Project Manager: Theresita Crockett Augustine	Project Name: Graham Quarry MRE
Date: December 16, 2016	Project Number: NAO-2012-01865

Project Description: This is a request to impact jurisdictional waters of the U.S. for the expansion of an existing mineral extraction operation with a second extraction pit and the relocation of the onsite processing facility, on a development site known as "Graham Quarry Mineral Reserve Extraction (MRE)."

The project site is located at 10000 Cox Road in Lorton, Virginia in Fairfax County.

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)	NLEB: Applying the 4(d) Rule; excepted from take	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 Programmatic Biological Opinion for Final 4(d) Rule on the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions to fulfill our project-specific Section 7 responsibilities.

Date: December 16, 2016		Project Number: NAO-2012-01865	Project Number: NAO-2012-01865		
	T	T		T	
Harperella (Ptilimnium nodosum)	No suitable habitat present	No effect	Harperella "[o]ccurs in three habitat types: rocky/gravelly shoals or cracks in bedrock outcrops beneath the water surface in clear, swiftflowing streams (usually in microsites that are sheltered from rapidly moving water); edges of intermittent pineland ponds or low, wet savannah meadows on the Coastal Plain; and granite outcrop seeps. In all habitat-types, the species occurs in a narrow range of water depths; it is intolerant of deep water and of conditions that are too dry. However, the plants readily tolerate periodic, moderate flooding - something to which few potential competitors are adapted. P. nodosum seeds generally germinate during short-duration spring floods and the plants have completed their life cycle by late summer or fall, just as water levels are lowest and competing species are moving in."* (NatureServe. 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available http://explorer.natureserve.org. (Accessed: September 25, 2014).	No impacts to streams.	
Small whorled pogonia (Isotria medeoloides)	Species not present	No effect	"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. The pogonia is found in soils that are acidic sandy loams with low nutrient content."	Survey was conducted. No Small whorled pogonia were found.	

Date: December 16, 2016		Project Number: NAO-2012-01865		
Dwarf wedge mussel (Alasmidonta heterodon)	No suitable habitat present	No effect	"The dwarf wedge mussel lives in shallow to deep rivers and creeks of various sizes where the current is slow to moderate. This mussel lives on muddy sand, sandy, and gravel stream bottoms that are nearly silt free."	
Eagles (Haliaeetus leu	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)			
Chaoine Under the Liv	riodiction of NOA	AANMEC		
Species Under the Ju	Tisalction of NOA	AAVNIVIFS	Γ	
Essential Fish Habitat				
Anadromous Fish Use Area				
Subaquatic Vegetation HAPC Sandbar Shark				
Atlantic Sturgeon				
	1	<u>l</u>		

Date:	December 16, 2016	Project Number: NAO-2012-01865

^{*} 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.