomene virginica)	No suitable habitat present	No effect	"The sensitive joint vetch is an annual legume native to the eastern United States. Populations currently exist in Maryland, New Jersey, North Carolina, and Virginia. The historical range for the species extended to Delaware and Pennsylvania. In Virginia, populations are found along the Potomac, Mattaponi, Pamunkey, Rappahannock, Chickahominy, and James Rivers and their tributaries." "The joint-vetch occurs in fresh to slightly brackish tidal river systems, within the intertidal zone where populations are flooded twice daily. It typically occurs at the outer fringe of marshes or shores; its presence in marsh interiors may be a result of nutrient deficiencies, ice scouring, or muskrat herbivory. The sensitive joint-vetch is found in localities where plant diversity is high and annual species are prevalent. Bare to sparsely vegetated substrates appear to be a habitat feature of critical importance for establishment and growth of this species."	The project will use a barge to remove mining materials using a conveyor belt dropping the matrials directly on the barge. The barge will sit next to the shoreline but not touch the shoreline. The shoreline is not natural and has man made shoreline protection.
Eagles (Haliaeetus leu	ıcocephalus)			
Eagle Nests	Unlikely to disturb nesting bald eagles	No Eagle Act permit required		
Eagle Concentration Areas	Does intersect with bald eagle concentration area	Eagle Act permit may be required		
Critical Habitat	os. ioonii alon aloa	1.0444104		

## **Species Conclusions Table**

Date: September 25, 2017		Project Number: NAO-2016-1228				
	_					
N/A						
Other (species not list	Other (species not listed above)					
Species Under the Jui	risdiction of NOA	A/NMFS				
Essential Fish Habitat	Not present					
Anadromous Fish Use Area	present					
Subaquatic Vegetation	not present					
HAPC Sandbar Shark	Not present					
Atlantic Sturgeon	Not present					

<sup>\*</sup> Copyright © 2014 NatureServe, 4600 N. Fairfax Dr., 7th Floor, Arlington Virginia 22203, U.S.A. All Rights Reserved. Each document delivered from this server or web site may contain other proprietary notices and copyright information relating to that document. The following citation should be used in any published materials which reference the web site.