Species Conclusions Table

Project Manager: Julie Hamilton	Project Name: New Kent County Water Withdrawal
Date: July 19, 2017	Project Number: NAO-2014-2045

Project Description: Construction of a water withdrawal in the Pamunkey River with 1 mm screens, a pump house, 7 mile pipeline and treatment facility.

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 22 acres of forested area will be cut.

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	Potential habitat present and no		"The small whorled pogonia is a herbaceous perennial orchid. It has a widely scattered distribution in the eastern United States along the Atlantic coast from Maine to Georgia with outlying occurrences in the midwest and Canada." "In Virginia, the small whorled pogonia is found in ordinary looking third-growth upland forests with an open understory and a closed canopy where the topography is typically moderately sloping or almost level. The plants are usually associated with decaying vegetative matter such as fallen trunks and limbs, leaf litter, bark, and tree roots.	
Sensitive joint-vetch (Aeschynomene virginica)	No suitable habitat present		The pogonia is found in soils that are acidic sandy loams with low nutrient content." "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."	A survey will be conducted this year. No wetlands are present at the water intake site and all large wetland systems will be directionally drilled.

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Eagles (Haliaeetus lei	ucocephalus)				
Eagle Nests	Unlikely to disturb nesting bald eagles	No Eagle Act permit required			
Eagle Concentration Areas	Does not intersect with bald eagle concentration area	No Eagle Act permit required			
Critical Habitat					
N/A					
Other (species not lis	ted above)				
Consider the live	minulination of NOA	A AIMEO			
Species Under the Ju		AA/NIVIFS		T	
Essential Fish Habitat	Not present				
Anadromous Fish Use Area	present			A cofferdam will be utilized during construction	
Subaquatic Vegetation	not present				
HAPC Sandbar Shark	Not present				
Atlantic Sturgeon	possibly present			A cofferdam will be utilized during construction	
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