Outline for Guided Bike Tour from Great Falls Tavern to Seneca Quarry

MP	miles	Stops
14.3	0	A. <u>Introduction</u> (meet in front of Tavern) - discuss plan for the tour - safety and equipment (keep to the right, use bell, safely passing pedestrians, sticks and roots, food, water, sunblock) - first stop will be in 2.5 miles upstream at Swains lock - look for great blue herons, turtles, beaver chewed trees, and the water intake for the city of Rockville along the way
16.7	2.4	B. Swains Lock (#21) - the Swain family worked on the canal from its inception through the 1980's (canal construction worker, lock keepers here and at Seven Locks, ran the concession stand and boat rental here) - NPS has plans to renovate the lockhouse and turn it into an "artist in residence" program - hiker/biker camping - next stop will be at the filtration plant in less than a mile (look for Dan Snyder's house along the way near mp 17) - check on biking speed, personal comfort, layers, etc.
17.5	3.2	C. <u>Washington Suburban Sanitary Commission Filtration Plant</u> - built in 1961 it processes and treats water for Montgomery and Prince George's counties - read the interesting plaques with info about the geology and history of the area - next stop will be in about 2 miles, look at the beautiful cliffs to the right of the canal along the way
19.6	5.3	D. Pennyfield Lock (#22) - part of the Canal Quarters program run by the C&O Canal Trust, you can stay overnight! (no electricity or running water) - president Grover Cleveland liked to stay here on bass fishing trips - take a look at the waste weir - the next stop will be in 2.5 miles at Violettes Lock - look at Dierssen Wildlife Management Area (mp 20, egrets, fishing at swamp on river side), Blockhouse Point (mp 21, civil war union fort, now a county park), and Historic Mile-marker 22 ("22 miles from Washington City," erected sometime between 1828-1831) along the way
22.1	7.8	E. <u>Violettes Lock (#23) and Feeder Dam #2</u> - the feeder dam was designed to raise the river 4' and supply the canal with water from here to Little Falls (Lock #5) - this section of the canal (from lock #5 to lock #22) was the first section to be completed - during the civil war armies forded the river here on their way to Gettysburg - take a look at the mechanics of the lift lock, and walk down the dam dike to find the name "S. E. Fiser 1902" carved into a stone - the next stop will be in less than a mile at Seneca Creek - along the way you will pass a golf course belonging to the Bretton Woods Recreation Center on the right (berm side) of the canal

22.7	8.4	F. Rileys Lock (#24) and Seneca Aqueduct - the only place along the canal where an aqueduct (to cross over Seneca Creek) was combined with a lock - the far (west) arch was washed out in 1971 during a local flood when the first two arches were clogged up and the rest of the debris coming down Seneca Creek battered the third arch - on some weekends local girl scout troops give tours of the lockhouse - across the Potomac river you can see Trump National Golf Course and its large waterfall that can be turned on and off - look for the 1889 flood mark on the red sandstone pillar on the left (river side) of the towpath - take care to dismount from bicycles when crossing the aqueduct
22.8	8.5	G. Seneca Stone Cutting Mill and Quarry – to get here you will have to hike off NPS property on unmaintained trails. Watch out for snakes and dangerous plants. Notice the periwinkle, a sign of houses/cemeteries long gone. - Seneca sandstone has been quarried along this stretch of the Potomac river as far back at the 18th century - Geology: The sandstone (part of the Manasas Sandstone formation) formed in a rift valley (the Culpepper Basin) between 230-200 million years ago when the supercontinent Pangea was breaking apart. When the stone is first cut it is softer in texture and color, but after exposure to air iron-rich minerals oxidize causing the color to become more red and the stone itself to harden. - Uses: These qualities made the stone very desirable for buildings in Washington, including the Smithsonian Castle, the Cabin John bridge, and many houses and churches in the area. Find the stones that were removed when the White House replaced the walls from around the property. Note how the majority of the stone was underground to anchor the wall. - The C&O Canal: In 1830 when the C&O Canal paid the owners for the land next to the river they also contracted the quarry owner to provide stone for locks and lock houses from lock 8-30. The new canal and turning basin made transportation of stone to Washington easy and inexpensive, increasing quarry production, and in 1837 the stone cutting mill was built. The stone cutting mill cut stone not only from the Seneca quarries, but also from other quarries in the area (some of this other stone was used for the U.S. Capitol and the Washington Monument). The mill operated until 1901 (find the name "L. Segar 1901" carved by a quarry worker). A water channel fed by the canal ran a waterwheel and later a turbine that powered the machinery like the stone-cutters (toothless tempered steel saws) in the mill. - Quarry and Quarry Masters house: Hike up to the quarry and look at the rocks, noting that as all the good rock was mined only the poorer quality crumbling layers r
14.3	17	H. <u>Return Ride</u> - ride back to the Tavern, stopping along the way to eat snacks, use restroom, and enjoy the view as needed - thank everyone for coming, wash down bikes, take a group photo