PO Box 215
Millboro, VA 24460

Cowpasture River Preservation Association

September 8, 2003

Ms. Jean W. Gregory
Environmental Manager II
Water Quality Standards and
Biological Monitoring Programs
Department of Environmental Quality (DEQ)
629 East Main Street
Richmond, VA 23240

Dear Ms. Gregory:

Enclosed is the completed petition from our organization requesting that a portion of the Cowpasture River be designated as an Exceptional State Water (Tier 3) under the provisions of 9 VAC 25 – 260 – 30- A.3.c.

Our thanks to you and your colleagues in DEQ for all the help, encouragement and patience in this environmental and administrative adventure. Should you have any questions, please call me at 540-862-7739 or Jean Howell at 540-925-2430.

With best wishes,

Sincerely yours,

Edward T. Walters
Vice President

Enclosures: Tier 3 Petition (original + 2 copies) + attachments

PETITION OF THE COWPASTURE RIVER PRESERVATION ASSOCIATION

TO CLASSIFY THE COWPASTURE RIVER AS AN EXCEPTIONAL WATER

UNDER 9 VAC 25-260-30.A.3.c

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8 September 2003

Cowpasture River Preservation Association
Edward Walters, Vice President
Cowpasture River Farm
HCR-04, Box 76
Millboro, Virginia 24460
(540) 862-7739

BEFORE THE STATE WATER CONTROL BOARD

PETITION OF THE COWPASTURE RIVER PRESERVATION ASSOCIATION TO CLASSIFY THE COWPASTURE RIVER AS AN EXCEPTIONAL WATER UNDER 9 VAC 25-260-30.A.3.c

The Cowpasture River Preservation Association ("CRPA") petitions the State Water Control Board to designate the Cowpasture River as an Exceptional Water under 9 VAC 25-260-30.A.3.c. All eligibility criteria have been met or exceeded. The CRPA recommends that the designation apply to the portion of the Cowpasture River between its confluence in Bath County with the Bullpasture River (near the village of Williamsville) and its confluence with the Jackson River in Botetourt County (near the Town of Iron Gate).[A]

The CRPA was organized in 1972 by riparian landowners whose mission was and remains to preserve "this magnificent river and its tributaries ." Since that time, the CRPA has led or participated in numerous projects to protect the river and the local environment. For example, CRPA advocated that the Federal Power Commission minimize the visibility of the VEPCO transmission lines at the crossings of the Cowpasture and Bullpasture Rivers as well as in other scenic areas of Bath and Highland Counties; led opposition to the construction of a pumping station on the Cowpasture; took a pro-active position in protecting the watershed of the river by participating in the revised George Washington National Forest long-range management plan; and purchased chemical monitoring equipment and established a system of year-round monitoring of water quality of the Cowpasture. During an acknowledgement of the CRPA's ongoing efforts to protect the river, Mr. Hunter Craig, former Chairman of the State Water Control Board (SWCB), recently stated that the best way to "save the Cowpasture" would be to pursue a Tier III designation.[B]

The CRPA has also worked successfully with others to maintain the quality of the Cowpasture River.[C] It has demonstrated its dedication to preserving the River by funding research by a professional biologist (Julian D. Olden, Ph.D. candidate, Ecology Program, Colorado State University) and sponsoring Bath County teachers' participation in the Chesapeake Bay Foundation's teacher training programs.[D] Another example demonstrates the level of local interest in the health of the river. David Peters, formerly a science teacher at Sharon Elementary School in Alleghany County, led, over a 10-year period, two hundred sixth and seventh grade students in water studies as a part of their science classes. In addition, a student environmental group met almost weekly from 1992 to 1998 to conduct chemical monitoring of the river, designed to raise awareness of the importance of clean water. In August

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[A] The Nature Conservancy map of Cowpasture River Watershed, produced September 2003.

[B] Brookside Family Dining Application before the Soil and Water Conservation Board (SWCB), VPDES Permit No. VA0091057, Jan. 6, 2003.

[C] Sue Eisenfold, *Virginia Waterways Benefit in Three Recent Success Stories*, BLUE RIDGE COUNTRY MAGAZINE, March/April 2003, pages 20-21.

[D] Fred Paxton, *the Chesapeake Bay: Exploring and Learning About its Ecology*, The River Runs (CRPA Newsletter), Summer 2003, page 6.

2000, "Cooperative Living" published a story about other students who participated in an annual essay contest describing their experiences on the River.[E]

The payoff of all of this work has been that Bath and Alleghany Counties can continue to boast of a river whose quality is rarely found in Virginia, therefore providing an important control to scientific studies on other regional rivers that have not fared so well. Finally, achieving a Tier III designation will officially recognize the long-term environmental stewardship of those who live and work near the Cowpasture River. It will acknowledge the ongoing local commitment to protect the "scenic beauty and wild character" of the River and the desire to "preserv[e] the natural resources of the county with wise environmental management."[F] And as the counties grow in the future, the designation will ensure that newcomers adopt the same high standard of care by preventing point-source pollution.

No serious or injurious impacts are foreseen on others, except those who might wish to use the river as a conduit for treated waste or storm waters. With proper and imaginative planning, economic development and population growth can be assured and even enhanced. Millboro Springs, the broader Millboro area and a Cowpasture River protected by Tier III, can coexist quite peacefully. In general, the only restriction Tier III will impose is that there can be no *additional* point source discharge into the river. No pending point source discharge applicants are known to exist (the Brookside Restaurant application has been approved, but it is on a tributary). Farming practices along the river would not be affected.

The Cowpasture River Provides an Exceptional Environmental Setting of a Quality Rarely Found in Virginia.

Adjacent to large tracts of the George Washington National Forest, the Cowpasture River winds through remarkably rugged and pristine terrain. In some locations, the Cowpasture slows to flat water, meandering through the picturesque farmland of western Virginia while in others it is fast-flowing, passing cliffs dotted with caves. It borders the aptly-named Rough Mountain Wilderness Area, which promises, in addition to stunning views, "physical challenge and solitude ."[G] Segments of the Cowpasture River have been classified as potentially eligible for Wild and Scenic River designation. (Segment A – 16 miles in Alleghany County; Segment B – 48.11 miles in Bath County).[H] Both segments were again recognized by the Commonwealth of Virginia Department of Conservation and Recreation, Outdoors Plan 2002 Virginia.[I] Despite its

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[E] Edward T. Walters, "Rollin' on the River," Cooperative Living (Magazine of BARC Electric Cooperative), August 2000, pages 40-41.

[F] Alleghany County 2002-2006 Comprehensive Plan (effective January 1, 2002, Alleghany County Board of Supervisors) and Bath County 1999-2004 Comprehensive Plan (adopted August 10, 1999, prepared by the Bath County Planning Commission and the Central Shenandoah Planning District Commission).

[G] National Wilderness Preserve System, Rough Mountain Wilderness website, http://www.wilderness.net/nwps/wild_view.cfm?wname= Rough%20Mountain&Criteria=rough%20mountain (last visited Sept. 6, 2003).

[H] Summary Of Wild And Scenic River Eligibility Determinations, in Letter To Ed Walters from Annie Downing, District Ranger, James River Ranger District, Us Forest Service, September 5, 2003.

[I] Commonwealth of Virginia Department of Conservation and Recreation, Outdoors Plan 2002 Virginia, p. 199, note 5.

remote location, or perhaps even because of it, the Cowpasture River has developed a devoted following that reaches well beyond its watershed.

To preserve this local jewel, the Bath County 1999-2004 Comprehensive Plan (page 223) recommends "preserve[ing] and protect[ing] the scenic beauty and wild character of the Cowpasture and Jackson Rivers ." In "Virginia's Scenic Rivers", a report by the Virginia Commission of Outdoor Recreation, the Cowpasture River is listed among "rivers recommended as worthy of preservation ."[J] The "winsome Cowpasture River" is even noted in the National Geographic Society's book, Great Rivers of the World, albeit in the ominous context of a discussion of pollution threats to notable waterways.[K] And pollution is evident nearby...David D. Ryan describes the significant pollution occurring just below Iron Gate, where the "clear" Cowpasture joins the "coffee-colored" Jackson, so described as a result of the discharge from a local pulp and paper mill.[L]

The Cowpasture has long been appreciated by artists and photographers for its scenery.[M] In addition, the Cowpasture is included by the National Park Service in its Nationwide Rivers Inventory which lists "river segments in the United States that are believed to possess one or more 'outstandingly remarkable' natural or cultural values to be judged to be of more than local or regional significance."[N] The Cowpasture is listed for its hydrologic, scenic, recreational and historical value.

The Cowpasture River's tremendous appeal among locals, travelers and professionals alike suggests a truly exceptional environmental setting. Despite the documented adoration, the Cowpasture River speaks far more eloquently for itself.[O]

The Cowpasture River Supports Aquatic Communities of Remarkable Stability and Quality.

In addition to providing an exceptional environmental setting, the Cowpasture River likewise fulfills the aquatic diversity requirement of the exceptional waters designation. To demonstrate proof of an exceptional aquatic community, one or more of the following criteria must be met: 1.) the waters support an exceptional wild or natural fishery, or 2.) the waters are classified as Class I or Class II wild natural trout streams under the Virginia Department of Game and Inland Fisheries system, or 3.) the water contains an exceptional diversity of aquatic species. The Cowpasture River qualifies as an exceptional aquatic community under conditions one and three.

[J] Virginia Commission of Outdoor Recreation, Virginia's Scenic Rivers, (1970, 2nd printing) p. 12.
[K] National Geographic Society, Great Rivers of the World, published by the National Geographic Society, 1984, p. 21
[L] David D. Ryan, The Falls of the James, copyright 1975, William Byrd Press, pages 9-10.
[M] Paintings of Bill White, www.billwhite-art.com.futuresite.register.com/_wsn/page4.html (last visited Sept. 6, 2003).
[N] National Park Service, Rivers, Trails & Conservation Assistance Program, Nationwide Rivers Inventory, www.nps.gov/ncrc/programs/rtca/nri/eligb.html (last visited Sept. 6, 2003).
[O] See attached photos.

The Cowpasture River is home to a very wide diversity of natural fish species. In a study conducted in 2002-2003, ecologist Julian D. Olden sampled over thirty-five miles of the river using sophisticated electrofishing techniques. Among the 12,446 fish collected, Olden identified 42 distinct species – 36 of which are native to the Cowpasture. The survey revealed a fish community that is 86% native, an unprecedented level by Virginia standards and exceptional by national standards as well.[P] A 1994 study by Jenkins and Burkhead (Freshwater Fishes of Virginia published by the American Fisheries Society, Bethesda, Maryland), cited in Olden's research, observed as many as 51 distinct species. To provide a relative marker, one should note that 210 fish species have been observed in Virginia overall. Jenkins' and Burkhead's research also indicates that the Cowpasture River is sanctuary to nearly one quarter of the fish species in the state.

Olden's research encompassed over half of the 64-mile stretch of the Cowpasture River that the current petition seeks to protect. Thus, the diversity of fish species he catalogued can be viewed as representative of the river as a whole. Apart from the diversity of fish species that are found in the Cowpasture, the sheer quantity of fish present is also a powerful indicator of the river's health. Specifically, Olden noted that the density of fish in the Cowpasture River is exceptionally high as compared to a nearby river of similar scope and size, the Jackson River. While the Jackson enjoys renown as one of Virginia's leading trout fisheries, the Gathright Dam has significantly reduced the diversity of its fish species over time. Today, the Cowpasture contains more than twice the number of fish species as the Jackson River does, and at a much greater density, according to Olden's research.

Harold S. Adams, Ph.D. Professor Emeritus (Biology) at Dabney S. Lancaster Community College, echoes Olden's findings about the diversity of the Cowpasture's aquatic community[Q]. Adams further reports that "research has consistently demonstrated that the Cowpasture River is typically a very clean stream with great diversity when compared to other comparable streams in the mid-Appalachians. Freshwater sponges are found only in cleanest of waters – they are found in the Cowpasture!" But his comments are not limited to the diversity of aquatic life. He also reports that macroinvertebrates are the best indicators of stream health. "Certain taxa typically indicate high levels of pollution, whereas others indicate low levels. As such, macroinvertebrates in streams lacking significant pollution invariably show higher proportions of taxa that are intolerant to degradation of streams and lower proportions that are tolerant of undesirable conditions. Such is the case for the Cowpasture River!" He concludes "Given the current documented status of the Cowpasture River....any change leading to its possible decline most certainly is not in the interest of the Commonwealth or the residents of that region. As possibly Virginia's only remaining major unpolluted stream, the Cowpasture River represents a treasure and heritage to be cherished and preserved for generations to come." Adams' methodology and results are included to support his previous statements.[R]

[P] Letter from Julian D. Olden, PhD Candidate, Department of Biology, Colorado State University, to Ed Walters, Vice President of CRPA (September 6, 2003).

[Q] Harold S. Adams, PhD, The Cowpasture River, A Scientific Introduction, 1994, pages 1-2.

[R] "A Study of the Physical, Chemical, and Biotic Factors of the Cowpasture River in Bath County, Virginia", Participants of the 1994 Governor's School Regional Center at Dabney S. Lancaster Community College.

Although not explicit to the eligibility criteria for exceptional waters under § 9 of the Virginia Code, the presence of threatened species should be considered in evaluating the overall biodiversity of the Cowpasture River. Specifically, the river is home to two state threatened species, the roughhead shiner (*Notropis semperasper*) and the orangefin madtom (*Noturus gilberti)*[S][T].The status of the roughhead shiner, a globally rare species, is of special concern nationally. There is good reason why these rare species have strong populations in the Cowpasture River. "The wildness of the Cowpasture is reflected in a diverse fauna that is likewise a surviving relic of Virginia's natural heritage. To call the Cowpasture River pristine is perhaps an understatement."[U]

Furthermore, the Cowpasture River supports an exceptional natural fishery that is integral to the recreational spirit of the region. The river is home to several staples of the Virginia fisheries, including small mouth bass, rock bass, muskellunge, chain pickerel, brown trout and redbreast sunfish. According to the Virginia Department of Game and Inland Fisheries' District Fisheries Biologist, the presence of rough fish, such as carp and bullhead catfish, is minimal. Game fish can be caught at points legally navigable below U.S. Route 60. Specifically, there is a public access point on State Forest Service land at Evans Tract, as well as two public access points on U.S. Forest Service land, one below Nimrod Hall (Walton Tract) and another near Williamsville (Wallace Tract). The District Fisheries Biologist also states that, "Excellent water quality, good instream fisheries habitat, and a relatively undeveloped watershed are contributors to an outstanding fishery in the Cowpasture River."[V]

The Cowpasture River Provides Exceptional Recreation Opportunities

Recreational opportunities abound both in and around the Cowpasture River. In fact, according to the National Park Service's National Rivers Inventory, the recreational opportunities qualify as "outstandingly remarkable"[W] for their ability to attract visitors from throughout and beyond the region and for their sheer diversity.

As the national Forest Service website describes, the river offers opportunities for a wealth of outdoor activities, including camping, year-round fishing, wading, floating, swimming, canoeing and kayaking.[X] As mentioned above, the Cowpasture River is particularly rich with fish, both in sheer number and in diversity of species. The quantity and quality of outdoor recreation in and along the Cowpasture River explain why so many people are willing to travel to the many bed and breakfasts, camps and lodges in this remote part of the state.[Y] In fact, the Bath

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[S] Letter from Paul E. Bugas, Jr., District Fisheries Biologist, Virginia Department of Game and Inland Fisheries, to Ed Walters, Vice President of CRPA (September 4, 2003).
[T] Paul E. Bugas, Jr., "The Cow and The Fish," The River Runs (CRPA Newsletter), Winter 2001, pages 1, 3-4.
[U] Letter from Julian D. Olden, PhD Candidate, Department of Biology, Colorado State University, to Ed Walters, Vice President of CRPA (September 6, 2003).
[V] Letter from Paul E. Bugas, Jr., District Fisheries Biologist, Virginia Department of Game and Inland Fisheries, to Ed Walters, Vice President of CRPA (September 4, 2003).
[W] National Park Service, Rivers, Trails & Conservation Assistance Program, Nationwide Rivers Inventory, www.nps.gov/ncrc/programs/rtca/nri/eligb.html.
[X] U.S. Forest Service website, The Southern Region, George Washington and Jefferson National Forests website, www.southernregion.fs.fed.us/ gwj/fishing/rivers/river05.htm (last visited Sept. 6, 2003).
[Y] See tourism brochures and materials.

County Chamber of Commerce's web page is almost exclusively dedicated to outdoor recreation-based tourism.[Z]

As demand for outdoor recreation increases, both generally and in this region, so does the importance of maintaining the outdoor recreation "supply." Tier III status will help ensure that the Cowpasture will continue to be preserved for those who love the outdoors.

Conclusion

In conclusion, the Cowpasture is an outstanding national resource for which the protection of the Exceptional Waters designation exists. As a part of the Chesapeake Bay Watershed community, the CRPA is a stunning example of how citizens can come together to maintain water quality even as their regions develop. "[I]t is important to stress that by protecting the Cowpasture River, one is not only protecting a single and valuable river system, but it also is protecting the extremely important headwaters of the largest drainage in the state, namely the James River Basin."[AA] As the Chesapeake Bay Foundation's President said in 1984 as quoted in the National Geographic Society's book, Great Rivers of the World, "This is not a time for hand wringing. This is a time for rolling up our sleeves and getting to work." The lovers of the Cowpasture have accepted this challenge, and their work should not be in vain. Their river is very special. As one CRPA member stated, "the mere memory of the Cowpasture River tranquilizes the spirit."[BB]

Respectfully submitted,

Cowpasture River Preservation Association

Edward Walters, Vice President
Cowpasture River Farm
HCR-04, Box 76
Millboro, Virginia 24460
(540) 862-7739

Dated this 9th day of September, 2003

[Z] Bath County Chamber of Commerce's web page, http://www.bathcountyva.org/pastpresent.htm (last visited Sept. 6, 2003).
[AA] Letter from Julian D. Olden, PhD Candidate, Department of Biology, Colorado State University, to Ed Walters, Vice President of CRPA (September 6, 2003).
[BB] Blair Niles, The James: From Iron Gate to the Sea, Rinehart & Company, Incorporated, 1975, pages 3-7.

LIST OF ATTACHMENTS TO THE PETITION OF THE COWPASTURE RIVER PRESERVATION ASSOCIATION TO CLASSIFY THE COWPASTURE RIVER AS AN EXEPTIONAL WATER UNDER 9 VAC 25-260-30.A.3.c

Attachment A	The Nature Conservancy map of Cowpasture River Watershed, produced September 2003.
Attachment B	Brookside Family Dining Application before the State Water Control Board (SWCB), VPDES Permit No. VA0091057, Jan. 6, 2003.
Attachment C	Sue Eisenfold, *Virginia Waterways Benefit in Three Recent Success Stories*, BLUE RIDGE COUNTRY MAGAZINE, March/April 2003, pages 20-21.
Attachment D	Fred Paxton, *the Chesapeake Bay: Exploring and Learning About its Ecology*, The River Runs (CRPA Newsletter), Summer 2003, page 6.
Attachment E	Edward T. Walters, "Rollin' on the River," Cooperative Living (Magazine of BARC Electric Cooperative), August 2000, pages 40-41.
Attachment F	Alleghany County 2002-2006 Comprehensive Plan (effective January 1, 2002, Alleghany County Board of Supervisors) and Bath County 1999-2004 Comprehensive Plan (adopted August 10, 1999, prepared by the Bath County Planning Commission and the Central Shenandoah Planning District Commission).
Attachment G	National Wilderness Preserve System, Rough Mountain Wilderness website, http://www.wilderness.net/nwps/wild_view.cfm?wname=Rough%20Mountain&Criteria=rough%20mountain (last visited Sept. 6, 2003).
Attachment H	Summary Of Wild And Scenic River Eligibility Determinations, in Letter To Ed Walters from Annie Downing, District Ranger, James River Ranger District, Us Forest Service, September 5, 2003.
Attachment I	Commonwealth of Virginia Department of Conservation and Recreation, Outdoors Plan 2002 Virginia, p. 199, note 5.
Attachment J	Virginia Commission of Outdoor Recreation, Virginia's Scenic Rivers, (1970, 2nd printing) p. 12.
Attachment K	National Geographic Society, Great Rivers of the World, published by the National Geographic Society, 1984, p. 21
Attachment L	David D. Ryan, The Falls of the James, copyright 1975, William Byrd Press, pages 9-10.
Attachment M	Paintings of Bill White, www.billwhite-art.com.futuresite.register.com/_wsn/page4.html (last visited Sept. 6, 2003).

Attachment N	National Park Service, Rivers, Trails & Conservation Assistance Program, Nationwide Rivers Inventory, www.nps.gov/ncrc/programs/rtca/nri/eligb.html (last visited Sept. 6, 2003).
Attachment O	See attached photos.
Attachment P	Letter from Julian D. Olden, PhD Candidate, Department of Biology, Colorado State University, to Ed Walters, Vice President of CRPA (September 6, 2003).
Attachment Q	Harold S. Adams, PhD, The Cowpasture River, A Scientific Introduction, 1994, pages 1-2.
Attachment R	"A Study of the Physical, Chemical, and Biotic Factors of the Cowpasture River in Bath County, Virginia", Participants of the 1994 Governor's School Regional Center at Dabney S. Lancaster Community College.
Attachment S	Letter from Paul E. Bugas, Jr., District Fisheries Biologist, Virginia Department of Game and Inland Fisheries, to Ed Walters, Vice President of CRPA (September 4, 2003).
Attachment T	Paul E. Bugas, Jr., "The Cow and The Fish," The River Runs (CRPA Newsletter), Winter 2001, pages 1, 3-4.
Attachment U	See Attachment P
Attachment V	See Attachment S
Attachment W	See Attachment N
Attachment X	U.S. Forest Service website, The Southern Region, George Washington and Jefferson National Forests website, www.southernregion.fs.fed.us/ gwj/fishing/rivers/river05.htm (last visited Sept. 6, 2003).
Attachment Y	Tourism brochures and materials.
Attachment Z	Bath County Chamber of Commerce's web page, http://www.bathcountyva.org/pastpresent.htm (last visited Sept. 6, 2003).
Attachment AA	See Attachment P
Attachment BB	Blair Niles, The James: From Iron Gate to the Sea, Rinehart & Company, Incorporated, 1975, pages 3-7.