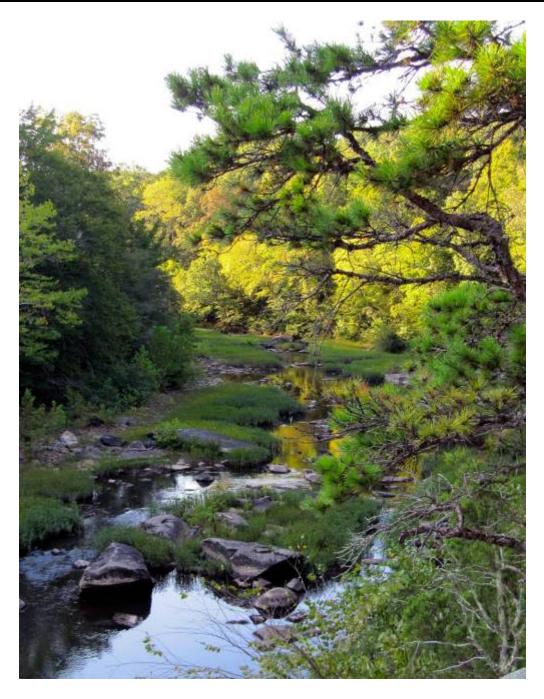
Meherrin Scenic River Report

Mecklenburg County and Lunenburg County



Prepared By
Department of Conservation and Recreation
Division of Planning and Recreation Resources

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I. REASON FOR THE STUDY

The local governments of both Lunenburg County and Mecklenburg County requested that the Virginia Department of Conservation and Recreation (DCR) evaluate the segment of the Meherrin River which serves as the boundary between the counties, for possible Scenic River designation. The limits of the study would be from the confluence of the North Meherrin and the South Meherrin on the west to the Brunswick County line on the east.

The Scenic Rivers Act, found in Title 10.1, Chapter 4, §§ 10.1-400 through 10.1-418.1 of the *Code of Virginia*, was enacted in 1970 as a means of recognizing the Commonwealth's scenic rivers and their immediate environs. In order to be eligible for Scenic River designation, a river, or section thereof, must contain substantial natural, scenic, recreational and historical attributes. At the request of the locality(s), DCR evaluates a specified river segment and writes a report documenting these attributes. Since the passage of the Act, 28 river segments, totaling more than 656 miles, have received Scenic River designation from the General Assembly. A list of those rivers can be found on the <u>Virginia Scenic Rivers</u> website, http://dcr.cache.vi.virginia.gov/recreational_planning/documents/srlist.pdf,

A. Benefits of Designation

The Virginia Scenic River designation accomplishes the following:

- requires the Federal Energy Commission (FERC) to consider the impact of proposed hydropower or related projects on a designated Scenic River using the Scenic River report developed in the qualification process,
- requires all state agencies to consider visual, natural and recreational values of a Scenic River in their planning and permitting process (§10.1-402) http://leg1.state.va.us/cgibin/legp504.exe?000+cod+10.1-402.
- gives riparian landowners, local citizens, and local governments a greater voice in the planning and implementation of federal and state projects that might affect the river (§10.1-406.1), http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+10.1-406.1.
- requires authorization by the General Assembly for the construction, operation and/or maintenance of any structure, such as a dam, that will impede the natural flow of a Scenic River (§10.1-407), https://leg1.state.va.us/cgi-bin/legp504.exe000+cod+10.1-407, and
- allows riparian landowners to continue using their land as they did before designation, except for the §10.1-407 provision noted above (§10.1-408), http://leg1.state.va.us/cgibin/legp504.exe?000+cod+10.1-408.

B. Designation Process

Scenic river evaluations involve data collection from state agencies, map surveys, related literature reviews and a field study to validate existing land use information and rank the river according to relative uniqueness or quality. Evaluations for each river or river segment take into consideration thirteen (13) different established factors or criteria, which provide a uniform gauge for all river studies. Field evaluations include physically canoeing or boating the stretch of river being evaluated and rating the characteristics of the resource. The evaluation criteria are: River Corridor Vegetation, Riverbed and/or River Flow Modifications, Human

Development of Visual Corridor, Historic Features, Landscape, Quality of Fishery, Special Natural Fauna, Water Quality, Parallel Roads, Crossings, Special Features Affecting River Aesthetics, Public Recreational Access and Land Conservation. A summary of the evaluation results is included in Section IV of this report, Environmental Analysis.

The Act instructs the DCR to conduct "studies of rivers or sections of rivers to be considered for designation" and to "recommend to the Governor and to the General Assembly rivers or sections thereof to be considered for designation as Scenic Rivers." This report fulfills the statutory directive.

II. SUMMARY AND FINDINGS

At the request of Lunenburg County and Mecklenburg County, which share their Meherrin River boundary, DCR conducted a Scenic River evaluation of the Meherrin River from the confluence of the North Meherrin and the South Meherrin to the Brunswick County line.

This report covers DCR's findings during the study of the aforementioned Meherrin River segment. The DCR evaluation of the Meherrin River corridor determines that the 17.8-mile section from the confluence of the North Meherrin and South Meherrin to the Brunswick County line, is eligible for inclusion in the Virginia Scenic Rivers System, and its designation as a Virginia Scenic River is recommended. It is further recommended that DCR be the administering agency.

It is important to note that this Scenic River designation will connect two currently designated Scenic River sections of the Meherrin. The 17.8 mile study segment begins at the terminus of the North Meherrin Scenic River and ends at the Brunswick County Line, where the Meherrin is again designated as Scenic River until the Greenville County line. (see Corridor Map - Image 1)

In addition to connecting the Meherrin Scenic River system, this segment will both support and benefit from the Meherrin River Canoe Trail and the Tobacco Heritage Trail. More information on these trails is provided in Section IV – L, of this report -- Public Recreational Access.

III. CORRIDOR STUDY MAP

The Meherrin River along the Lunenburg County and Mecklenburg County border, generally flows east until it permanently enters Brunswick County. This report will discuss the river segment proposed for designation; i.e, from the confluence of the North Meherrin and the South Meherrin Rivers until the river flows into Brunswick County, a distance of approximately 17.8 miles (Image 1).

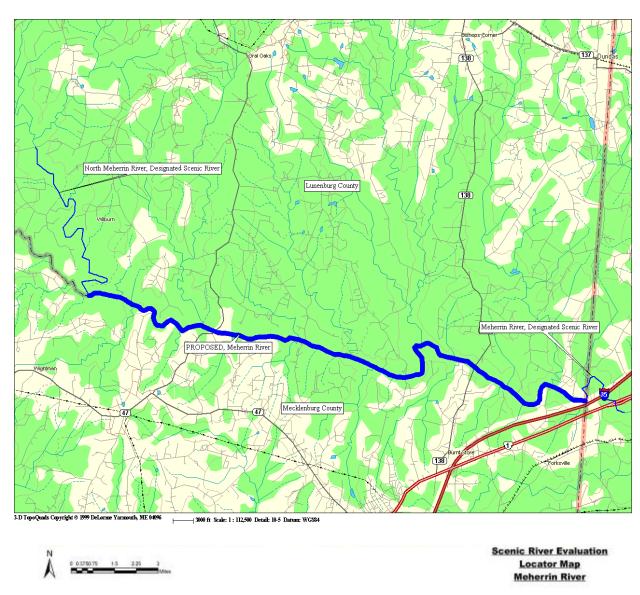


Image 1: Corridor Study Map - Note the connection between two currently scenic river segments

IV. Environmental Analysis

In order to determine whether the proposed segment of the Meherrin River was eligible for scenic river designation, personnel from the Division of Planning and Recreation Resources of the Department of Conservation and Recreation (DCR) and from the Community Design Assistance Center (CDAC) of Virginia Tech conducted an analysis of the river corridor. On September 14 and 15, 2012, staff, local government officials, and interested citizens conducted a field investigation. The following is a description of the qualities and conditions of the resource that makes it a candidate for the Virginia Scenic Rivers Program.

A. River Corridor Vegetation

The Meherrin River winds through private tracks of land. A good portion of this land is timberland and has ample forested buffers, which provide a sense of isolation and remoteness. The forested corridor is accented by regular rock formations. The banks of the Meherrin show evidence of being incised; however, vegetation is prevalent and mature. Understory and stream bank vegetation are well established and tall mature trees stand straight, providing a towering riparian canopy. Because the banks are secure, few trees yield to the river, so overhanging vegetation or downed trees were not routinely observed during the study (Image 2).



Image 2: Typical corridor vegetation

The land along the river is primarily utilized for timber resources although some areas are open fields used for grazing, growing hay, or for row crops. Most of the river has a forested riparian buffer of 100'

or more between agricultural plantings and the water's edge, which protects water quality and aquatic habitats. The aerial analysis below was conducted to verify and adequately measure thinning buffers less than 100' (in red) noted during the field study (Images 3-5).



Image 3: N. Meherrin - Saffolds Bridge



Image 4: Saffolds Bridge - Hawthorn/High Bridge



Image 5: Hawthorn/High Bridge to Brunswick County Line

This section of the Meherrin is host to Basic Mesic Forests, registered as a globally and sub-nationally important natural heritage resource (see Section IV, G – Flora/Fauna). Basic Mesic Forests represent intermediate and basic, mesic, mixed hardwood forests of the Piedmont from south-central Virginia to south Georgia. Stands occupy mesic sites with soils of moderately high to high base status, typically sites including ravines and north or east-facing, river-fronting slopes. These closed-canopy forests are dominated by Fagus grandifolia and Quercus rubra with Liriodendron tulipifera, Quercus alba, Carya ovata and Fraxinus Americana. Threats to this natural community include timber harvest, erosion, fragmentation, and the conversion of adjacent areas to planted pine stands.

The first 3-miles of the Meherrin offer the visitor interesting scenery through a diverse combination of rock formations and vegetative density (Image 6).



Image 6: "Big Rock" (center of photo) is a landmark well-known by locals

B. Riverbed and/or River Flow Modifications

The river section studied is a free flowing river with few natural or manmade obstructions. The river runs straight for extended lengths, interrupted by steep topography and rock formations, forming easy bends in the river. The riverbed is alluvial and is primarily a mix of sand and light gravel. Deeper, slower moving sections of the river hold finer sediments of silt and clay. Because the study occurred in extremely low water conditions, it is expected that the in-stream and stream-side rock formations would foster riffles, chutes, small rapids and eddy conditions in higher water.

An impoundment at Whittles Mill Dam forms the only major obstruction to boaters. Paddlers hoping to travel along the entire length of the river section must portage around the dam. A put-in/take-out ramp

on the south side of the river, before the dam is clearly marked. Paddlers continue their trip from the beach downstream from the spillway (Image 7).



Image 7: Whittles Mill Dam is a central feature to a 34-acre park.

A smaller low-water and natural obstruction occurs just downstream of Union Mill bridge. This natural rock shelf runs perpendicular to flow and could easily be missed under higher water levels and is likely the natural foundation of the Union Mill millpond (Image 8).



Image 8: Note the partial boring at bottom-edge of photo that might have served as a dam brace

C. Human Development of Visual Corridor

The most obvious development along the corridor is agricultural and more specifically, timber and livestock operations. The visual indicators of this development are thinning to non-existent vegetative buffers.

The Meherrin River corridor contains few signs of housing or industrial development. Several houses and cabins may be seen along the route, but they are few and far between and are often veiled by foliage. The siting of these structures, well away from flood zones, high on banks and behind vegetative buffers does not significantly compromise the sense of isolation on the water or the aesthetic quality of the corridor (Image 9).



Image 9: Typical structure along the study segment

Whittle's Mill Park, with its industrial development remains, provides placemaking for the region with historical, recreational, and aesthetic assets important to the overall scenic quality of the Meherrin.

An abandoned sand mining outfit just before Union Mill bridge is barely recognizable because a new growth stand of sycamore has become established along the bank and hides abandoned heavy machinery from view. The most noticeable remains are the concrete bulkheads that likely formed the working edge of the sand mining outfit (Image 10 – next page).



Image 10: Old sand mine location

Other vestiges of development, such as mill-house and bridge crossing foundations, remain along the corridor. Similar to Whittle's Mill, these relics of the past fall into the category of interesting and intermittent and do not negatively impact the visual corridor (Image 11).



Image 11: Old Bridge footing at confluence of Flat Rock Creek

D. Historic Features

The Meherrin River features locally significant historic sites. And as the Meherrin River is sometimes referred to as *Southside Virginia's Hidden River*, so too does it seem the historical assets of the corridor are not recognized by historic registries. The most notable, Whittle's Mill features a stone dam (circa 1805) and is the backdrop to the old mill pond that has attracted locals for generations (see Section L - Public Recreation Access).

In the grist mills of the region, like Whittle's Mill, one must recognize the geologic history that physically underpinned the mill pond dams, and therefore made the prospect of milling most feasible. These geologic features are historic in this regard and have remained virtually unchanged throughout human history. Clearly visible and adding interest to the aesthetic quality of the river, these rocks are some of the oldest and hardest on earth (Image 12).



Image 12: The rocks at Whittle's Mill are crushed into a series of tight folds and offset by a fault (red arrow). This folding occurred some 300 million years ago when the Northwest margin of Africa collided with North America to form one of the great mountain ranges of earth history. These visible rocks are the roots of this ancient mountain range, long since eroded into rolling hills and serve as the physical foundation for such human enterprises as grist mills.

Image and information courtesy of http://www.whittlesmill.org
Please see acknowledgments at the end of this report.

E. Landscape

The Meherrin River originates on the Lunenburg-Mecklenburg County line in Virginia and flows southeasterly through the coastal piedmont into Emporia Reservoir. From the base of the Emporia Dam, the Meherrin River flows again south east into North Carolina where it merges with the Chowan River. This particular study evaluated the section of the Meherrin River, from the confluence of the North Meherrin and South Meherrin to the Brunswick County line.

The Meherrin River basin in Virginia is primarily agricultural and mixed hardwood-pine forest. Running through the large, level Piedmont Plateau, the Meherrin is characterized by meandering passages periodically accented with rock outcroppings and rock ledges.

F. Quality of Fishery

The Meherrin River above the Emporia Reservoir has a diverse fish community. The river supports good populations of smallmouth and largemouth bass. There are also good numbers of bluegill, redbreast sunfish, redear sunfish, and warmouth. There is a limited fishery of yellow perch, black crappie, channel catfish, longnose gar, and bowfin.

The Meherrin River also has a seasonal migration of spawning American and hickory shad, along with a limited run of "river herring"; i.e., alewives and blueback herring. American shad are listed as a Tier IV species under the Virginia Wildlife Action Plan (WAP). Currently, the river herring are protected by the Atlantic States Marine Fisheries Council and the Virginia Marine Resources Commission.

The Meherrin River also is home to one federally endangered fish species, the Roanoke Logperch. It is also home to Roanoke Bass, a Tier II fish species on Virginia's WAP.

Fishing for largemouth and smallmouth bass is fair on the Meherrin River. Sunfish fishing is also fair when compared to other Piedmont rivers in the Commonwealth.

G. Flora/Fauna

The Natural Heritage Program of the Department of Conservation and Recreation (DCR) identifies areas that have a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. This section of the Meherrin River contains two state and globally significant natural heritage resources that occur at three locations along the study segment:

1. Fusconaia masoni, Atlantic Pigtoe, ranked G2[Global – Imperiled Status]/S2[Subnational - Imperiled Status]*

The western-most end of the Meherrin River study segment has been designated by the Virginia Department of Game and Inland Fisheries (VDGIF) as a "Threatened and Endangered Species Water". The species associated with this T&E Water is the Atlantic pigtoe (*Fusconaia masoni*).

2. *Lampsilis cariosa*, Yellow lampmussel, ranked G3G4[Global – Vulnerable-to-Apparently Secure Status]/S2[Subnational - Imperiled Status]*

The Yellow lampmussel ranges from Nova Scotia to Georgia in Atlantic slope drainages (NatureServe, 2009). In Virginia, it is recorded from the Roanoke, Chowan, James, York, and Potomac drainages. It is found in larger streams and rivers where good currents exist over sand and gravel substrates and in small creeks and ponds (Johnson, 1970).

3. Basic Mesic Forest, ranked G3G4[Global – Vulnerable-to-Apparently Secure Status]/S2[Subnational - Imperiled Status]*

*Note: See ranking definitions in the Appendix.

These and other small invertebrate shellfish like them are important protein sources for small mammals. A family of river otters were observed during the field evaluation; small piles of cleaned

shells were observed on streamside rocks and on sand bars.

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality (see Section H – Water Quality), good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, dredging, and the invasion of exotic mollusk species.

Additional expected species of some frequency along the river include deer, turkey, rabbit and quail. Other species expected along the corridor include diverse populations of small mammals, amphibians, reptiles and insects. Varieties of bird species observed in the corridor include a moderate level of water-associated fowl, such as blue heron, wood duck and kingfishers.

H. Water Quality

Water levels during the field investigation were extremely low and the general impression due to these low water conditions was that the water was less turbid than is typically experienced. Below waterline river features could easily be seen up to a depth of 3 feet. Healthy vegetative buffers contribute to a moderate water clarity for most of the activities related to the river.

The Meherrin River fully supports aquatic life, wildlife, and recreational uses. Data from 2003-08 water quality surveys provided by the Virginia Department of Environmental Quality rates most of the corridor water quality within the study segment as unimpaired.

Consumer trash was rare at the beginning of the study corridor; however, further downstream, the number of visible auto tires steadily increased. This was likely due to low water conditions during the evaluation. (Image 13).



age 13: Tires represented the majority of observed consumer trash

I. Parallel Roads

For the entire length of the study corridor, no parallel roads were predetermined through roadway map analysis prior to field study nor was any evidence of parallel roads observed during the field study.

J. Crossings

Crossings consist of roads, railroads, pipelines and power/communication lines; most cross perpendicular to the Meherrin, thereby having limited visual impact on the river experience. In nearly every case, roadway and wire crossings are concurrent, and therefore, the visual proximity of two crossings is witnessed as one occurrence.

K. Special Features Affecting River Aesthetics

The Meherrin River under consideration offers an isolated experience defined by remoteness. Besides the occasional crossing, evidence of human activity is limited to modestly sized and appropriately sited private interventions that are few and far between. This is an intimate corridor with ample canopy which contributes to a high percentage of foreground and middle ground views.

The generous buffers and stream canopy would be expected to offer a moderate to high wildlife experience that would not only be seen, but heard — especially for paddlers quietly floating the corridor. However, because of the low water conditions at the time of evaluation, the accompanying noise of an on-foot study limited observations of local fauna.

The Meherrin also boasts a variety of instream and streamside rock formations. At the beginning of the study section to three miles downstream, instream and streamside rock formations are regular and impressive. The visual diversity of this area, with rocks set against soft vegetation, provides a memorable and uniquely aesthetic experience (Image 14).



age 14: The Meherrin offers areas of high visual interest

Rock formations throughout the remainder of the study corridor become less regular, and instead punctuate long and straight river sections by turning the river course into easy "S" bends. These meanders often occur in steep topography, changing the view from middle to more intimate foreground views (Image 15).



Image 16: Exposed rock formations along the Meherrin offer interesting foreground views

Several small streams flow into the Meherrin from the surrounding landscape and provide additional points of interest (Image 16).



Image 15: This feeder stream featured a small waterfall one can hear from the Meherrin

L. Public Recreational Access

The Whittle's Mill Park is a 34 acre public facility owned and maintained by the Town of South Hill. The area provides public access for a variety of recreational activities including paddle sports, swimming and tubing. Below the dam, an ample beach provides sunbathing and swimming "backdropped" by the dam spillway (Image 17). The park is also known locally as a great area for fishing or camping.



Image 17: Courtacy http://www.whittlesmill.org

The close proximity of both historical and recreational resources on the Meherrin cross promotes both the Tobacco Heritage Trail and Virginia Blueway Trail systems. Put-in/take-out- facilities for canoe and kayak enthusiasts traveling the Blueway Trail are provided above the dam (Image 18).



Image 18: Put-in/Take-out of Blueway Trail

The Blueway Project plan shows several potential public access points along the along the Meherrin at the Hawthorn/High Bridge and Union Mill Bridge crossings. (Image 19).

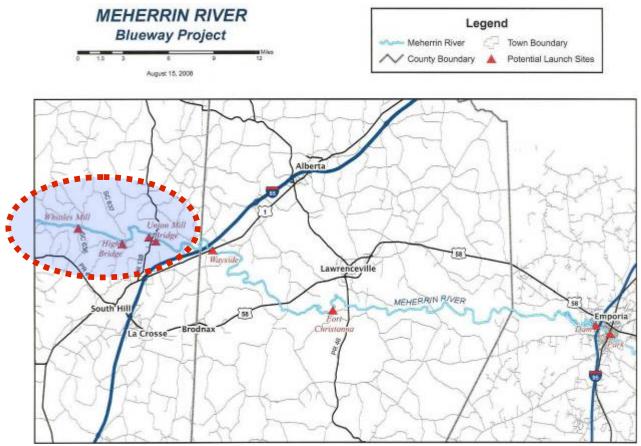


Image 19: Blueway Project Planning Map showing potential Put-in/Take-out sites within scenic study area.

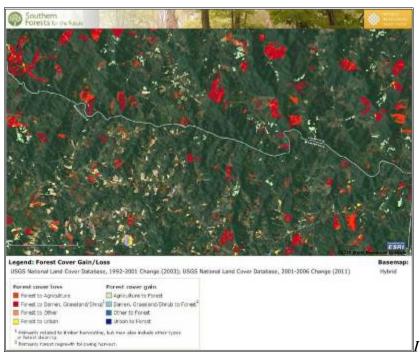
The river allows for wet season recreational paddling. During dry seasons, navigation is hindered and short in-stream portages are common in shallow sections. Paddlers can obtain access at public bridge crossings and by permission of private land holders.

M. Land Conservation

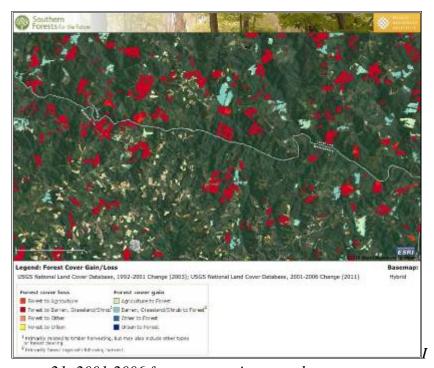
At the publication date of this report, there is only one Department of Forestry held easement along the study corridor. Please see Section VII - Conservation Plan, later in this report for conservation strategies.

V. LAND USE AND OWNERSHIP

Lands in the study corridor are primarily in private ownership and are primarily forested or used as pasture for livestock. The scope and type of forest conversion is displayed below (Images 20-21).



mage 20: 1992-2001 forest conversion record



mage 21: 2001-2006 forest conversion record

Most of the land use, other than forested, is not visible due to a low point of view and high river banks. A review of satellite and aerial imagery demonstrates a variety of forest resource management practices where previously timbered lands have respected the river edge by maintaining vegetative buffers. It also appears through aerial imagery analysis that most livestock operations also respect the river edge. However, encroachment does exist. One livestock area, on the north side of the river downstream from Saffolds Bridge, borders the river with minimal vegetative buffers (Image 22).



Image 22: Buffers <100' have been shown to have little effect in moderating or filtering run off

VI. CONCLUSIONS AND RECOMMENDATIONS

The Department of Conservation and Recreation concludes that the Meherrin River on the border of Lunenburg and Mecklenburg Counties from the confluence of the North Meherrin and the South Meherrin to the Brunswick County line, a distance of approximately 17.8 miles, is hereby eligible to be a component of the Virginia Scenic River System. Scenic River designation is warranted because of the aesthetic and recreational qualities of the river section, its environs, the unique flora and fauna, and its historic setting.

Flowing through largely agricultural and forested land, this river segment possesses a number of interesting aesthetic features including instream and streamside rock formations, mature forests, diverse vegetation, flowing feeder streams, and a visible geological record that contributes to much of the cultural history of the watershed. Its meandering alignment is typical for the Piedmont Plateau, and the Meherrin provides an ample canopy that promotes interesting foreground views and offers a sense of remoteness and isolation. The adjacent landscape has few man-made features. The Meherrin River is a well rounded river corridor with consistent and extensive vegetative buffers that sustain productive aquatic and avian habitats.

The natural attributes contributing to the Meherrin's scenic river value are also supported by parallel recreational and historical initiatives in the region; i.e., in recreation, the Meherrin River Canoe Trail, and in recreation and agricultural history, the Tobacco Heritage Trail. Both overlap this proposed scenic designation and both contribute to and benefit from this association.

Considering all aspects of the Meherrin River as described in this report, DCR recommends it as a good candidate for Virginia Scenic River designation.

It is recommended that:

- 1. The Meherrin River on the border of Lunenburg and Mecklenburg Counties from the confluence with the North Meherrin Scenic River and the South Meherrin to the Brunswick County line, a distance of approximately 17.8 miles, be recommended for Virginia Scenic River designation;
- 2. The Department of Conservation and Recreation be appointed the Administering Agency;

VII. CONSERVATION PLAN

Several elements contribute to the conservation plan for the Meherrin River. These elements call for a minimum effort and specific actions on the part of the General Assembly, local and state units of government, and individual and riparian landowners.

Legislation establishing Virginia Scenic River designation for the section of the Meherrin River under consideration is the first element that must be implemented. In addition to clearly expressing the policy intent of the Commonwealth with regard to protection and conservation of the river, designation will focus attention on the river as a natural resource of statewide significance. The increased attention will help ensure a greater scrutiny of plans or proposals that have the potential to significantly alter or destroy those resource qualities that make the river worthy of designation. The locality has the option of creating a local river committee that is either appointed by the DCR or the locality and that will work with the DCR to consider and manage the scenic attributes of the river (see code section § 10.1-401.A.4 and and § 10.1-406.1).

A second element of the Conservation Plan involves Lunenburg and Mecklenburg Counties agencies. Comprehensive land use plans should explicitly reflect citizens' recognition, appreciation and concern for the river and the valuable role it plays in the region's quality of life. Such plans should be aimed in part at protecting the river and its environs from potential development, or at least to make sure that the development that does occur utilizes low impact development strategies as much as possible.

The final element of the Conservation Plan is the continued individual stewardship of local and riparian landowners. Over the years, this stewardship has been good. If not for this stewardship, the river might have lost the attributes necessary for inclusion in the Virginia Scenic River System. Through continuation of these efforts, the natural and scenic character of the river can be protected. For example, advocating for ample vegetative buffers, regardless of land use, is an important public educational topic that will certainly help maintain scenic river qualities.

Action by the General Assembly to designate this section of the Meherrin River and the carefully coordinated efforts of Lunenburg County and Mecklenburg County should combine to protect the natural and scenic qualities of the recommended section of the Meherrin River for the enjoyment of future generations. Proposed Legislation is provided in the Appendix.

VIII. ANTICIPATED COST OF DESIGNATION

The only anticipated direct costs as a result of the designation will be those incurred by the Department of Conservation and Recreation (DCR) as a result of its duties as administrator of the river. At present, these costs are estimated to be in the range of \$1,000 per year.

IX. AGENCY COMMENTS/ RESOLUTIONS

A draft report was circulated for review among DCR Divisions, other state agencies, Mecklenburg County, Lunenburg County, and the Town of South Hill. Their comments and any support documents are included in the Appendix of this report.

The authors of this report would like to acknowledge the local officials, interested citizens. and subject matter experts who volunteer their time and share information relevant to Scenic River evaluations. While community participation is required, it is in the active involvement of individuals that helps bring additional meaning to the evaluation criteria. In particular, Catherine L. Townsend, PhD the Senior Regional Geologist for the University of Washington in Seattle and Max B. Crowder, author of *Whittle's Mill – An American History*, are recognized for openly sharing insights and images relevant to the historical and geological assets of this designation.

X. **APPENDIX**

- A. Species Ranking definitions of DCR Natural Heritage
- B. Letters of support C. Proposed Legislation

Appendix A

Species Ranking Definitions of DCR Natural Heritage

SCIENTIFIC COMMON GLOBAL STATE FEDERAL STATE **NAME** NAME RANK RANK **STATUS STATUS** Marshallia obovata var. Spoonshape Barbara's G4G5T3T5 S2 NLNL buttons obovata

Definitions of Abbreviations used on Natural Heritage Resource Lists

The following ranks are used by the Virginia Department of Conservation and Recreation to set protection priorities for natural heritage resources. Natural Heritage Resources, or "NHR's," are rare plant and animal species, rare and exemplary natural communities, and significant geologic features. The criterion for ranking NHR's is the number of populations or occurrences, i.e. the number of known distinct localities; the number of individuals in existence at each locality or, if a highly mobile organism (e.g., sea turtles, many birds, and butterflies), the total number of individuals; the quality of the occurrences, the number of protected occurrences; and threats.

- **S1** Critically imperiled in the state because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. Typically 5 or fewer populations or occurrences; or very few remaining individuals (<1000).
- **S2** Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. Typically 6 to 20 populations or occurrences or few remaining individuals (1,000 to 3,000).
- **S3** Vulnerable in the state either because rare and uncommon, or found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extirpation. Typically 21 to 100 populations or occurrences (1,000 to 3,000).
- **S4** Apparently secure; Uncommon but not rare, and usually widespread in the state. Possible cause of long-term concern. Usually>100 populations or occurrences and more than 10,000 individuals.
- **S5** Secure; Common, widespread and abundant in the state. Essentially ineradicable under present conditions. Typically with considerably more than 100 populations or occurrences and more than 10,000 individuals.
- S#B Breeding status of an animal within the state
- S#N Non-breeding status of animal within the state. Usually applied to winter resident species.
- S#? Inexact or uncertain numeric rank.
- **SH** Possibly extirpated (Historical). Historically known from the state, but not verified for an extended period, usually > 15 years; this rank is used primarily when inventory has been attempted recently.
- S#S# Range rank; A numeric range rank, (e.g. S2S3) is used to indicate the range of uncertainty about the exact status of the element. Ranges cannot skip more than one rank.
- **SU** Unrankable; Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- **SNR** Unranked; state rank not yet assessed.
- **SX** Presumed extirpated from the state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
- SNA- A conservation status rank is not applicable because the element is not a suitable arget for

conservation activities.

<u>Global Ranks</u> are similar, but refer to a species' rarity throughout its total range. Global ranks are denoted with a "G" followed by a character. Note GX means the element is presumed extinct throughout its range, not relocated despite intensive searches of historical sites/appropriate habitat, and virtually no likelihood that it will be rediscovered. A "Q" in a rank indicates that a taxonomic question concerning that species exists. Ranks for subspecies are denoted with a "T". The global nd state ranks combined (e.g. G2/S1) give an instant grasp of a species' known rarity.

These ranks should not be interpreted as legal designations.

FEDERAL STATUS

The Division of Natural Heritage uses the standard abbreviations for Federal endangerment developed by the U.S. Fish and Wildlife Service, Division of Endangered Species and Habitat Conservation.

LE - Listed Endangered **LT** - Listed Threatened **PE** - Proposed Endangered

PT - Proposed Threatened

C - Candidate (formerly C1 - Candidate category 1)

E(S/A) - treat as endangered because of similarity of appearance

T(S/A) - treat as threatened because of similarity of appearance

SOC - Species of Concern species that merit special concern (not a regulatory category)

STATE LEGAL STATUS

The Division of Natural Heritage uses similar abbreviations for State endangerment:

LE - Listed Endangered **PE** - Proposed Endangered

SC - Special Concern - animals that merit special concern according to VDGIF (not a regulatory category)

LT - Listed Threatened **PT** - Proposed Threatened **C** – Candidate

For information on the laws pertaining to threatened or endangered species, please contact:

U.S. Fish and Wildlife Service for all FEDERALLY listed species;

Department of Agriculture and Consumer Services, Plant Protection Bureau for STATE listed plants and insects

Department of Game and Inland Fisheries for all other STATE listed animals

CONSERVATION SITES RANKING

Brank is a rating of the significance of the conservation site based on presence and number of natural heritage resources; on a scale of 1-5, 1 being most significant. Sites are also coded to reflect the presence/absence of federally/state listed species:

Conservation Site Ranks

B1 - Outstanding significance

B2 - Very High significance

B3 - High significance

B4 - Moderate significance

B5 - Of general Biodiversity significance

Legal Status of Sites

FL - Federally listed species present

SL - State listed species present

NL - No listed species present

Appendix B - Letters, Comments and other support documents

From: Woodward, Jay (MRC)

Sent: Monday, October 22, 2012 3:12 PM

To: Rhur, Robbie (DCR) Cc: Watkinson, Tony (MRC)

Subject: Proposed Scenic River Designation of Segments of the Dan, Bannister and Meherrin Rivers

Dear Ms. Rhur,

Per the October 15, 2012 memorandum from Danette Poole requesting comments on the proposed Scenic River Designations for certain segments of the Dan, Banister and Meherrin Rivers, VMRC would like to offer the following:

The Virginia Marine Resources Commission Habitat Management Staff has no comment on the local requests to designate the subject segments of the three rivers described as "Scenic Rivers." The VMRC would continue to assume our proprietary responsibility in the management of any impact to or encroachment upon the beds of these river segments below the ordinary high water line through the Joint Permit Application process. We would continue to seek comments from DCR, DGIF and other state agencies, as well as any stakeholders or members of the public at large for such activities involving the submerged lands along the proposed river segments during the standard public interest review process, as required by the Code of Virginia.

Thank you for the opportunity to comment on this issue and we look forward to working with you as this process develops.

Jay Woodward, Environmental Engineer, Habitat Management Division Virginia Marine Resources Commission (757) 247-8032 office, (757) 504-7009 mobile jay.woodward@mrc.virginia.gov Website: www.mrc.virginia.gov

From: Ray, Alfred C. (VDOT)

Sent: Friday, November 16, 2012 9:55 AM To: Poole, Danette (DCR); Reed, Beth (DCR)

Cc: Cromwell, James R. (VDOT); Jordan, Elizabeth (VDOT); Newman, Regina K., E.I.T. (VDOT)

Subject: FW: Potential Virginia Scenic River Designations

Ms. Poole,

Thank you for providing VDOT with the opportunity to review these recommendations. Typically we do not see these until they are submitted as bills during a General Assembly session. In most cases, at that time we ask the bill's sponsor to add the following language:

"Nothing in this section shall preclude the Commonwealth or a local governing body from constructing, reconstructing, operating, or performing necessary maintenance on any road or bridge project."

If you have any questions please give me a call. Thank-you

Chip

A.C. (Chip) Ray, Environmental Program Planner Virginia Department of Transportation 1401 East Broad Street, Richmond, VA 23219 804/371-2605 (office), 804/814-0603 (cell) alfred.ray@vdot.virginia.gov

Dougles W. Damenech Secretary of Natural Resources DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
TDD (804) 698-4021
www.dog.virginia.gov

David K, Paylor Director

(804) 698-4020 1-400-592-5482

January 15, 2013

David A. Johnson, Director Department of Conservation and Recreation 203 Governor's Street Richmond, VA 23219-2094

Dear Mr. Johnson:

Thank you for requesting input from the State Water Control Board (Board) on the three Scenic River designation proposals for portions of the Dan, Banister and Meherrin Rivers, as noted in your November 27, 2012, letter. DEQ has reviewed its files and the reports on the three proposals. Based on the reports, General Assembly designation of the above as scenic rivers will not impact existing Board programs. Therefore, DEQ, acting on behalf of the Board, has no comment on the proposed designations.

David K. Paylor

cc;

Danette Poole, DCR David Dowling, DCR Michelle Vucci, DCR Cindy Berndt, DEQ Melanic Davenport, DEQ **Proposed Legislation**

Proposed Legislation for the scenic river designation of the Meherrin River on the boarder of Lunenburg County and Mecklenburg County between the confluence of the North Meherrin and where the river permanently enters Brunswick County.

A BILL to amend the Code of Virginia by adding in Chapter 4 of Title 10.1 a section numbered § 10.1-XXX.X., relating to Scenic Rivers.

Be it enacted by the General Assembly of Virginia:

- 1. That the Code of Virginia is amended by adding in Chapter 4 of Title 10.1 a section numbered 10.1-XXX.X as follows:
- § 10.1-XXX.X. Meherrin State Scenic River.

The Meherrin River along the boarder and shared county line of Lunenburg County and Mecklenburg County from the confluence with the North Meherrin to where the river permanently enters Brunswick County, a distance of approximately 17.8 miles, is hereby designated a component of the Virginia Scenic Rivers System. Nothing in this section shall preclude the Commonwealth or a local governing body from constructing, reconstructing, or performing necessary maintenance on any road or bridge.