

OBED WILD AND SCENIC RIVER TENNESSEE

National Park Service
U.S. Department of the Interior



OUTSTANDINGLY REMARKABLE VALUES



Dear Friends of the Obed Wild and Scenic River,

What comes to mind when you think about the Obed Wild and Scenic River? A wild river and its tributaries flowing through a rugged landscape of spectacular gorges? The thrill of a demanding whitewater boating experience? A family-friendly place to explore the magnificent scenery of the Cumberland Plateau? A place that compels us to learn about the abundant diversity of a fragile ecosystem or to better understand the history of those who thrived on this land before us?

The Obed Wild and Scenic River is all of this, and much more. To help us protect this river system for the benefit and enjoyment of future generations, we have contemplated this very question to determine what makes it truly outstandingly remarkable.

Based on the hard work of my staff and others within the National Park Service, I am pleased to present to you the outstandingly remarkable values of the Obed Wild and Scenic River. The statements that follow have been developed to provide a strong foundation for the future management and protection of this nationally significant river system—to help us focus our daily attention on the river's most important aspects.

I urge you to read these statements and to share your thoughts with us about what makes the Obed so outstandingly remarkable to you. Thank you for sharing your passion for the Obed Wild and Scenic River by helping to shape its future.

Sincerely,

*Janet Ambrose
Unit Manager*

THE WILD AND SCENIC RIVERS ACT AND THE OBED RIVER

In 1968, Congress passed the Wild and Scenic Rivers Act. It “*declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.*”



Clear Creek



Daddys Creek



Emory River



Obed River

Eight years later, in 1976, portions of the Obed River, Clear Creek, Daddys Creek, and the Emory River were designated by Congress as a national wild and scenic river. As stated in the act, these river segments include

- **OBED RIVER**, from the western edge of the Catoosa Wildlife Management Area to the confluence with the Emory River
- **CLEAR CREEK**, from the Morgan County line to the confluence with the Obed River
- **DADDYS CREEK**, from the Morgan County line to the confluence with the Obed River
- **EMORY RIVER**, from the confluence with the Obed River to the Nemo bridge

OUTSTANDINGLY REMARKABLE VALUES

Outstandingly remarkable values are defined by the Wild and Scenic Rivers Act as the characteristics that make a river worthy of special protection. The Interagency Wild and Scenic Rivers Coordinating Council has issued criteria for identifying and defining these values: they must be river-related and they must be either rare, unique, or exemplary in a regional or national context. Based on these criteria, the Obed Wild and Scenic River has numerous outstandingly remarkable values, which have been identified and defined for the Obed River, Clear Creek, Daddys Creek, and the Emory River.

In addition to outstandingly remarkable values, the free-flowing condition and water quality of the Obed Wild and Scenic River are also described. Because free-flowing condition and water quality support the integrity of the river’s outstandingly remarkable values and are key components of future planning and management, they are included as part of this publication.

The analysis concluded that the Obed Wild and Scenic River contains the following outstandingly remarkable values: aesthetic, recreational, cultural, ecological/vegetation, geologic, wildlife, and fish. A set of broad statements has been developed that describes each of these outstandingly remarkable values for the entire Obed Wild and Scenic River. An evaluation process was then used to determine which designated river segments contain these different outstandingly remarkable values. The results of this evaluation were used to develop additional statements for those individual river segments, which provide evidence and support for the broader statements. The following matrix summarizes the evaluation results and provides an organization to the statements that follow.



River Segment	ORV Category						
	Aesthetic	Recreational	Cultural	Ecological/ Vegetative	Geologic	Wildlife	Fish
Obed River	●	●		●	●	●	●
Clear Creek	●	●	●	●	●	●	●
Daddys Creek	●	●		●	●	●	●
Emory River	●	●	●	●	●	●	●

OBED RIVER

The Obed River possesses a series of high, colorful sandstone cliffs from Daddys Creek to Alley Ford. From the Point Trail, visitors have dramatic views of both the Obed River and Clear Creek. No human-made structures or activities are visible along this segment.

CLEAR CREEK

Clear Creek possesses a series of high, colorful sandstone cliffs from Lilly Bridge to the Clear Creek/Obed River confluence. From the Point Trail, visitors have dramatic views of both the Obed River and Clear Creek. Three bridges and some evidence of past timber harvest, visible from the rim but not from the river, are the only signs of human intrusion along this segment.

DADDYS CREEK

Daddys Creek possesses a series of high, colorful sandstone cliffs from Devil's Breakfast Table to the Obed River Junction. No human-made structures or activities are visible along this segment.

EMORY RIVER

While the Emory River lacks the sheer cliff scenery of the other three segments, it still possesses a largely undeveloped character through a narrow gorge. There is some evidence of human activity such as the railroad, day-use area, and bridge. The scenic character of the gorge is regionally exemplary.



AESTHETIC VALUES

The Obed Wild and Scenic River cuts through the Cumberland Plateau's sandstone cap overlaying softer shale layers, creating a canyon environment that gives visitors the impression that they are in deep wilderness, far removed from human civilization. The park's massive, overhanging cliffs frequently loom more than 500 feet above the streams, lending to the narrow canyons a sense of isolation and intimacy. In many places the Pennsylvanian-era sandstone of these cliffs is brilliantly colored, with hues ranging from shades of gray and brown to bright pink, orange, red, and yellow. During times of medium flow, the park's larger streams are often a brilliant turquoise, providing a dramatic contrast to the geologic features. At these times the river dances an intricate swirling course through a labyrinth of boulders and eddies, racing through narrow chutes at a breathtaking pace and plummeting from high ledges, tossing spray and foam high into the air.



The river's primitive character allows a sense of discovery. Dark night skies allow visitors to enjoy wilderness-like encounters with the stars. The park visitor can experience a wide array of natural sounds, from the roar of the river in flood stage, to bird songs in spring, to the deafening chorus of insects and frogs on a summer night. The totality of sensory experiences, including sights and sounds and lack of modern-day intrusions along the Obed Wild and Scenic River constitutes a significant vestige of primitive America.

RECREATIONAL VALUES



The Obed Wild and Scenic River provides world-class climbing and regionally significant boating opportunities in the eastern United States. Its natural flows support whitewater paddling, typically from November through May. A major characteristic of both

climbing and boating at the Obed is the opportunity for challenge in a highly scenic wilderness setting. Other than bridges at put-in and take-out points, paddlers can explore the park's entire river system while encountering virtually no signs of human activity. Because of the river's natural, unregulated flow regime, rugged terrain, and limited parking, the Obed has the ability to provide paddlers with opportunities for solitude. While sport climbing is restricted to two miles of cliff within the park—where encounters with other climbers are common—traditional climbing and bouldering are allowed throughout the park, providing opportunities for solitude. North facing cliffs, overhangs that provide protection from rain, and southern exposures create year-round climbing opportunities in a scenic setting. The Cumberland Trail traverses the park, allowing the intrepid hiker to explore the most remote and scenic sections of the Obed by foot. This planned 300-mile-long trail system provides challenge and a sense of adventure, and will ultimately allow users to hike all the way from the Obed Wild and Scenic River to the Appalachian Trail.



OBED RIVER

The Obed River segment provides opportunities for high challenge Class III and IV whitewater boating, bouldering, and both sport and traditional climbing in a remote and scenic recreational setting. These whitewater boating opportunities are regionally rare, while the climbing opportunities are rare to the United States. This segment also provides regionally rare opportunities for solitude while hiking (Cumberland Trail) and fishing in a primitive, scenic, remote setting.

CLEAR CREEK

The Clear Creek segment provides opportunities for high challenge Class III and IV whitewater boating, bouldering (Lilly Boulders), and sport and traditional climbing in a remote and scenic recreational setting. These whitewater boating opportunities are regionally rare, while the climbing opportunities are rare to the United States. This segment also provides regionally rare opportunities for solitude while hiking and fishing in a primitive, scenic, remote setting.

DADDYS CREEK

Daddys Creek provides opportunities for challenging Class II+ whitewater boating and high challenge traditional climbing in a remote and scenic recreational setting within the park boundary. These whitewater boating and climbing opportunities are regionally rare. This segment also provides regionally rare opportunities for solitude while hiking (Cumberland Trail) and fishing in a primitive, scenic, remote setting.

EMORY RIVER

The Emory River provides regionally exemplary opportunities for challenging Class II whitewater boating in a remote and scenic recreational setting. This segment also provides regionally exemplary opportunities for solitude while hiking (Cumberland Trail and Emory River Nature Trail) in a primitive, scenic, remote setting. Opportunities to fish for native, trophy Muskellunge are also exemplary.

CLEAR CREEK

Along Clear Creek, in addition to rock shelter archeological sites, there is the Howard Mill and home site at Lilly Bridge. This is a historic early 20th century gristmill that had a horizontally mounted mill wheel—called a “tub” mill—which is a rare occurrence in East Tennessee and a relatively rare occurrence on the Upper Cumberland Plateau. This historic cultural site had a direct relationship to the river system: by diverting water through a mill race, it used the river to power the mill.

EMORY RIVER

Along the Emory River, there are several significant historic cultural resources. Specifically, these are the early 20th century Girder and Truss bridge with hand-cut stone abutments at Nemo and the late 19th century Southern Railroad tunnel also at Nemo. While these engineering resources undoubtedly meet criteria for inclusion in the National Register of Historic Places they have not been nominated and they do not belong to the federal government. Nevertheless, both of these resources underscore the nature of the river as both a transportation corridor and a natural barrier to transportation requiring engineered construction in order to develop regional road networks.

OBED RIVER AND DADDYS CREEK

Due to lack of supporting archeological evidence, the Obed River and Daddys Creek do not contain outstandingly remarkable cultural values. Rock shelters found throughout these segments have the potential to be culturally significant and future inventories may change this determination.



CULTURAL VALUES

Human occupation along the Obed Wild and Scenic River system encompasses thousands of years of diverse cultures—from prehistoric native people through 20th century European settlers. The rivers provided reliable year-round water and abundant riparian resources, such as mussels, fish, birds, and mammals. People also used the rivers as important travel corridors. Prehistoric and historic use is reflected in engineering structures and archeological sites, including rock shelters, bridges, tunnels, grist mills, and home sites throughout the river system.



All four segments of the Obed Wild and Scenic River system contain prehistoric rock shelter sites located at the base of the cliffs. Some of these rock shelters may contain significant cultural resources, which would make them eligible for nomination to the National Register of Historic Places. Artifacts, such as mussel shell and fish bone, can provide evidence of water quality conditions, species diversity, and general conditions of the river system at different periods of time. Additionally, prehistoric artifacts at these rock shelter sites may reveal the use of the river as a transportation corridor for trade and seasonal migration of prehistoric people. However, no sites have been excavated and no comprehensive inventory of the Obed Wild and Scenic River has been completed to document the regional or national significance of its archeological resources.



ECOLOGICAL/VEGETATION VALUES



The Obed Wild and Scenic River, located within one of the most species-rich temperate ecoregions in North America, protects many regionally and nationally significant habitats, several of which are riparian. The park contains 45 miles of contiguous riparian forest, some of which have never been cleared. The Obed also contains the vast majority of the globally imperiled “Cumberland river scour prairie” plant community, of which there are fewer than 500 acres remaining. These river

prairies share many characteristics with the tallgrass prairies of the American Midwest. However, where fire is the driving force sustaining Midwestern prairies, raging floods are the ecological driver in the bottom of the deep river gorges of the Cumberland Plateau, regularly scouring these habitats to maintain their open state. Associated with this community type are 2 federally listed plants, Cumberland rosemary and Virginia spirea, as well as 27 other species of plants that are either regionally or nationally significant. The Obed is the most significant stronghold for Cumberland rosemary—protecting 60% of all remaining populations. In addition, there are four plant species potentially new to science associated with the Obed’s riparian habitats. Due to the inaccessibility and rugged nature of much of the park, comprehensive surveys have not been completed, making other significant scientific discoveries possible.



OBED RIVER

This segment contains 72 alluvial/cobble bars, many of which contain the globally imperiled river scour prairie community type. The Obed River provides habitat for 29 rare plant species, including 6 species of national significance (2 are federally listed and 1 is under consideration for federal listing), and 2 species that are significant to the Cumberland Plateau ecoregion. In addition, there are 4 recently discovered species that may be new to science. Two Virginia spirea locations and roughly 30 Cumberland rosemary occurrences are known to exist along the Obed River.

CLEAR CREEK

This segment contains 82 alluvial/cobble bars, many of which contain the globally imperiled river scour prairie community type. Clear Creek provides habitat for approximately 29 rare plant species, including 6 species of national significance (2 are federally listed and 1 is under consideration for federal listing), and 2 species that are significant to the Cumberland Plateau ecoregion. One Virginia spirea locations and roughly 30 Cumberland rosemary occurrences are known to exist along Clear Creek.

DADDYS CREEK

This segment contains 24 alluvial/cobble bars, many of which contain the globally imperiled river scour prairie community type. Daddys Creek provides habitat for approximately 29 rare plant species, including 6 species of national significance (2 are federally listed and 1 is under consideration for federal listing), and 2 species that are significant to the Cumberland Plateau ecoregion. One Virginia spirea locations and roughly 20 Cumberland rosemary occurrences are known to exist along Daddys Creek.

EMORY RIVER

This segment contains 4 alluvial/cobble bars, many of which contain the globally imperiled river scour prairie community type. The Emory River provides habitat for approximately 29 rare plant species, including 6 species of national significance (2 are federally listed and 1 is under consideration for federal listing), and 2 species that are significant to the Cumberland Plateau ecoregion. Roughly 5 Cumberland rosemary occurrences are known to exist along the Emory River within the park.

OBED RIVER

The Obed River contains approximately 72 alluvial/cobble bars that occupy both sides of the river. Numerous rock falls create waterfalls and rapids such as Widow Maker, 90 Right 90 Left, Omigod, Rock Garden, and Submarine Falls. Scenic cliff lines are visible throughout the river segment, growing more numerous and spectacular in the section above the confluence with Clear Creek and above Alley Ford. Other unique geologic features include the Obed Chimney and Point Arch.

CLEAR CREEK

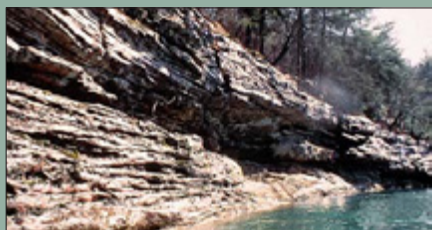
Clear Creek contains approximately 82 alluvial/cobble bars that occupy both sides of the river. Numerous rock falls create waterfalls and rapids such as Double Drop Falls, Jack Rock Falls, The Grunch, Lilly Rapids, and Camel Rock Rapids, Wootten's Folley and Focus Falls. Scenic cliff lines are visible throughout the river segment, growing more numerous and spectacular near the downstream end of the segment. Other unique geologic features include two unnamed arches.

DADDYS CREEK

The Daddys Creek Segment contains approximately 24 alluvial/cobble bars that occupy both sides of the river. Numerous rock falls create waterfalls and rapids. Scenic cliff lines are visible throughout the river segment. Devils Breakfast Table is the most well known unique geologic feature in this segment.

EMORY RIVER

The Emory River Segment contains approximately four alluvial/cobble bars that occupy both sides of the river. Numerous rock falls create rapids. Scenic cliff lines are visible throughout the river segment. The Emory Chimney is an example of a scenic unique geologic feature in this segment.



GEOLOGICAL VALUES

The Obed Wild and Scenic River is located on the Cumberland Plateau Physiographic Province. The terrain is generally flat to rolling tableland, deeply dissected by steep-walled gorges. Surface geology adjacent to the wild and scenic river consists primarily of the Crab Orchard Mountain formation, composed of conglomerate, sandstones, siltstones, shales, and coal. The spectacular gorges of the Obed River



system were formed when surface drainages eroded through the Rockcastle conglomerate to contact the underlying Vandever shale formation, which is more susceptible to erosion, thus producing many unique scenic features, including rock shelters, arches, and chimneys. The rivers are geomorphically active, continually moving large amounts of sediment as they erode cliffs, slopes, and streambeds. Sediment transport is important in the creation and maintenance of the alluvial/cobble bars found within the river channels, which support rare plant communities.



WILDLIFE VALUES

The Obed Wild and Scenic River contains exemplary habitat for five imperiled wildlife species in the southeast region. The park provides nesting and foraging habitat for one of the largest concentrations of the rare Swainson's warbler. The abundant cliff lines provide essential roosting habitat for eastern



small-footed bat populations and Rafinesque's big-eared bat populations, in close proximity to foraging habitat along the river. Both of these bat species are under consideration for federal listing. Clean, well-oxygenated waters of small tributaries to the Obed River provide optimal habitat for the Black Mountain salamander and the Cumberland dusky salamander. The



Cumberland dusky salamander is endemic to the Cumberland Plateau. The Obed and its tributaries are important to the sustainability of these species, as well as to that of the river otter, which is recovering from being extirpated from the region in the late 1800s.

All four river segments contain cliff lines that provide potential roosting and foraging habitat for the rare eastern small-footed and Rafinesque's big-eared bats, as well as exemplary contiguous stretches of undisturbed habitat for river otters.



OBED RIVER

The Swainson's warbler has been sighted along the Obed River in 3 locations. The warbler is commonly found in riparian habitat in dense rhododendron stands along the Obed River; this 25-mile segment of river contains confirmed nesting habitat as well as abundant potential habitat for the warbler. This river segment also contains confirmed habitat for the rare Cumberland dusky salamander and potential habitat for the rare Black Mountain salamander.

CLEAR CREEK

The Swainson's warbler has been sighted along Clear Creek in 3 locations. The warbler is found in riparian habitat in dense rhododendron stands along Clear Creek; this segment contains potential habitat for the warbler. The segment contains cliff lines that provide actual roosting and foraging habitat for the rare eastern small-footed and Rafinesque's big-eared bats. Clear Creek contains confirmed habitat for the rare Cumberland dusky and Black Mountain salamanders.

DADDYS CREEK

This segment contains potential habitat for the Swainson's warbler because dense rhododendron stands are common. Daddys Creek contains potential habitat for the rare Cumberland dusky and Black Mountain salamanders, as well.

EMORY RIVER

This segment contains potential habitat for the rare and exemplary Swainson's warbler because dense rhododendron stands are commonly found in the river corridor. Emory River contains potential habitat for the rare Cumberland dusky and Black Mountain salamanders, as well.

OBED RIVER

Fish and aquatic resources of the Obed River segment are considered to be outstandingly remarkable for its entire length. The Obed River supports a diverse cool water fishery that includes both nongame native species indicative of high quality conditions and native recreational sport fisheries, including the Cumberland Plateau strain of muskellunge. The entire reach of the Obed River within the park is designated critical habitat for spotfin chub. In addition, the Obed River supports 8 species of native freshwater mussels and the Obed River crayfish.

The Obed River watershed includes both undeveloped forest and agrarian lands but also drains municipalities within and adjacent to the City of Crossville. At the time of designation, the upper reaches of the Obed River were impaired, primarily by nutrient enrichment and bacteriological contamination. The most significant trend identified by recent monitoring efforts is the substantial improvement in water quality at the upper reaches of the Obed River. The most notable contribution to improved water quality can be attributed to the construction of a new sewage treatment plant by the city of Crossville. These improvements in water quality since the time of its designation as a wild and scenic river are reflected in improved conditions for the river's outstandingly remarkable fish and aquatic resources.

CLEAR CREEK

Fish and aquatic resources of Clear Creek are considered to be outstandingly remarkable for its entire length. Clear Creek drains a largely undeveloped forested and agrarian watershed that is characterized by high water quality, low sediment loading, and near optimal aquatic habitat. Clear Creek supports a diverse cool water fishery that includes both nongame native species indicative of high quality conditions and native recreational sport fisheries, including the Cumberland Plateau strain of muskellunge. The entire reach of Clear Creek inside the park is designated critical habitat for spotfin chub. In addition, the entire reach supports 2

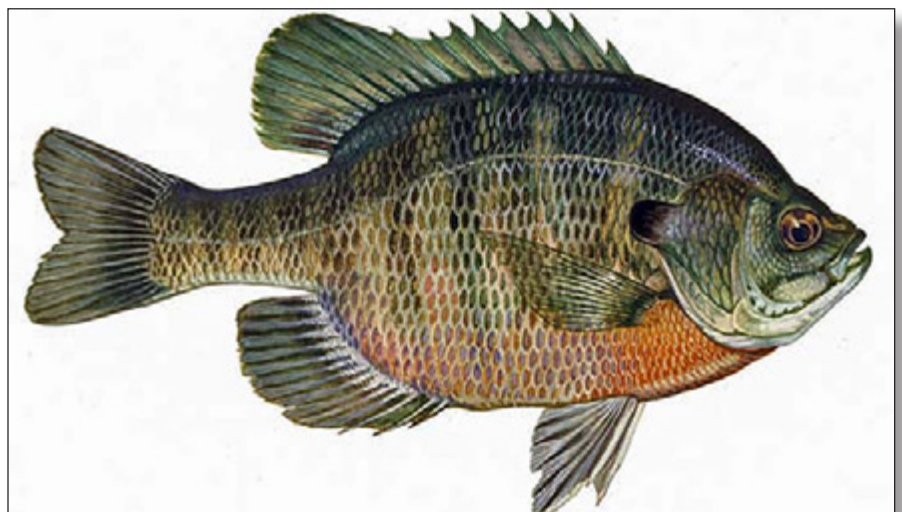
FISH AND OTHER AQUATIC VALUES

The Obed Wild and Scenic River system provides some of the most extensive and contiguous remnant habitat for the Cumberlandian aquatic species assemblage. It also represents an ecological remnant of a major free-flowing tributary to the upper Tennessee River, and it provides high quality habitat to 52 native fish species, 8 freshwater



mussels, and numerous other aquatic species. Among these are at least 5 imperiled fish species: the federally listed spotfin chub, tangerine darter, olive darter, ashy darter, and native muskellunge; the federally listed purple bean mussel; and other vulnerable species including the endemic Obed River crayfish, the Emory River crayfish, and the Eastern hellbender. The hellbender was found in the Obed Wild and Scenic River as recently as 1997; this species has been deemed by the state of Tennessee to be in need of management. Other state-listed species deemed to be in need of management include the tangerine and olive darters. The ashy darter is state-listed as threatened. The entire Obed Wild and Scenic River system has been designated as critical habitat for the spotfin chub under the Endangered Species Act.

The unique biological characteristics of the Obed system arise from a combination of low ionic water chemistry, low sediment loads, steep and moderate gradients, diverse micro-habitats, and geographic setting. Water quality of the Obed remains among the highest in Tennessee



and reflects unique chemical characteristics influenced by bedrock of the Cumberland Plateau. Bedrock geology is also reflected by variable stream gradients. Where streams flow over resistant sandstone, gradients may be gentle; where streams have breached through resistant sandstones into underlying, more easily erodible shales, steeper gradients occur.

All of these factors contribute to the regional significance of the Obed River system. The area remains one of the most biologically diverse aquatic systems in the Tennessee River drainage and is unique within the Cumberland Plateau ecoregion.



species of native freshwater mussels (Cumberland Bean and Alabama Lampmussel) and may support the Obed River crayfish.

DADDYS CREEK

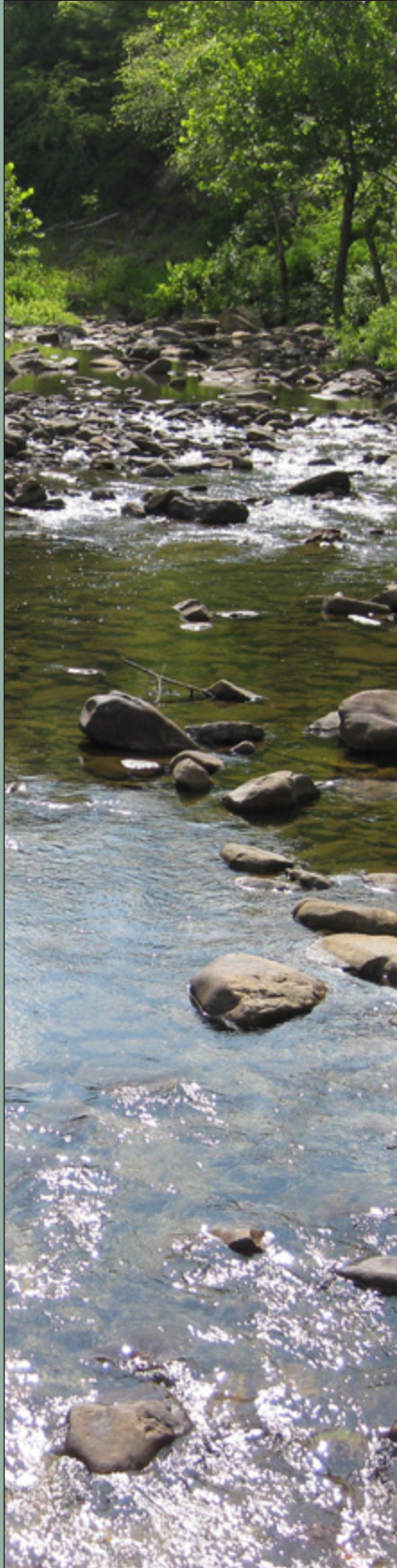
Fish and aquatic resources of Daddys Creek are considered to be outstandingly remarkable for its entire length. Daddys Creek is currently characterized by high water quality and low sediment load, which supports a moderately diverse cool water fishery that includes both nongame native species indicative of high quality conditions and native recreational sport fisheries, including the Cumberland Plateau strain of muskellunge. The entire reach of Daddys Creek inside the park is designated critical habitat for spotfin chub. In addition, the entire reach supports 3 species of native freshwater mussels and the Obed River crayfish.

The Daddys Creek watershed includes both undeveloped forest and agrarian lands but also drains an area adjacent to Fairfield Glade that has been developed as a retirement community and golf resort. A number of relatively large impoundments have been constructed in association with these developments, some of which harbor Hydrilla, an invasive exotic aquatic plant species that has become established throughout Daddys Creek and into downstream portions of the Obed River below the Daddys Creek confluence—threatening to degrade these outstandingly remarkable aquatic communities.

EMORY RIVER

The entire reach supports 3 species of native freshwater mussels and the Obed River crayfish.





FREE-FLOWING CONDITION

According to the Wild and Scenic Rivers Act, “free-flowing” means “flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.” However, the act also states that “the existence of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion provided that this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.”

The Obed Wild and Scenic River system is a high quality rainfall-runoff dominated watershed characterized by extremes in stream flow, both in response to seasonal rainfall variation and individual storms. The Obed River and its designated tributaries, Daddys Creek and Clear Creek, are located atop the Cumberland Plateau physiographic province in Tennessee. Thin soils and low-porosity bedrock shales of the plateau promote rapid overland runoff and inhibit groundwater infiltration. As a result, streams respond rapidly to large-scale precipitation events and short-term intense rainfall (such as from thunderstorms), but stream flow is poorly sustained during long periods of low rainfall.

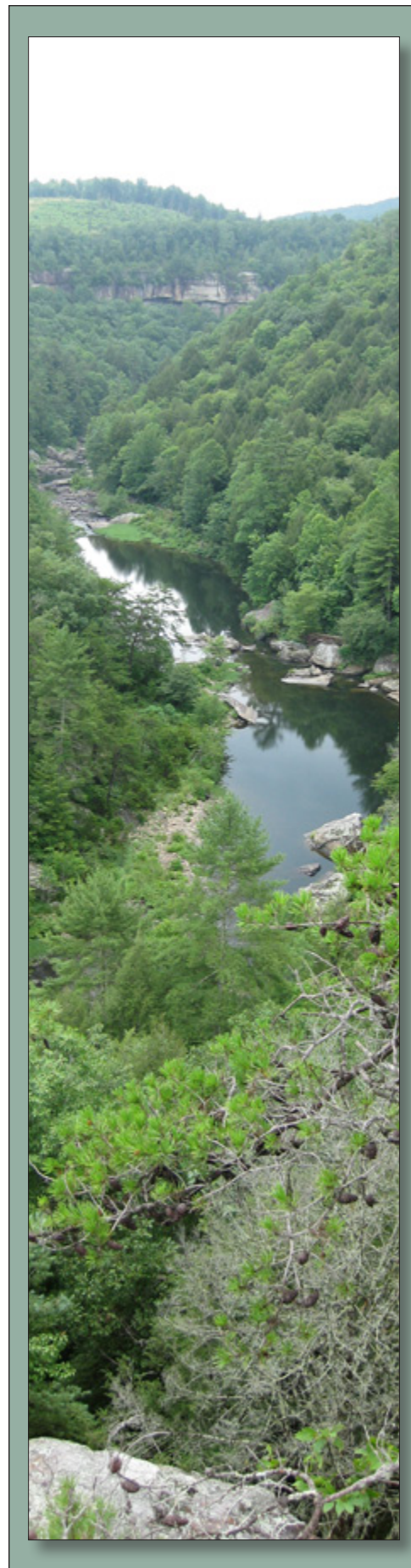
The Obed River and its tributaries respond dramatically to significant precipitation events with rapidly rising waters and scouring flows that are an important component of aquatic and riparian habitats. In contrast, the system is also characterized by low flow extremes, both in response to normal seasonal conditions and drought. These factors render water resources extremely susceptible to impacts associated with increased water demand, because powerful, scouring floods are vital to the system. Although the region typically receives abundant



annual rainfall, the Obed River system is every bit as susceptible to increased water demand as are the streams of the arid west during late summer and fall months.

Frequent rainfall fronts, seasonal thunderstorms, and episodic intense tropical low pressure systems producing sustained bank full conditions, moderate scour events, and catastrophic flood pulses are important mechanisms influencing the Obed's fluvial geomorphology. Powerful scouring floods associated with these events are critical to creating and maintaining diverse riparian habitats, including the globally significant Cumberlandian cobble bars.

There are no impoundments within the designated boundary of the Obed Wild and Scenic River system. Within the headwaters and above the designated section of the Obed there were 2,454 impoundments as of 2002 in the 520 square-mile watershed. These impoundments occupy approximately 1% of surface area and control more than 10% of the surface drainage of the watershed. Land use activities upstream and adjacent to the Obed Wild and Scenic River influence and may threaten the integrity of park water and riparian resources. Upstream urban and suburban growth and associated increase in water demand, wastewater discharge, an increase in recreational and water supply impoundments, and interbasin transfer are key management concerns. To date, most of the larger impoundments of concern are concentrated in the Daddys Creek and Obed River headwaters near the Interstate 40 corridor. Clear Creek, a more agrarian watershed, has been less affected thus far, but improvements to U.S. Route 27 between I-40 and the Kentucky state line will open the Clear Creek watershed to development.



WATER QUALITY



Under undisturbed conditions, water chemistry in the Obed watershed ranges from extremely dilute, low ionic (i.e., soft) water in low order headwater drainages to moderately soft waters in the larger streams. The primary natural influence to water quality of the Obed system is geology. Sandstones such as the Rockcastle conglomerate are highly resistant to physical and chemical weathering, and streams that drain predominately sandstones are poorly buffered and are moderately acidic to circumneutral. This lack of buffering capacity renders Obed waters highly susceptible to degradation by acidic input, and park waters have been adversely affected by acid mine drainage from unregulated mining of the Rex and Sewanee mines prior to the Surface Mining Control and Reclamation Act and mining of other coal seams.

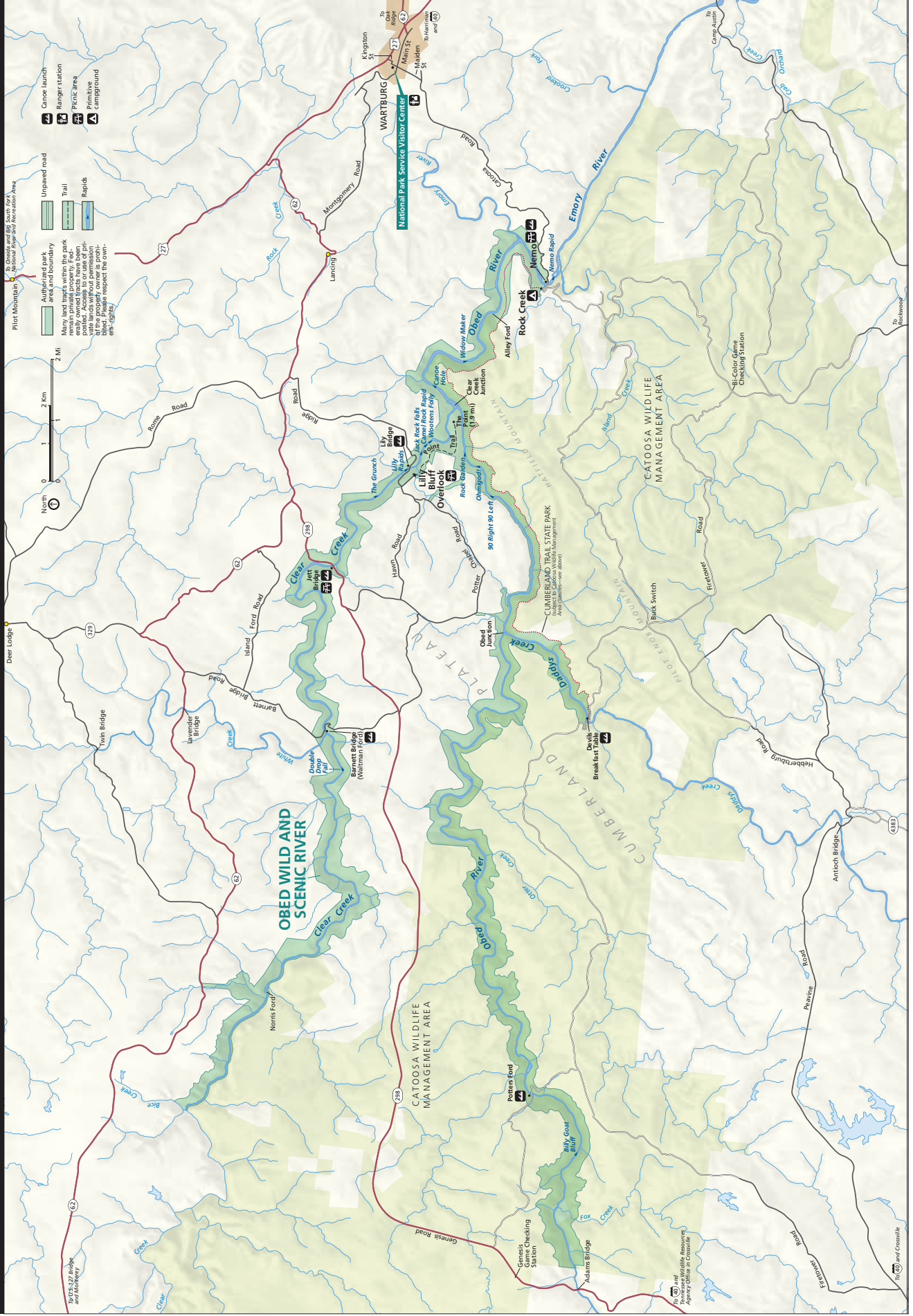
At the time of its designation as a Wild and Scenic River, waters of the Obed and its designated tributaries included waters indicative of both impaired conditions and near pristine conditions. The Clear Creek watershed drains largely rural lands in the northern portion of the watershed and is buffered from impacts by forested lands within the Catoosa Wildlife Management Area. Water quality of Daddys Creek at the time of designation also indicated high quality conditions. In contrast, various water resource investigations indicated that the upper reaches of designated stream reaches of the Obed River were impaired, primarily by nutrient enrichment and bacteriological contamination. Since designation, water quality has generally improved in the Obed system.

The Obed River within the designated portion of the Wild and Scenic River system has been designated by the Environmental Protection Agency (EPA) and the State of Tennessee as an Outstanding Natural Resource Water where no water quality degradation is allowed. All other waters within the Obed Wild and Scenic River system are classified as Exemplary Waters by EPA and the state, with the exception of a 303(d) listed 1.4 mile section of Clear Creek which was subject to an accidental oil spill in 2002.



OBED WILD AND SCENIC RIVER TENNESSEE

National Park Service
U.S. Department of the Interior



O B E D W I L D A N D S C E N I C R I V E R
O U T S T A N D I N G L Y R E M A R K A B L E V A L U E S



N A T I O N A L P A R K S E R V I C E
U . S . D E P A R T M E N T O F T H E I N T E R I O R