

Smithsonian Associates
A Journey Through the Potomac Gorge
March 29, 2023
12:00 PM
With Melanie Choukas-Bradley

Potomac Gorge Parkland

Maryland

C&O Canal National Historical Park (including Great Falls, MD and the Billy Goat Trails);
Cabin John Stream Valley Park; Glen Echo Park

Virginia

Riverbend Park, Great Falls Park; Difficult Run Stream Park; Scott's Run Nature Preserve,
Turkey Run Park; Potomac Overlook Regional Park; Potomac Heritage Trail

District of Columbia

C&O Canal; Battery Kemble Park; Foundry Branch, Glover Archbold Park; Theodore Roosevelt
Island

Potomac Gorge Maps

Potomac Gorge Area: Great Falls Park, VA & C&O Canal National Historical Park, MD,
Published by the Potomac Appalachian Trail Club

***Potomac Gorge: MD, VA & DC, Sponsored by National Park Service, the Nature Conservancy
& Potomac Conservancy, Map by Mary Belcher for TNC (SEE PAGE THREE)***

Guide Books

The C&O Canal Companion: A Journey Through Potomac History by Mike High, Johns
Hopkins University Press

Towpath Guide to the C&O Canal by Thomas F. Swiftwater Hahn, American Canal &
Transportation Center

Potomac Pathway: A Nature Guide to the C&O Canal by Napier Shelton, Schiffer Publishing
Ltd.

Geology & History Books

Nature & History in the Potomac Country: From Hunter-Gatherers to the Age of Jefferson by
James D. Rice, Johns Hopkins University Press

The Potomac by Frederick Gutheim, Grosset & Dunlap

The Grand Idea: George Washington's Potomac & the Race to the West by Joel Achenbach, Simon & Schuster

A Washington Sketchbook by Gail Dickersin Spilsbury, with drawings by Robert L. Dickinson, 1917-1918, Chesapeake Book Company

The River & the Rocks: The Geologic Story of Great Falls & the Potomac River Gorge, US Government Printing Office

Nature Books

Finding Wildflowers in the Washington-Baltimore Area by Cristol Fleming, Marion Blois Lobstein & Barbara Tufty, Johns Hopkins University Press

Flora of Virginia by Alan S. Weakley, J. Christopher Ludwig & John F. Townsend; Bland Crowder, Editor, Botanical Research Institute of Texas Press (Note: a big book!)

Newcomb's Wildflower Guide by Lawrence Newcomb, Little, Brown & Company

City of Trees: The Complete Field Guide to the Trees of Washington, DC by Melanie Choukas-Bradley, University of Virginia Press

Finding Solace at Theodore Roosevelt Island by Melanie Choukas-Bradley, Changemakers Books

The Sibley Guide to Trees by David Allen Sibley, Alfred A. Knopf

The Sibley Field Guide to Birds of Eastern North America by David Allen Sibley, Alfred A. Knopf

Websites

C&O Canal National Historical Park: www.nps.gov-choh

C&O Canal Trust www.canaltrust.org

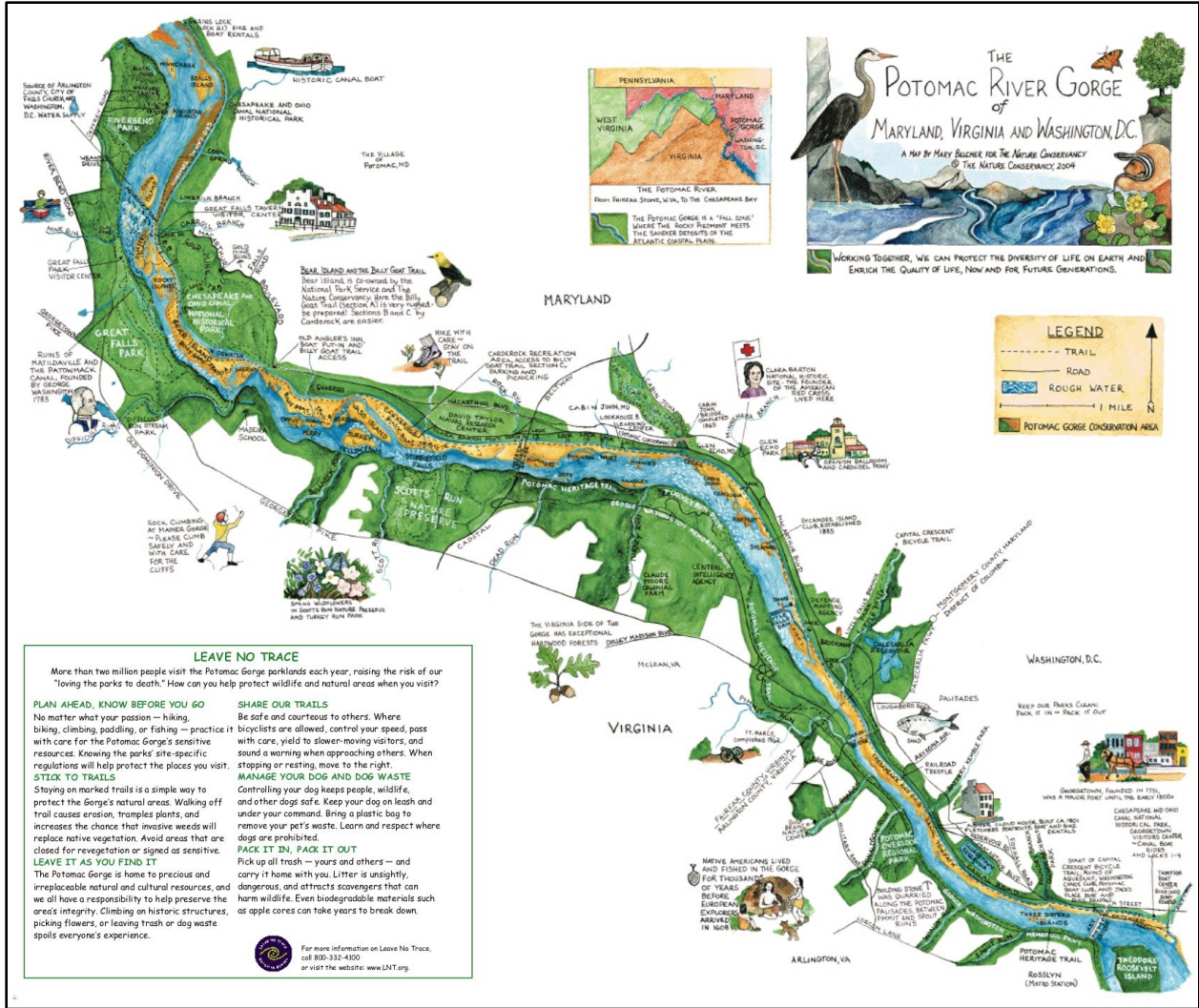
Potomac Conservancy www.potomac.org

The Nature Conservancy www.nature.org

Potomac Appalachian Trail Club www.patc.net

Georgetown Heritage www.georgetownheritage.org

Note: All parks in the Potomac Gorge mentioned above have their own websites



Discover the Potomac Gorge: A National Treasure



The heart of the Potomac Gorge is also known as Mather Gorge, named after Stephen T. Mather, first director of the National Park Service.

On the outskirts of Washington, D.C., the Potomac River passes through a landscape of surprising beauty and ecological significance. Here, over many millennia, an unusual combination of natural forces has produced a unique corridor known as the Potomac Gorge.

This 15-mile river stretch is one of the country's most biologically diverse areas, home to more than 1,400 plant species. Scientists have identified at least 30 distinct natural vegetation communities, several of which are globally rare and imperiled. The Gorge also supports a rich array of animal life, from rare invertebrates to the bald eagle and fish like the American shad.

In total, the Potomac Gorge provides habitat to more than 200 rare plant species and natural communities, making it one of the most important natural areas in the eastern United States.



This riverside prairie at Great Falls, Virginia, results from periodic river flooding, a natural disturbance that creates and sustains rare habitats.



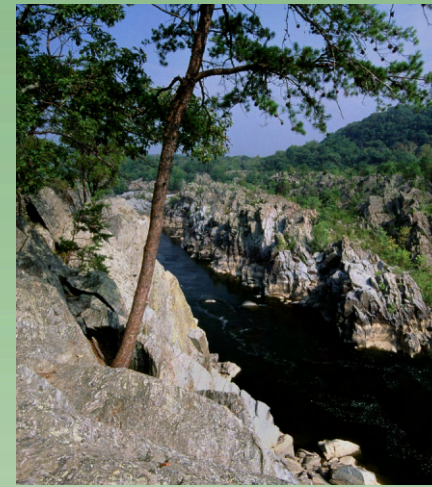
Flowering dogwood, a native forest understory species in our region, is being decimated by an introduced fungal disease.



Specially adapted to withstand river flooding and scouring, rare plants like riverbank goldenrod take root and survive in rock crevices.



The Potomac Gorge is home to myriad bird species, from migratory songbirds to our national emblem, the bald eagle.



Clinging precariously to the cliff's edge, Virginia pine is a characteristic species of the rare bedrock terrace woodland of Great Falls and Bear Island.



Brightly colored in its immature form, a reptile known as the five-lined skink is a regular sight in the Potomac Gorge.

WHAT IS THE POTOMAC GORGE?

Over thousands of years, natural forces at work in the Potomac Gorge have created a deep, narrow valley. Here, rainwater gathered from an approximately 11,500-square mile area upstream is funneled through a constricted passageway, where plants have adapted the ability to survive in the face of intense flood scouring.

dangerous rapids known as Great Falls — the water level drops 60 feet in a half-mile stretch.

While a fall zone is characteristic of many U.S. east coast rivers, the Potomac has one



The unique geology, geography, and hydrology of the Potomac Gorge produce its array of rare species and natural communities.

A crossroads for plants and animals, this area also supports a many different habitats, including scoured bedrock river terraces, mature upland woods, rich floodplain forests, streams, and wetlands. It is this diversity of life that makes the Gorge a nationally significant conservation area.

The Potomac Gorge is located in the "fall zone," where the river passes from the hard, erosion-resistant bedrock of the Piedmont to the softer, sandy deposits of the Atlantic Coastal Plain. Over this 15-mile corridor, the river drops from an elevation of 140 feet to 10 feet above sea level. At its steepest point — the fast-flowing,

of the longest, steepest fall zones on the Atlantic slope. Despite its location in the Washington, D.C. metro region, the Potomac Gorge has one of the continent's most intact fall zones, unaffected by major dams and largely unspoiled by riverfront development.

Large rainstorms and melting snows upriver regularly produce powerful flooding in the Gorge. At times, floodwaters rise high enough to wash over the Gorge's 50-foot cliffs, but even lesser floods can scour the river's ancient bedrock terraces, filling side channels and inland ravines. Moreover, floods wash away years or decades of plant growth, rearrange soils and plants, and deposit new sediments and seeds in their place.

The Potomac Gorge is a dynamic, highly disturbed environment, yet this disturbance is a natural process and critical to the extraordinary natural diversity of the Gorge.

WHO OWNS AND CARES FOR THE POTOMAC GORGE?

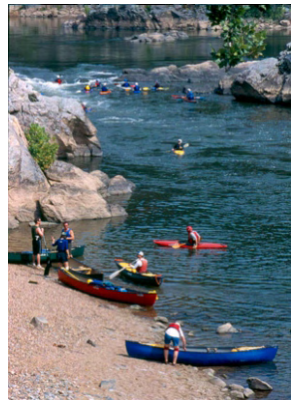
We're all responsible for the Gorge. Much of the Potomac Gorge's 15-mile shoreline is public parkland, where park managers protect natural and cultural resources and provide recreational opportunities for current and future generations to enjoy. The river itself belongs to the State of Maryland, extending back to colonial times. However, responsibility for long-term stewardship of the Gorge belongs to all who visit or live around this important natural area.

Public parkland in the Gorge includes the National Park Service's Chesapeake & Ohio Canal National Historical Park and George Washington Memorial Parkway, which administers Turkey Run Park, Great Falls Park, and Glen Echo Park. In Virginia, the Fairfax County Park Authority oversees Riverbend Park and Scotts Run Nature Preserve, and there are several county stream valley parks on both sides of the river.

Two private nonprofit conservation groups are active in the Gorge. The Nature Conservancy co-owns Bear Island, home of the popular Billy Goat Trail, with the National Park Service. Potomac Conservancy owns Minnie's Island and administers the C&O Canal's Lockhouse 8 Learning Center.

Other public and private lands are included in the nearly 10,000-acre area that's the focus of conservation action in the Potomac Gorge. Many homes and businesses exist in and around the Gorge, as well as schools, hospitals, and other institutions. Important

public infrastructure runs through the Gorge — including water, sewer, gas, and power lines — providing critical services to the D.C. metro region population. While much of the Gorge's immediate riverfront property is "protected" by being publicly owned and not vulnerable to private development, it still faces a number of threats.



Paddlers putting in from the Angler's Inn access area.

This oasis in the middle of an urban environment faces ongoing threats from human activity as well. Stresses include expanding residential and commercial development, road and utility construction, and increased demand for water. Within the parks, high levels of visitor use create pressure to build additional infrastructure, such as parking lots. And insensitive recreational practices can destroy natural areas by trampling vegetation, fragmenting habitats, and promoting the spread of invasive species.

WHAT ARE THE THREATS TO THE POTOMAC GORGE?

Several factors threaten the natural resources of the Gorge. More than 250 introduced nonnative species, including garlic mustard, Japanese honeysuckle, and kudzu crowd out native plants. The region's large deer population harms natural areas by overeating native vegetation, altering natural habitats, and preventing tree regeneration. Introduced plant diseases like dogwood anthracnose also take a toll on native vegetation.



Kudzu

White-tailed deer

HOW CAN WE PROTECT THE POTOMAC GORGE?

As one of the more than two million people who visit the Potomac Gorge each year, please do your part to help protect this exceptional place. Discover the Gorge's special natural and historical places. Volunteer with the parks or nonprofit groups to help conserve and

restore the parks' resources. Be safe and follow the park rules. Above all, practice "Leave No Trace" sensitive recreational use principles (see opposite side).

If you live in the greater Washington, D.C. region, you also have an important role to play. There are many things you can do in your own backyard to help ensure a healthier Potomac Gorge, Potomac River, and Chesapeake Bay.

For more information, get the *Good Neighbor Handbook: A Guide to River Friendly Living in the Middle Potomac Region*, on The Nature Conservancy's website at www.nature.org/goodneighbor or Potomac Conservancy's site, www.potomac.org. The handbook's topics include landscaping with native species, controlling invasive nonnative species, reducing lawn chemical use, abating storm-water runoff, and permanently protecting private land through conservation agreements.

EXPLORE HISTORIC SITES IN THE POTOMAC GORGE

Besides its natural riches, the Potomac Gorge is home to many cultural and historical sites, reflecting human activity over thousands of years. Beginning on the Virginia side of the Potomac, the ruins of George Washington's Patowmack Canal are preserved at Great Falls Park, along with remnants of the once bustling town of Matildaville.

Across the river in Maryland and Washington, D.C., explore the Chesapeake & Ohio Canal National Historical Park, a 19th-century engineering marvel running 184.5 miles from Georgetown to Cumberland, MD. You can learn more about the C&O Canal at its two D.C.-area Visitor Centers, in Georgetown and at Great Falls (MD).



The historic Great Falls Tavern Visitor Center.

In Georgetown, walking tours and boat rides take you back to this town's heyday as a major tobacco port. Up the river in Maryland, Glen Echo Park offers year-round activities in dance, theater, and the arts. Begun in 1891 as part of the Chautauqua movement, Glen Echo was a popular amusement park until 1968. Community action by local citizens, in partnership with the National Park Service, has saved the park from destruction and fosters its continued restoration.

The Great Falls Tavern has been welcoming visitors since 1831, when the C&O Canal Company responded to travelers' requests for shelter and meals. Now an NPS Visitor Center, the tavern offers year-round interpretive programs. In addition to the canal towpath, the Billy Goat Trail and the Gold Mine Trail, among others, offer scenic vistas and varied recreational opportunities.

BE SAFE AND FOLLOW THE PARK RULES

- It is unlawful to enter the Potomac River and C&O Canal from National Park lands for wading, swimming, or bathing. The river is extremely dangerous at all water levels, especially near dams, falls, and rapids. River currents are strong and unpredictable.

- Stay on marked trails. Bicycles and horses are allowed only on designated trails. Check with each park for specific rules before you visit.

- Pet owners must keep dogs on leash in all park areas and must remove their pets' waste. Dogs are prohibited on Olmsted Island, Bear Island, and the Billy Goat Trail Section A.

- Damaging, disturbing, collecting, or removing natural, cultural, archaeological, and paleontological resources is prohibited.

- Keep off archaeological and historic resources unless explicitly permitted by parks.

- Keep wildlife wild; don't feed the animals.

- Poisonous snakes and other wildlife live in the park. Watch where you put your hands and feet, particularly in rocky areas.

- Hunting and trapping in park areas are prohibited; fishing is subject to state or D.C. licensing regulations.

- Camping and campfires are permitted only in designated areas.

- Alcohol, firearms, and metal detectors are prohibited in park areas.

SELECTED ATTRACTIONS

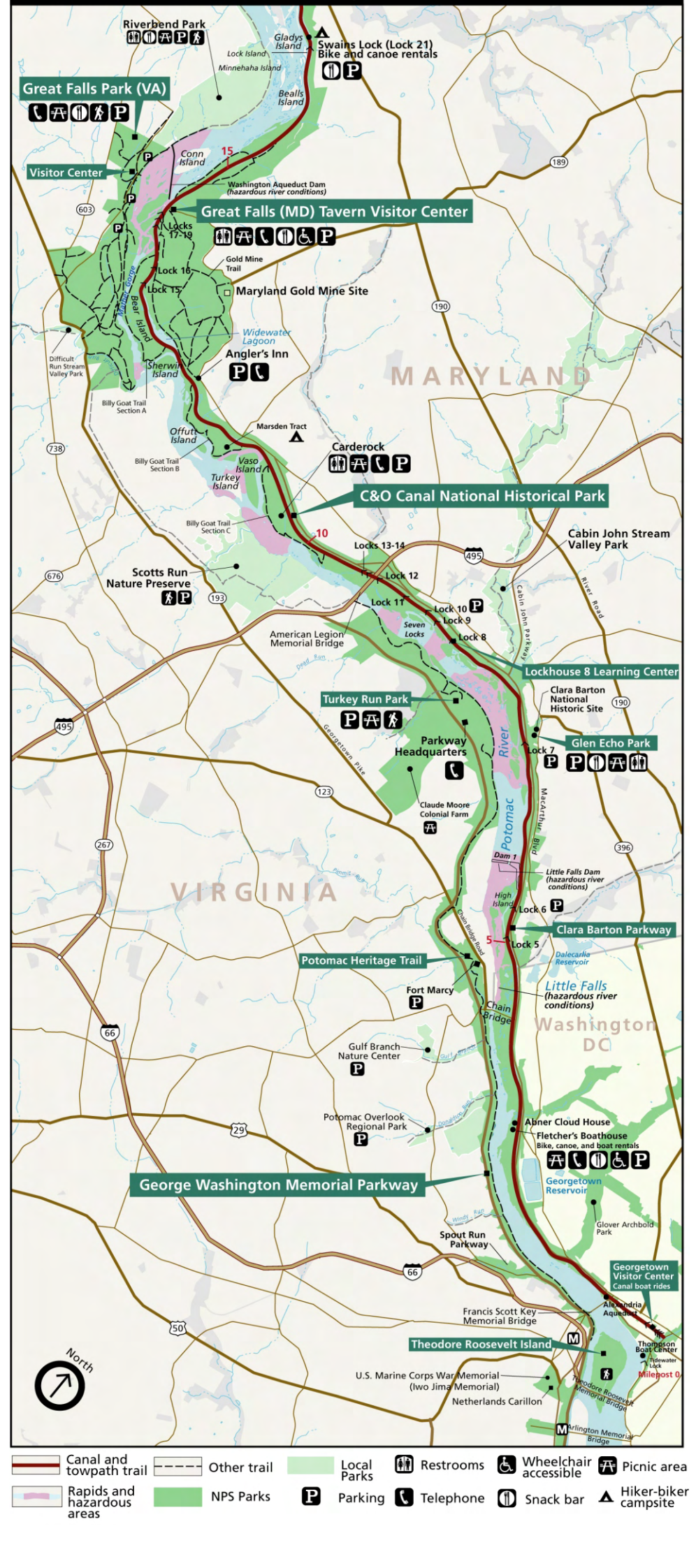
- George Washington Memorial Parkway**
Great Falls Park (VA)
Hiking, picnicking, kayaking, rock climbing, bicycling, and horseback riding.
703-285-2965
www.nps.gov/gwmp/grfa
- Turkey Run Park**
Hiking, picnicking, spring wildflowers.
703-289-2500
www.nps.gov/gwmp/vapa/turkey.htm
- Fort Marcy & Theodore Roosevelt Island**
Hiking and historic interpretation.
703-289-2500
www.nps.gov/gwmp/home.htm
- Glen Echo Park**
Dance, theater, and art classes.
Call 301-492-6229
www.nps.gov/glec
- Clara Barton National Historic Site**
Home of American Red Cross founder.
Call 301-492-6245
www.nps.gov/ciba

- C&O Canal National Historical Park**
Georgetown Visitor Center
Canal towpath open to hiking and biking.
202-653-5190
www.nps.gov/choh
- Great Falls Tavern Visitor Center**
Sixteen hiking trails; conditions and difficulty vary.
301-299-3613
- Lockhouse 8 Learning Center**
Accessible from southbound Clara Barton Parkway.
301-608-1188 (Potomac Conservancy)
www.potomac.org

County and Regional Parks

- Riverbend Park**
Hiking, birding, spring wildflowers.
703-759-9018
www.fairfaxcounty.gov/parks/riverbend
- Scotts Run Nature Preserve**
Waterfall, wildflowers, hiking trail.
- Gulf Branch Nature Center**
703-228-3403
www.arlingtonva.us
- Potomac Overlook Regional Park**
703-528-5406
www.nvrpa.org/potomacoverlook.html
- Cabin John Stream Valley Park**
301-299-0024
www.mc-mncppc.org

Detail Map of the Potomac River Gorge



Potomac Gorge Conservation Partners

The Nature Conservancy is a global conservation organization whose mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Through a strategic, science-based planning approach, TNC identified the Potomac Gorge as a priority conservation area.

The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

For more than ten years, the Potomac Conservancy has been protecting the health, beauty, and enjoyment of the Potomac River and its tributaries. The Conservancy provides conservation options and hands-on restoration opportunities throughout the Potomac River region, including in the Gorge, which it has identified as a critical landscape meriting special protection.