



A Brief Trip Upstream of Big Slackwater

By Trent Carbaugh

Typical towpath on the first part of Level 34

All photos by Trent Carbaugh

The section of the C&O Canal upstream of McMahon's Mill, known as Level 34, is slated to be restored, as was the Big Slackwater area just downstream in Level 33 in 2012. Note that the level designations in this article are those used by the Level Walker program, and not the historical level numbers, which were based on lock numbers.

I figure this is a good time to document the level as it is before it changes for good. Possibly the restoration will be in the near future, but as with so many things in this time of involuntary changes in our society, I suspect it may now, unfortunately, be a while before this project happens.

Level 34 is subject to flood damage, which is the main reason for the restoration project. The surface of the towpath from McMahons Mill to Lock 41

undulates vertically, leaving some parts, mostly the stone causeways that go out into the river, scoured of their crushed stone filling. In times of high water these areas can become impassable to foot and bicycle traffic, necessitating a short but dangerous detour on narrow country roads. In the aftermath of high water events slippery mud can also be an issue, especially for cyclists.

But – before we move on, a little context might be helpful if you are not familiar with this part of the canal.

Big Slackwater, at the West End of Level 33

One of the places on the C&O Canal where nature said a big “NO!” to the canal company was the area known as Big Slackwater. This is the area above Feeder Dam 4 (Mile 84.40, built 1832-34). At Mile 86.94 limestone cliffs begin on the

Maryland side of the river and continue to Lock 41 at Mile 88.90, with a single break where Avis Mill Road comes down to the mill. This is a distance of a little more than three miles of the canal. The canal company's engineers and builders, when presented with this topography, must have scratched their heads mightily (and probably expressed themselves with some colorful cursing as well).

The cliffs precluded any feasible idea for building a canal prism, so a towpath was built by cutting away parts of the cliffs as well as building on the rocks of the river's edge. Canal boats then were put into and out of the river by Inlet/Guard Lock 4 (Mile 85.62) upstream from Dam 4 and at Lock 41 at the west end of the cliffs. With the building of the dam, the river was made somewhat more manageable and safer for canal boats to travel on.

The Big Slackwater Restoration

In 1996 the National Park Service closed a 2.7 mile section of the towpath between Dam 4 and McMahons Mill (Level 33). This occurred due to flood and hurricane damage over the years, making the towpath in this section impassable with some areas having the foundations completely washed away. This necessitated a hazardous 4.6 mile detour on narrow country roads. The NPS considered this a dangerous set of circumstances and ultimately wanted to restore the area so the towpath was contiguous once again. Unfortunately this was a major, and quite expensive, restoration project. Various proposals and ideas were put forth to accomplish this goal as well as to make a safer detour, until at last an ambitious project was agreed upon.

In October of 2012, this area was open again at a cost of 19 million dollars, the largest building project in the park since the canal was built. A series of concrete bridges were attached to the cliff walls, these structures are designed to allow flood waters to flow around, under and over them during high water events mitigating the potential for serious damage. The bridges are connected to the few remaining places where the foundations of the stone-built towpath at the base of the cliffs still existed as well as building new foundations where it was feasible. The original towpath was restored wherever it was possible to do so. It is quite the engineering feat, to put it mildly.

Level 33 showing part of the Big Slackwater restoration



Big Slackwater

With that introduction, let us begin a tour, starting at the parking lot at the end of Avis Mill Road, off of Delinger Road at McMahons Mill.

**Level 34, Charles Mill Level,
McMahons Mill to Opequon
Hiker/Biker, 2.84 miles**

McMahons (or Charles) Mill, Mile 88.10. The mill is built on Downey Creek at the only major break in the limestone bluffs of Levels 33 and 34 that is wide enough for a road. A mill was built here in 1778 and, with many changes, operated until 1922. Over the years it produced everything from plaster to electricity.

Walk out on the access road past the mill to the towpath and turn upstream where you will cross Downey Creek on a concrete bridge. If you look downstream you can see the Big Slackwater Restoration on a long curve of the river.

Fishing is quite popular in this area; on warm evenings you can see folks sitting in lawn chairs bank fishing. Most anglers are fishing for catfish, but pan fish and smallmouth bass are also frequently caught. Since the water is relatively deep here, you will see small fishing craft as well as the occasional powerboat at all points on the level.

Along this section, about a third of a mile upstream from Downey Creek, a dirt path leaves the towpath going uphill. This path follows the top of the limestone bluffs and was once considered, along with a similar path on Level 33, for improvement as an alternative detour route.



McMahons Mill with its steel waterwheel



Fisherpersons by Downey Creek; looking downriver towards Level 33



Grotto of Howell Cave



Swimming hole upstream from Howell Cave



Downey Creek in its flood control basin

Looking upstream you will see a long stretch of towpath built onto a causeway faced with stone on the river side. At this point the limestone bluffs begin to rise again. During the spring and early summer a large variety of wildflowers can be observed growing in cracks on the cliff faces.

Howell Cave, Mile 88.28. The first major feature that you come to next is Howell Cave, set into a magnificent limestone grotto. An intermittent stream flows out of the cave mouth and exits through a small drain culvert under the towpath into the river. This stream drops into a sinkhole up on the top of the bluff and then exits through the cave mouth. The actual cave itself opens into two large rooms from the small opening and purportedly you can get to the sinkhole stream entrance through a passage.

The towpath here is very close to the river's surface level and is prone to flooding in high water as well as flooding from excess water flowing from the stream out of the cave.

Just upriver from the grotto is a large block of limestone that I call "Arthur's Rock" after my son; we often sat on it to eat lunch during our adventures in the area.

Cliffs, Bluffs, and Other Interesting Features in this Section. About one tenth of a mile upstream from Howell Cave is a very well used, and venerable, swimming hole with a rope swing. Be wary of congestion at this point as well as flying teenagers. Unfortunately this area also collects a massive amount of trash from said teenagers.

From McMahons Mill to Lock 41 the berm side of the towpath is a series of limestone cliffs ranging from 20 or so feet high by the mill to 90 or 100 feet in some sections. Some of these cliffs were laboriously drilled by hand-hammered drill rods and blasted away with black powder charges. If you look closely in some places you can still see the remains of the drill holes. In other places the natural cliffs are set back far enough to allow space for the towpath. At some sections it was more expedient to build out into the river with stone walls that were then filled with loose stone surfacing and small gravel as a walking surface for the mules and packet boat horses. From the area of Howell Cave trees, some quite magnificent, are on both the river side and the berm side.

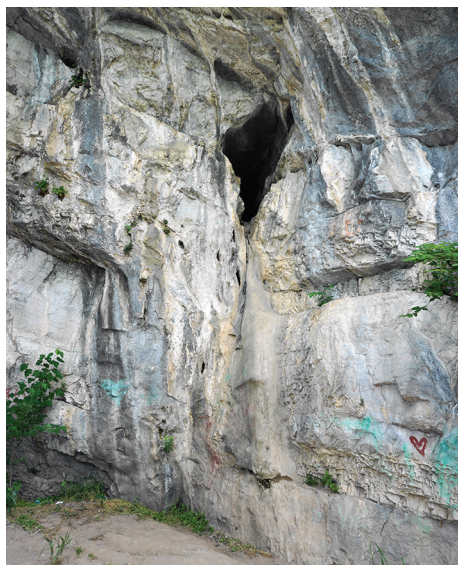
Stone Causeways. There are three extensive stone causeways built out on the river on rocks on the shallow river bottom. All three of these are fairly low and, especially in the case of the first one upriver from Howell Cave, subject to flood damage from high water events.

Little Howell Cave, Mile 88.59. Twenty feet up off the towpath and set back into a shallow overhanging spot in the cliff face is the entrance of Little Howell Cave. This cave extends 20 feet into the cliff.

Lock 41, Mile 88.90. Lock 41, with a lift of 10 feet, served as a river entry/exit lock. Boats traveling upriver would enter the lock. The lock was built of limestone blocks and later repaired with concrete. Although the current towpath continues on the river's edge, originally it continued on the berm side until Lock 42 where there was a mule crossover bridge. The "towpath" on the river side provides much needed flood protection for Lock 41 and the low section of towpath just downstream. The limestone bluffs continue here but they are lower and are further back from the river's edge leaving a narrow bottom-land that allowed construction of the canal prism to be resumed.



Stone causeway partially scoured by flood waters



Little Howell Cave 20 feet up on a cliff



Lock 41 in the winter



Downstream end of Lock 42 showing the remains of the towpath crossover bridge

Lock 42, Mile 89.04. Four tenths of a mile upstream from Lock 41 is Lock 42. As with Lock 41, Lock 42 has much concrete repair work. This lock had nine feet of lift and combined with Lock 41 raises the canal fifteen feet above the river. Fifteen feet of elevation over the normal river flow was enough to protect the area from reasonable flooding though high flooding was and still is a hazard at this spot. On the downstream end of the lock are the remains of a mule cross-over bridge that allowed the mules to be brought over the lock to the towpath, which continues on the river side from this point.

Neither lock was built with a bypass flume, as Lock 41 exited into and out of the river. Water needed to operate Lock 41 came out of Lock 42.

Along the original towpath on the berm side of the canal, slightly upstream of Lock 41, there are a series of stone building foundations that were once part of a small community.

On the berm side of Lock 42 are ruins of the foundation of the lockhouse that served both locks. On the river side, there is a large pile of cut limestone blocks that were removed from the lock when concrete repairs were made.

Culvert 118 ½, Mile 89.21. Built in 1835, Culvert 118 ½ is a 4-foot span that drains water from a small stream that runs from farmland to the north. If the Potomac is low you can make out the remains of dock pilings in the upstream mouth of the stream exit.

Brunswick Farm. On the berm side of the canal, when the leaves are off the trees, you can see the bank barn and stone colonial house of Burnside Farm (built between 1760 and 1780). If you look upstream on the berm side of Culvert 118 ½ it is possible to make out a steel paddle wheel from a small mill that was on the farm.

On the towpath side is a gate that is closed during high water events, the road

that leaves the towpath at this point is the first part of the detour to go around this section.

Dellinger Widewater, Miles 89.63 to 90.24. This is a wide section of the canal prism that utilized the natural topography of the area to ease the building of the canal. Through this section there was naturally occurring high ground on the berm side that allowed an earthen wall to be built with less work. Widewaters were often used as stopping places at night by canal boats and also allowed space for boats to pass.

Opequon Hiker/Biker, Mile 90.94 Opequon (pronounced “opeckon”) Hiker/Biker campground is on a terrace above the river just off of the towpath and is quite a pleasant place to camp. As with all hiker/bikers there is a picnic table, water pump, and a portable toilet. During warmer weather, the proximity upstream of the Potomac Fish and Game Club means you may get some powerboat noise into the evening hours.

Wildlife. On the first part of the level due to the steep terrain you will see more birds, in great variety, than anything else. Occasionally you can see tracks of the nocturnal presence of raccoons, opossums, and sometimes coyotes.

On the western end of the level you can see all of the normal wildlife on any other part of the canal in the west. White-tail deer are a common sight as is the random flocks of wild turkeys that wander in from the local farms. One thing you will definitely see is squirrels: grey squirrels, fox squirrels, and pine squirrels (and a few chipmunks). For some reason there is a high population of these critters here. Every now and then box turtles, black snakes, and garter snakes can be encountered, along with various species of frogs when the area is wet.

Traveling on Level 34. The best time to visit this part of the canal is anytime you can, but the area is at its most spectacular in the fall. Winter is the ideal time if you want to examine the structures



Culvert 118 ½



Barn and waterwheel (on the right) of Brunswick Farm



Beginning of the Dellinger Widewater



Hiding fawn on the edge of the towpath



Bad weather on Level 34

around Locks 41 and 42 when the leaves are down and there is less undergrowth. Spring and summer can be rough weather-wise with thunderstorms and sudden rain complicating travel. Due to the terrain, storms can sneak up on you from the north and west. Parts of Level 34 can become very muddy and slippery, particularly for bicycles.

The area is also good for an evening paddle in a canoe or kayak. Boats can be put in at the Big Slackwater Boat Ramp off of Dam 4 Road. Paddle upstream along Level 33 and Level 34, and drift back to the boat ramp. There are some spectacular views from the river going both directions. Be wary of powerboat wakes on the river, and keep an eye on the weather.

The upper path, though once a privately improved trail, is no longer. It is rough in places and in the summer can be very overgrown and as of summer 2020 there are some large trees down across the trail. Use caution if you choose to walk it. The tops of the cliffs are owned by the National Park Service, but the park boundaries are not marked and border private lands.

Major Features on Level 34

McMahons (or Charles) Mill, Mile 88.10

Howell Cave, Mile 88.28

Little Howell Cave, Mile 88.59

Lock 41, Mile 88.90

Foundations, Mile 89.01

Lock 42, Mile 89.04

Culvert #118 ½, Mile 89.21

Brunswick Farm, Mile 89.22

Dellinger Widewater, Miles 89.63–90.24

Opequon Hiker/Biker, Mile 90.94

Afterword. All of us who volunteer on the C&O Canal do so for a variety of good reasons. There are irreplaceable cultural and historic resources that absolutely must be protected. The nature that has returned to this once industrial corridor, in all of its delightful diversity, needs our

help to continue to thrive. The volunteers for this park happily give up our free time in support of the park and the fine folks of the National Park Service.

These reasons, though, blend together into a solid cohesive whole that guides our personal efforts as well as supporting other volunteers and volunteer programs, and ultimately all who come to visit and enjoy the park and the Potomac River. We really don't need to come up with reasons, though. We volunteer because we love the place.

The C&O Canal National Historical Park and the Potomac River are a unique piece of American history. So many things happened in this area! Native Americans lived here. Three major wars were partially fought in the Potomac River Valley. The industrial revolution gave us the C&O Canal and its major commercial competitors the railroads.

Our predecessors had the great sense to turn the remains of the canal into a national historical park as well as beginning the long-term, ongoing project of cleaning up the Potomac and its tributaries. This once busy commercial corridor has now become a place of recreation, and more importantly, a place of recovering nature. During my lifetime I have been a witness and a participant in these efforts and continue to do so.

For many of us spending time on the C&O is something that has been a part of our and our families' lives for a lot of years. Many of my fondest childhood memories were of times spent having adventures paddling and fishing on the Potomac, hiking the canal, and just simply exploring as many interesting places as I could get to (despite my mother's objections to my caving, climbing and whitewater running proclivities). My father and grandfather instilled in me the reasons and desire to take care of the natural world. Scouting re-enforced this and taught me other skills, most of which were learned along the C&O and on the Potomac. These skills took me



View from the upper path



Limestone cliffs along the towpath



Path to the upper trail along the cliff top

competently to many of the wilder places of the world. But I always came back to the C&O.

To me the C&O is more than just a nice place to hike, ride a bike, or paddle. It is that unique blend of nature and history that appeals as much to my sense of the wonder of nature as it does to my sense of history. It is also a place of people, from the Native Americans, who left their slight elusive marks along the Potomac River, all the way to the modern folks that travel from far places to visit. We should also not forget the National Park Service personnel that do such a fine job of taking care of the place, even though they are often understaffed and underfunded.

Level 34, though, is a bit different for me personally as it has the element of bittersweet memories. It was my late son's favorite place to be on the canal. Having the opportunity to be a level walker on this particular part of the canal and to take care of a place my son and I both loved together, and for all of the other reasons stated above, I see as a privilege and an obligation.

References:

Farming Along the Chesapeake and Ohio Canal, 1828-1971: A Study of Agricultural Sites in the C&O Canal National Historic Park, Perry Carpenter Wheelock, 2007, National Park Service

Towpath/Detour Options for Big Slackwater, Final Report, prepared by Dewberry & Davis, Fairfax VA., 1998

Geology of the Chesapeake and Ohio Canal National Historic Park and Potomac River Corridor, District of Columbia, Maryland, West Virginia, and Virginia, Professional Paper 1691, U.S. Department of the Interior, U.S. Geological Survey. 2008

Towpath Guide to the C&O Canal (revised edition), Thomas F. Hahn, Harpers Ferry Historical Association, Harpers Ferry, W.Va. 2015

And many thanks to Karen Gray for kindly sharing her knowledge.

Along the Towpath, September 2020