

## Comments Mailed in from Concerned Stakeholders

**Subject:**

WSSC watershed meetings

Hello Ms. Eberhard,

My name is Tom Socey and I'm a fisherman.

I can't make either meeting, but I do have one suggestion to improve the WSSC Patuxent Reservoir watershed

I've been fishing Triadelphia Reservoir for the past 6 years, and I started fishing Rocky Gorge last year.

I've bought both the yearly, and the daily permits throughout the years.

The on-line permitting service is fantastic, and I used it for my yearly permit this year.

The problem is: that I've never been checked by the WSSC police for a watershed permit.

However, my boat has been checked on the water by the DNR at Triadelphia, once.

I can absolutely guarantee you that half the people on the reservoirs don't have WSSC watershed permits.

How would they know they even need a permit, if the WSSC police never come down, and check people out, and talk to them?

The only time I see the WSSC police is if I'm fishing late, and they stay to lock the gate after the last person has left. The officer usually just stays in the car and doesn't check anybody.

WSSC should enforce the watershed permit laws by routinely checking people.

They should also have a very visible boat docked at both reservoirs, maybe by the dam areas.

It doesn't have to be an expensive boat, just a Jon Boat with 'WSSC POLICE' in bold letters on the side.

That boat should go out and periodically check boaters for their watershed permits.

If the WSSC police would show a presence at the reservoirs, the nature lovers, and fishermen who truly value the reservoirs, and want them to stay around would be the ones using them.

You'd have far fewer unlawful people to litter them up, and to clog up the parking lots.

The places would stay pristine for a longer period of time.

I've thought many times to myself "What's the use in buying a permit if they never check?"

But, I'm an honest person, and I always have a permit.

Why should I have to pay for a permit, when so many others don't, and they are not punished for it?

Please feel free to use this information any way you see fit.

Thanks.

Tom Socey

**Subject:**

WSSC Current/Future recreational uses

Dear Ms. Eberhard, I would like to give some input on the current/future use of the WSSC reservoirs. First and foremost, keep it out of the hands of commercial and residential developers. The area's surrounding both facilities have a very rich history and it would be ashamed to see it go the way of the dinosaur through residential/commercial development. Secondly, the boat ramp area's at the Scott's Cove and Brown Bridge facility could use improvement. The Brown Bridge ramp should be relocated back to the Howard County side of the lake where it was situated for many years before being moved to the Montgomery County side. As it is now, it is only usable a couple months of the fishing season before it is closed due to low water during summer drawdown. Third, Have WSSC look into the feasibility of putting in a new boat ramp in the area of the Rt. 29 Bridge. This would grant greater access to boaters and fisherman looking to fish the stretch between the Rt. 29 Bridge and Browns Bridge. Fourth, Try to increase the presence of the Watershed Police force via boat, horseback, or ATV. I think this would help to greatly reduce any illegal activity that may thrive due to a lack of law enforcement presence. Fifth, Extend the hours the reservoir is available to the public. In the 80's, the closing time was 10 pm during the summer months but for some unknown reason it was discontinued and closing time was 1 hour past sunset. With respect to Triadelphia, the only thing I can make a comment about is the ramp area at the Greenbridge Road site- it needs to be moved so that it can be used in the period where there is high drawdown due to drought. Sixth, Why did the WSSC shorten the fishing season to November 1st when it was December 1st for as long as I can remember and on top of that they raised the yearly permit fee- I don't understand the higher fee/shorter season. I have a sentimental spot for both reservoirs as I started fishing them when I was 12 and continued to do so for the next 45 years until I moved South a couple of years ago. I still go back to Maryland occasionally and stop to visit the reservoirs. I hope that they are around for many years to come so that their beauty and serenity can be enjoyed by the youth of today and future generations. Thank you for your consideration in this. Sincerely, Michael A. Peck, Daytona, Florida

---

**Subject:**

Written Comment in Support of WSSC's Hunting Program

Ms. Eberhard,

I would like to submit the following in support of the well-managed deer hunting program.

The managed deer hunting program at the watershed is one of the best programs I've participated in. The hunters have to be qualified marksmen and adhere to safety standards.

Mr. Bryon Benton is an active involved wildlife manager who is very safety conscious. He knows the acreage and deer patterns well and is of direct assistance to hunters. He emphasises safety and adherence to regulations.

According to the National Highway Traffic Safety Administration there are about 1.5 million car accidents with deer each year that result in \$1 billion in vehicle damage, about 150 human fatalities, and over 10,000 personal injuries. The actual numbers are probably higher because the National Highway Traffic Safety Administration's figures for deer accidents, rely on inconsistent state reporting- there is no standard reporting of deer accidents in the country yet, and a "reportable deer accident" varies significantly between states. There is a web site that shows the vehicle damage related to deer hits: <http://www.car-accidents.com/deer-car-auto-accidents.html> Not too long ago a Maryland driver was kicked to death by a deer that came through the windshield. Please attach those pictures to this submission. The number of dead deer lying along side of Maryland roadways is just a small indication of the number of local deer collisions. Many hit deer wander out of sight into the woods. My brother's car was flipped over by a guardrail as he avoided a direct deer collision; luckily he survived without serious injury.

If deer herds go unmanaged there is an overbrowsing of vegetation that results in malnutrition and illness among the herd, a scarcity of required food for other animals and the resulting devastation of the natural wildlife cycle. Anybody who has hunted deer know that other means besides hunting to control wild deer populations are presently impractical and unworkable and costly.

In addition, lyme disease is related to the spread of ticks by deer. Local house owners witness the devastation of their gardens and shrubs by deer seeking food outside the WSSC boundaries.

Many of the WSSC's program participants donate their harvest to "Food for the Hungry Program." Years ago, I participated in another program that provided 2000 pounds of venison to needy persons.

Mature does normally give birth to two fawns annually for about ten years. Three fawns are not uncommon. Four and even five fawns at a time have been given birth by does. An unculled deer herd will double in size every three years.

For road safety and the protection of human lives, for a balanced wildlife population, for preservation of forest plant species and food for other wildlife animals, for less spread of lyme disease, I urge the continuation of the quality WSSC deer hunt program.

Please accept this submission for your records. At your request I'll be glad to give it orally at the Laurel meeting.

Jay J. Gloede

242

**subject:**

Watershed usage

Dear Ms. Eberhard, I would like to see the following things considered for the usage of the reservoirs:

Expand the width of the boat launch ramp at Scott's Cove. 1.  
the ramp at Browns Bridge/Ednor Road back to th Howard County side of the reservoir. The current location of the ramp renders it pretty much useles to traileered boats during the summer drawdown. 2. Relocate  
of putting a new boat ramp in at Rocky Gorge in the vicinity of the Rt.29 bridge. 3. Look into the feasability  
10 pm during the summer. This policy was in effect for a few years during the 1980's but was later abolished for some unknown reason. 4. Expand the fishing hours to  
5. Ensure adequate patrolling of the watershed by the WSSC police force by boat, horseback, and vehicle patrols. I realize they are stretched thin, but in all the years I fished both reservoirs, their presence was lacking.

As far as Triadelphia, the reservoir boat ramps are adequate to use.  
Keep any land currently surrounding the reservoirs out of the hands of developers both residential and commercial. There is a rich history that surrounds the area's of the reservoirs and it would be ashamed to see it go the way of the dinosaur. I fished both reservoirs from the age of 12 until I moved south 2 years ago, so I have a soft spot in my heart for both reservoirs and would hope it will be around for the youngsters of today and tommorow to enjoy as I did. Thank you for your consideration in this matter. Michael A. Peck, Daytona, Florida

---

**subject:**

Re: Public Meeting Notice - Patuxent Reservoirs Watershed Meeting

Good Morning Tracy,

I will not be able to attend the meeting this evening. I would however like to express my thoughts in this email if allowed?

As I wrote to the WSSC in the Spring of this year. A few years ago WSSC raised yearly boating permits for Rocky Gorge and Tridelphia to \$60 from \$30. Its always pleasant to see anything double in price in one year but to be honest I'm fine with that. What I don't like is the fact that WSSC has doubled the permit cost and reduced our on water season by two (2) full months. That to me and my entire fishing club, this doesn't make sense. How does that conversation even come up at WSSC? Lets double the price and give them two (2) months of less fishing/boating time!!!

The part of this that really doesn't register is that it takes zero to very little money to have the reservoir open at the dates it was open several years ago. I believe those dates were March 1st thru December 15th. I drive to Brighton Dam last year to get my permit and they said sorry you have to wait until the lake is no longer frozen to get your permit. That also does not make sense why I drove all the way from Bel Air, Maryland to the Brighton Dam facility to get a permit and was told I could not purchase one. So I had to now make two trips to get my permit when I could have been issued one on the spot. I could clearly see that I cant get my boat into a frozen lake by why couldn't I get a permit. What does the water being frozen have anything to do with obtaining a year long permit? Then along comes the 2012 season. I called WSSC about getting my permit and again was told that I had to wait till April 1st to get a permit which was now available online. I asked why the reservoir was closed and they said; in previous years the frozen lake made us open later so we decided that we could do the same thing this year. So on the single warmest winter on record in the last century, WSSC is opening the reservoirs a month later then it was supposed to open because of weather in years past? That makes zero sense. I would love to be in the room with the person that makes this decision.

My season is shortened because someone in WSSC can't look at the current weather conditions and make a call? I don't get it. I have heard through various sources that the reason for this was that someone had drowned in the cold water earlier this year. I don't know if that is true but you can drown in any temperature water as far as I know. If water temperature is the reasoning, why not just open in June? Hypothermia has potential in water temps below 79 degrees. The reservoirs don't reach 79 degrees until late June/July. As of today, we still dont have 79 degree water.

I love the reservoirs and so does my fishing club. We have been fishing these reservoirs for 7 years plus and they are great with the exception of the season opening and closing dates. If the guys that fish Liberty Reservoir and Prettyboy Reservoir can fish starting March 1st thru December 31st, why can't WSSC make the same thing happen? This is a sore spot for us as you can tell and I hope that this can be addressed to get back to the March 1 to December 15th schedule.

I thank you for your time.

Sincerely,  
Chris Clark



**Subject:**

WSSC Meeting Comments

Tracy,

Unfortunately I have a prior commitment and won't be able to make it down to Laurel for this evening's meeting. However, I really would like to express one thought (displeasure) regarding a recent change that WSSC has implemented at Rocky Gorge...

Permit costs - costs of the permit were raised recently from \$30/year to \$60/year. That's OK...that's puts you in the same ballpark as the other MD reservoirs run by Baltimore City. What's not OK is you doubling the price and cutting the season by 2 months. I'd LOVE to know the logic behind this one. I'll trust that others will express this same sentiment regarding this asinine change and it will be discussed at tonight's meeting.

I'm part of a local reservoir club and we have been fishing Rocky Gorge for years and we absolutely love it. There was talk at our meeting this winter of removing the Gorge from our trail due to this change. It's utterly ridiculous that someone at WSSC has the balls (excuse my french) to approve this. As a club, we sucked it up and all paid our dues to fish it this year. I can promise you that won't happen again next year unless something changes.

I look forward to seeing the minutes from tonight's meeting.

Thanks,

Gino Ciotola

---



**Subject:**

RE: Public Meeting Notice - Patuxent Reservoirs Watershed Meeting

**Dear Ms. Eberhard,**

**I have been canoeing on Rocky Gorge Lake and Tridelphia Lake for many years, am 66 and find these lakes are the most wonderful place to relax and at the same time get very beneficial exercise. I typically spend three to four hours, two to three times a week on the lakes and have heard from other boaters that there is consideration being given to closing the lakes by the WSSC. This would be a terrible idea, leaving those of us who use the lake with no option, and to what end? Surely I cause no damage to the watershed or water quality by paddling up and down the lake. If the lakes are closed I will actively lobby Maryland legislators to overrule this misguided policy. I was unable to attend the Laurel meeting last night but would like my comments entered into the record. I look forward to hearing that the lakes will remain open to we who value these wonderful resources.**

**Respectively,**

**Reed Joiner**

**Subject:**

Patuxent Watershed Study comments

Dear Ms. Eberhard,

This email is in response to the Patuxent Watershed Study your company is currently undertaking for the WSSC. I am unable to attend the meeting this evening and wanted to share some thoughts with you.

My name is Peter Congedo. I am a lifetime resident of Maryland and have been actively boating and fishing the WSSC lakes for over 45 years. My season typically begins on March 1st and often I have fished by boat up to the last week the lake is open. I have many, many years of firsthand experience on these lakes.

I have attempted to exercise good stewardship when using these lakes over the years. I have practiced 45 years of catch-and-release, I pick up litter, and I have reported dangerous situations to the WSSC when I have encountered them. This includes dead deer in the water and even a dead body I came across years ago. I have reported these events beginning 30 years before the arrival of cell phone technology. My point? I have demonstrated over a long term a sincere interest in the wellbeing of these lakes. I sincerely appreciate the access the WSSC has allowed my family and me.

I fully understand that your primary goal is to maintain and improve the quality of water in the reservoirs and the property that provides the protective buffer zone for them. My thoughts on balancing continued access to these lakes while reducing potential negative impact to the water quality is briefly outlined below:

1. Maintain the March opening date

Delayed opening of the reservoirs until April leads to a more concentrated number of fishermen during the major spawn of many species and negatively affects the overall health of the spawning fish populations of the reservoirs. The April opening this year was catastrophic and occurred during the peak bass and bluegill spawns.

Additionally, this change in the opening date did not stop the walk-in anglers, hikers, and others who we all know do not limit themselves to the designated walk in access areas. The bare earthen trails around these lakes being used by these folks contribute to the particulate that enters these reservoirs. The early-season anglers and well equipped kayakers are the WSSC's best source of information to inform the WSSC on people illegally using these trails. The presence of well informed and intentioned boaters could have helped to monitor this.

2. Limit access

To minimize contaminates from storm water runoff, I suggest limiting some of the access points to the lakes, and just open the two main launching ramps; Green Bridge Road on Triadelphia, and Scotts Cove on Rocky Gorge. This is how the much larger Liberty reservoir operates.

Liberty is 3200 acres where the WSSC lakes are 800 acres. One access point per lake would eliminate some user stimulated runoff, trash, and also save maintenance money. Fewer points to patrol, fewer walk in areas, and better control over the activities of users of these lakes would improve water quality.

### 3. Educate, Empower, and Enforce

Ensuring adherence to these new rules will require educating the users on good environmental practices. Permit holders could be required to view a "best practices" video when they purchase the on-line permit. Or sign a letter of understanding. I suggest clear regulations be published, explained, and enforced. If permit holders viewed themselves as active participants in the health of these lakes, they could: 1) feel more empowered to utilize safe handling practices when landing pre spawn or spawning female fish, 2) report people that choose to not follow the rules and report other incidents. These incidents could be excessive runoff during heavy rain, dead wildlife in the water, unauthorized walk in access, and other potentially hazardous situations. Empower the users to be the WSSC's eyes and ears from the water. Serious fishermen like me, fish early and late in the season. We fish in the rain and wind and when the WSSC patrol personnel and others choose to stay inside.

In summary, reducing access points, educating and empowering users, and enforcing environmentally prudent rules would immediately improve water quality. This could occur without reducing the historical March opener and November closing dates. I and other serious anglers, kayakers, and boaters, would be more than happy to assist in the development of educational tools for the novice users of the WSSC impoundments. Prior to cut backs and post 9-11 security policies changes, there was a constant presence of armed, well informed Watershed Patrol Personnel on these lakes. I believe without the presence of these WSSC personnel, new tools need to be deployed to ensure safe and environmentally intelligent access that can be effectively monitored and maintained.

V/r Peter Congedo

2012

**Subject:**

Rocky Gorge & Triadelphia Reservoir

Please do not prohibit kayaking on these 2 beautiful bodies of water! Kayaks leave no trace and cause no harm to the environment. I am a Howard County kayaker and would be devastated if kayaking were prohibited at Rocky Gorge or Triadelphia Reservoir! Thank you!

Melissa Emery  
Columbia, MD

**Subject:**

WSSC survey/project

Hello

Tonight I attended the public comment meeting at the Izaak Walton in Damascus, MD. Initially, I had only one comment/recommendation. After the meeting, I now have two.

Regarding the meeting... I got the impression that a number of speakers (users of WSSC facilities) had spoken at the Laurel meeting last night. If this is correct, they spoke at both which was a waste of time. It seemed that the purpose of letting people speak was so that EA would get some input from the public which might be useful. I doubt that it was necessary for EA people to hear the same people twice. If people spoke twice, their agenda was to speak to others attending the meeting, not the EA people. If my assumption is correct, again, much time was wasted and I left prior to the end of the meeting.

Now for my comment. If sedimentation is a concern, and EA wants to ID the source, I have a method. If there is a heavy rain during the period of your work, rent a plane and fly over both reservoirs. You will be able to photograph the muddied waters where they enter. As a boater, I can give you a big clue. Look at where the water enters the upstream end of each body of water. You will see that much muddied water is carried down stream by the river and dumped into the upper end. If you can't get aerial photos after a heavy rain, send people to the Browns Bridge Road crossing on Rocky Gorge or the Tridelphia ramp (near Sunshine, MD) on Tridelphia.

Pray for a heavy rain, because the proof I've noted is irrefutable and easily documented w/ photos.

Richard Blatchford

---

**Subject:**

Wssc watershed meetings

I was unable to attend because I have had to work. I am very concerned though asinhear there is a possibility of banning use of the reservoirs by kayaks and canoes.

If water quality is the issue, then some enforcement of current rules need to go first. I see people swimming and wading. I see people having their dogs swim. but my biggest concern is how cars and trucks pull into water to get their boats in and out. Many of these boats have been in other bodies of waters as they have the huge motors on them. They may not use them, but they can't be all that clean.

I also think that water quality is probably impacted more by the things people use in their yards nearby. I don't see that prohibiting kayaking and canoeing and other non'motorized boats will greatly impact the water quality.

I also think the announcements about this study on the website was misleading. It was only after hearing from someone who attended that I realized that you are considering such an action. If you want people to take care of the water, let those who respect it (in their non'motorized boats ) enjoy it.

I would be willing to talk with you further if you like.

Christine Schmidt

**Subject:**

WSSC watershed

I used to be a regular user of the WSSC watershed around Brighton Dam before I found out that hiking about was an illegal activity. It's obvious that horseback riding is allowed because it's got a lobby but human walking does not. In fact, it's likely that any human activity, including the WSSC's motorized patrols is potentially a source of erosion unless the paths/trails are graded or somehow designed to slow the water flow towards the reservoir. As I said to U, if the public can't use a place because it is walled off—it drops off the public's radar and this beautiful resource should be celebrated by the non-boating public.

While I get most of my water from the Pautuxent (I live about a mile and a half south of the watershed near the source of one of the eastern branches of the Northwest Branch of the Anacostia), I don't think that much of the public thinks about the watershed ever—they turn on their faucets and hoses and simply don't want to comprehend the complexity of this life support system.

WSSC obviously has an investment in keeping the area as pristine as possible in order to minimize their water processing costs and the rest of us have an indirect investment in this as well but I'm betting that only a minority of water customers ever read the inserts in their bills or use their website for informational purposes.

So how about permits for hikers and bikers?? (If you're going to allow horses, then it should be open to others—my favorite is the ban on jogging.) How about regular maintenance by volunteers for permit credit on whatever trail system is ultimately decided upon. How about dredging the reservoirs to increase their capacity which has probably been compromised by runoff and use that to form dikes to slow down runoff? I somehow get the feeling that the WSSC regards the watershed as a necessary evil or burden—a distraction from their water purification duties.

As for the old Laurel High School, its turret was used as an observation post for enemy aircraft in WW2. The building style was popular between 1920 and 1940 and I'm guessing that it was built about the same time as my own high school which was opened in 1935. (I was the aging gent who remarked that he felt as if he'd been deposited in his old high school.) When I got home I realized that I had graduated from high school 51 years ago—and I just hadn't been in a building like that in several decades. It was like a time capsule.....only the colors of the walls were different.

Jack Schwarz



**Subject:**

patuxent watershed comments

i am a long time recreational user of both reservoirs. since 1971. i am curtis hintze ;  
discussing water quality. erosion. sedimentation. etc.

i fish from my 16 ft. boat which uses electric motors. no pollution from boat. all trash brought home.

i also use my 4 kayaks and a canoe.

i also sail my 19 ft. sailboat.

i mostly launch at greenbridge, but occasionally at supplee lane and tridelphia lake road.

no horseback use, no shorefishing for me. i have used mooring stakes in years past, but no longer do.

the trash left by the shorefishermen is a big problem. i pick up and remove many pounds of trash each season.

last season i removed 62 car tires from lake tridelphia. ask jim benton about me.

my use of the reservoirs does not impact either water quality or cause erosion/sedimentation.

to see what fish we catch, ask to see the annual contest results from 2011.

i hope to continue to use the reservoirs for many more years to come.

water quality...during a heavy thunderstorm, the upper parking lot at greenbridge contributes a fair amount of silt runoff. install a sediment trap.

the mooring stake areas at greenbridge are eroding. put down a few truckloads of gravel.

the fire roads are eroding heavily.

the trash problem....post the fines for violations and enforce same. the police force is stretched thin. the watershed patrol(boat based officers) was disbanded many years ago.

police on dirt bikes are needed.

police in boats are needed.

make people wear their res. use permit in plain sight.

post regulations in spanish.

extend the fishing season into mid december as it always was.

i noticed that the water looks great on tridelphia, but a bit more murky in rocky gorge. too much development around rocky gorge i think.

tridelphia is unique in maryland in that it can rain very very hard, and the lake stays clear. intact watershed is the reason.

deer hunting... yes. hunt more, and often, to manage the population and balance the ecosystem

it is to wssc benefit that the recreational users are allowed to continue to use the lakes as we have been. we are the eyes and ears to spot violations. cell phones now allow us to talk directly to the wssc security staff.

if your people wish to study the lakes by boat, my 16 foot boat will carry 4 people. i am willing, as a volunteer, to show you the lakes from the waters perspective.

the 2 lakes are a true jewel amidst the urban place i live, r

thanks, curtis hintze

**Subject:**

WSSC Public comment

Ms. Eberhard,

I am submitting this comment in response to a request for public input into the Patuxent Watershed Study concerning the Washington Suburban Sanitary Commission (WSSC) current and future uses.

I have spent many years either deer hunting or hiking Rocky Gorge and Triadelphia reservoirs. The quality of both the deer hunts and the pristine habitat are unique for all of Maryland. I have hunted many of the managed deer hunts in Maryland and the WSSC staff have been exceptional and the quality of the hunts unparalleled.

Aesthetically, this area is also unmatched in its uniqueness. The large tracts of forest provide excellent habitat to wildlife and offers the public the opportunity to observe and enjoy nature.

As such I would recommend maintaining or increasing the managed deer hunting opportunities to reduce deer impacts on the WSSC habitat, continue the multi-use access by the public and maintain the diverse habitat existing in the vicinity of the reservoirs.

Thanks

Bob Sadzinski

**Subject:**

Re: Public Meeting Notice - Patuxent Reservoirs Watershed Meeting

Thank you so much for sending out the notice for the meetings. I did attend and was not amused. Many stables will have problems finding borders if the trail time is diminished from what most riders have to spend with their horses. Sue Gething at Kruhm Farm and Woodland horse Center

10.

**Subject:**

WSSC Reservoir Meetings

Hi Tracy,

I am a concerned "stake holder" of the WSSC Reservoirs. I live about a mile from Rocky Gorge. As a stake holder, I enjoy kayaking and canoeing on both Rocky Gorge and Triadelphia Reservoirs. I did attend the meeting in Laurel on June 18th.

I would like to provide two additional points for consideration that I did not hear at the meeting I attended:

1. **Hold a Reservoir Clean Up Weekend** - Use private boats to collect trash from the waters, Contact those people who hold use and boat pole permits. Ask them to help pick up trash from the edges of the reservoirs using their own their watercraft. WSSC could use their boats to collect and consolidate the trash from private canoes and kayaks that have patrolled the perimeter of the two reservoirs.

2. **Old Mill Seats as a source of sediment** -

see <http://pages.towson.edu/thompson/Courses/Techniques/Papers%20and%20theses/Allen-Ben-Thesis-2011-05.pdf> This is a thesis that looks at old mill seats adding sediment to Baltimore County Reservoirs.

**On Triadelphia old mill seats** included Pigmans, Gaithers and Roxbury . Of Course Triadelphia Mill itself but it is underwater.

**On Rocky Gorge old mill seats** include Crows Mill (underwater?), Ridgelys (underwater?) . Bond Mill (under water?), Rawlings Mill (not Rawlings River) as well as Haviland Mill.

Other names like Riggs Grist Mill, Nichols Mill were on the Big Patuxent but I don't have their locations.

Also consider that the Rawlings River and its tributaries has many old mill seats on it - Grove Hill, Chandlees, Brooke Grove, Sherwood and several more.

Thank You,

Tom Sims

**Subject:**

WSSC Patuxent Watershed Study

Dear Ms. Eberhard and the Patuxent Watershed Study Group,

I wanted to offer a few comments on future land uses for the WSSC reservoir. The river is highly valued by the local community, not only as a source of clean drinking water, but also as a scenic and quiet refuge that should be protected for future generations.

I know the mandate of the WSSC is to protect the quality of the water in the reservoir and I endorse these efforts. However, the gradual elimination of access to the water may ultimately frustrate this goal; the community of people who value and use the reservoir can be called on to help care for its protection, rather than treated as antagonists.

One of the biggest problems I have personally observed, is the damage done by shore fisherman. They not only use the designated fishing areas, but also park and walk down to spots all along the river. These areas are seriously compacted from trampling feet and strewn with trash, beer cans and fishing gear. This activity might be regulated with better signage advising people to fish only in designated spots and posting warning signs about strict fines for littering.

I know the policing and enforcing resources of the WSSC have been taxed lately and perhaps allowing a small cadre of volunteers who could report abuses and violations might be a useful resource. Many who retreat to the reservoir are the very people who could be relied upon to be the "eyes and ears" of the watershed.

Canoeists, kayakers and non motorized watercraft users who are on the river do no harm to the water. The WSSC could benefit from this community by making it easier to get a daily pass to enter the water. If there were honor system kiosks at all legal and designated put-ins, the WSSC would bring in more revenue than they do now. Currently the only place to buy a day pass is at the dam or WSSC headquarters which is far for many of us who might spontaneously like to put in a canoe, or take visiting friends onto the reservoir on a summer afternoon.

If it is determined that any interior horse riding trails need to be re-routed away from the water, I suspect this community would be happy to comply. There are also numerous archeological sites along the river that need to be protected and the WSSC riding trails should be diverted away from these treasured sites.

I think the biggest threat to the water quality is the housing density and threatened changes in the zoning along the watershed and I would love to see the WSSC offer input in the zoning changes that are proposed every few years. In fact, this may be an unintended consequence of closing the horse trails: if more and more stables are forced to close because of limited access to the trails, those lands will most likely be subdivided for additional housing which use chemical lawn fertilizers and septic systems. Even at five acre zoning, a one hundred acre horse farm could be replaced with twenty homes.

I know the upcoming study is largely scientific to gauge the environmental effects on the water and I thank you for allowing me additional input into this discussion.

Sincerely,

Barry Louis Polisar

**Subject:**

Recreational Use of Reservoirs

Ms. Eberhard,

Please add my voice to those who would like to continue to use the Tridelphia and Rocky Gorge reservoirs for limited recreational activities including kayaking. We have lived in Montgomery County near Tridelphia for 25 years and have long enjoyed the very beautiful nature experience so close to home. I frequently kayak on weekends with friends and have purchased season passes for the last 7 years (even when the price doubled it seemed a small price to pay). I enjoy the relaxation, peace, quiet that the reservoirs provide so close to home. It is a wonderful "oasis" in the midst of a fast developing area and I so appreciate the opportunities the watershed offers. The water is peaceful, the plant and wildlife amazing!! I hope to be able to use the reservoirs for kayaking for many, many years.

Thank you!

Deborah McIndoe

Patuxent Watershed Study  
c/o EA Engineering, Science and Technology  
15 Loveton Circle  
Sparks, MD 21152

JUN 13 2012

RECEIVED  
SPARKS, MD

June 11, 2012

Dear Patuxent Study Team:

I am a member of the Maryland Horse Council, a Maryland taxpayer, land owner, voter, horse owner, and trail rider. I ride horses, hike, and run in the Patuxent Watershed.

I am aware of the recent actions taken by the WSSC to restrict public access to its watershed lands. I am interested in the Patuxent Watershed Study and hope that you will consider the views of the Maryland Horse Council on the study's scope and conduct, as well as on the historic importance of the watershed to equestrian users and the importance of equestrian users to the watershed.

Hors back riders and other recreational users have had access to these lands for generations, and as development continues in our area, access to trails such as these has diminished. Many Maryland Horse Council members have become volunteer stewards of the land and water, and their presence on these trails has contributed greatly to the security of these areas.

As I understand it, verifiable facts don't currently exists as to why horseback riders should be banned from the Patuxent Watershed. I am unable to attend your public meeting, but I hope you will take my interest in this issue under consideration. The Patuxent Watershed belongs to the people of Maryland, and equestrian use should not be restricted.

Sincerely,

Valerie Ormond



**Subject:**

WSSC COMMUNITY PROJECTS

I have participated in the Patuxent River Clean Up project for over 10 yrs. I am the site coordinator for the Green Bridge Boat Landing site in Montgomery Co. This project has been a continuing success due to the coordination and support from Sandy August & the WSSC working so smoothly with the Patuxent River Keeper organization. I live within a quarter mile of this amazing public access facility. I walk at this site almost daily. The impact of this clean up project has had a lasting effect improving the level of debris at this site. We have removed environmentally damaging trash (tires, metal debris, and some construction waste). Our clean up projects every year have yielded up to 25 bags bags of non recyclable trash. Every year we also sort recyclable trash & yield up to 20 bags of trash we recycle. The participation of WSSC is critical in the clean up. They pick up all our non recyclable trash as well as large debris we could not handle without there participation. I want to voice my appreciation to Sandy August & WSSC for helping maintain this valuable natural habitat. I make myself available for any other community based feedback. Thank you. Anne Thompson

JUL 09 2012

RECEIVED  
SPARKS MD

July 05, 2012

Patuxent Watershed Study  
c/o EA Engineering, Science and Technology  
15 Loveton Circle  
Sparks, MD 21152

Reference: WSSC Patuxent Reservoirs Watershed Independent Study

Dear Sir:

Thank you for this opportunity to offer some thoughts in regard to the Washington Suburban Sanitary Commission's interrelation with its customer based community.

For reference, my property is contiguous with both the Rocky Gorge Reservoir watershed (WSSC) and a double pylon wide Baltimore Gas & Electric (BG&E) transmission cut which traverses the Reservoir.

1) Water Quality: Water quality has a critical impact upon human health. I am greatly disturbed by:

- WSSC's seeming unwillingness to test, record and report on raw water contaminants beyond the minimal water quality standards promulgated by the Environmental Protection Agency (EPA). It is clear that those politically derived selections may establish WSSC's legal obligation. But I believe that there is also a moral responsibility to:
  - provide the best possible consumer product given available treatment technologies beyond and regardless of minimal standards compliance;
  - educate the consumer as to what remains in the treated water and how they may supplement WSSC's processes if they so desire or even can with available technologies (EG: synthetic sex hormones, antibodies, mood stabilizers, anti-convulsants & other pharmaceuticals, MTBE...which is reported to be present in *every* body of water in the United States, viruses, the international fluoride debate, ...);
  - *be the public's advocate for national water quality improvement and not simply maintain the staus quo.*

After all, they are a bi-county, quasi-government agency and not a pure for-profit corporation.

- BG&E began applying herbicide on their property a couple of times per season about two to three years ago to reduce their expenses incurred in the previous five to ten year cycles of manual tree cutting and trimming. I do not know what is being applied or in what concentration. But if we look at the historical experience of what was believed to be one of the safer herbicides, house hold strength RoundUp, it has a half-life of around nine months. Current spraying applications have been closer together than that meaning that some residue will always be present and running off into the reservoir. Further, several studies have raised serious concerns about the previously listed inactive ingredients in RoundUp which were subsequently found to form unhealthy compounds in the environment after application. By extrapolation, any herbicide is likely to have the same inherent problems.

- it has been reported to me by a neighbor who is suffering from a reoccurrence of pancreatic cancer that there are a number of cancer cases (not to mention other health issues) in the immediate neighborhood. As a thirty five year resident and realtor, he is better acquainted with other residents than I am. Because of the variety of cancer types it is not considered a cluster.

- over a decade ago many older homes in the surrounding area suffered pin holes in their interior water supply pipes. This was such an unusual issue for copper tubing that even THIS OLD HOUSE magazine / television series experts cited it as a unique problem nationally at the time, particularly given the density within the confined geographical area in which it appeared. Their conclusion, which WSSC disputed when it was posited by others independently, was that the effect had to be due to an additive in the water treatment process. Eventually WSSC admitted to modifying the chemical treatment of raw water in response but I do not personally know what was added to or deleted from their processes...just that the problem appears to have gone away with chemical additives.

However, every time I distill a gallon of water for drinking and see the brown residue left in the boiler and smell the unusual odor I cannot help but wonder: what is in the tap water?

## 2) Safety & Security:

- it is curious that the "post 911" era was when WSSC decided to cut costs by greatly reducing security patrols in the watershed. More recently, long standing horse trails have been closed although riders provided on-going:

- surveillance of security and ecological conditions while possessing extensive knowledge of local conditions and residents;
- physical maintenance for the trails as well as the watershed perimeter road, even assisting with the cleanout of several neglected drainage pipes along the road (others had 'blown out' under pressure over the years causing more extensive washout damage than if they had been functioning properly);
- local economic support (boarding stables, trainers, equipment & feed suppliers and associated services and employment positions).

- WSSC's desire to operate in secrecy and thereby avoid public scrutiny and criticism has led to an unethical lack of general public notice regarding their extensive Deer Management Program (shotgun hunts) even though the dangerous activities are not an expected use co-mingled with permitted general public access (boating, horse riding, picnicking...). WSSC had scheduled twenty four (24) hunts (Rocky Gorge Reservoir @ (13), Tridelphia Reservoir @ (11)) for the October 2011 through January 2012 season, and reported two thousand four hundred and one (2401) kills officially for the eleven years' Program as of the end of the 2010-11 season. This is not an insignificant expenditure of fire power.

In the same period, the decline of security patrols has allowed a visible increase in general trespassing by a diverse community which is not always sourced locally and may not be well informed as to what watershed areas are open to the public or the hunt zone boundaries, etc. There is no published pre-notification of the hunts. Signage on the days of the hunts has been weak or non-existent. Local law enforcement offices have not been notified in at least a number of instances...if ever. And horse riders or boaters who legitimately enter into the watershed and travel between counties are unlikely to have any notice prior to hearing gun fire.

Only contiguous property owners are sent hunt schedules. For example, a neighbor who operates a boarding stable and whose property is not contiguous with the watershed...but who can legally access it over land leased from BG&E which is...does not receive such notifications.

- tragically, a WSSC employee assigned to assist a deer hunt last fall (this is routinely done to drag deer carcasses in the water or on the shore line to access points for hunter retrieval) was assigned by WSSC to work by himself. Apparently he was not provided with:

- a boat constructed for / appropriately conducive to such a one-man retrieval operation;
- water safety or heavy object retrieval training;
- appropriate personal safety and work equipment (regardless of what the Maryland Department of Natural Resources may mandate for boat operation on the largest and longest river occurring entirely within the State, there are common sense, ethical standards that WSSC should have been attentive to).

He ended up dead in the water. The body was not retrieved for almost two weeks although it surfaced where he had fallen in, making me question the quality of the SAR procedures conducted. WSSC in its peculiar need to maintain a very low

corporate profile regarding the hunt (and its failure in contingency planning (?)), released very little information and did not, according to local report, call upon local skilled tracking or diving volunteer groups. Engineering, Science and Technology should have access to more complete information regarding this event directly from WSSC; I have only been able to garner unofficial bits and pieces from a variety of sources.

The tragedy for Mr. Duckett's family at Christmas, was enormous. The rest of us only had to tolerate a corpse in our raw drinking water for an excessive period of time.

WSSC has a public relations problem. It prefers to operate in secrecy and obfuscation in order to avoid customer challenges to its perceived authority and has become unable and unwilling to draw upon the expertise and resources within the community. Yet, a vested public could be an important ally and valuable source of free information.

3) Ecological: there is great environmental importance to the watershed even beyond the maintenance of raw water quality.

- the loss of viable security patrols by WSSC has allowed considerable unmanaged activity just in the small area which I can observe from my property. Temporary damage from foot traffic, motorbike, ATV, golf cart and even authorized utility and contractor vehicles has always been far greater than what naturally existing wildlife and horses may cause yet the latter seem to receive the blame for what may be the same environmental changes I see occurring to my limited acreage.

- ironically, WSSC rules and regulations restricted horses to traversing the same paths over and over which inevitably slowed re-growth of natural plant life... but these are very narrow paths and I have been advised that none are near the edge of the reservoir nor display indications of created erosion. Unmaintained drains and sections of the perimeter road *have* created water problems such as 'blowouts' and the re-directing of surface runoff from the naturally formed inlets and streams. By the way, horse and deer skat (as with any herbivore) provides excellent fertilizer.

- while I do not support the deer hunt, there is general agreement that it is the most inexpensive solution after just leaving the population to naturally size itself. However, WSSC's supportive arguments for the Deer Management Program should pertain to specific watershed issues within the scope of their legal authority and not local garden damage complaints or traffic accidents in Montgomery County or agriculture damage (which they are negatively impacting themselves with the current equestrian policy). WSSC has not made a well documented case for proving that deer permanently damage the watershed or raw water quality.

- at one time beavers were allegedly doing extensive shore damage; then we went through periods of severe drought when considerable shoreline was exposed around the entire reservoir and anyone could clearly observe that no attempt had been made to stabilize even the worst erosion. The beavers seem to be gone but erosion (and water turbidity) complaints have increased. Where is the science?

- there must be some level of lead residue being deposited in the watershed by the hunts; given the published number of kills per year, I can only imagine the number of rounds and individual pellets which have ended up in the water / soil / vegetation as 'through-and-throughs' or outright misses.

- before further blame is placed on wildlife or horses, and certainly the most pristine surface water on earth is surrounded by natural settings, it would be appropriate to better define the specific water treatment issues:

- thoroughly test the river water and accurately list all substances contained within for several points along its length, particularly at major road bridges after rain and snow fall;
- accurately collect and analyze air, rain, snow and soil samples for pollutants;
- accurately record changes to the water shed caused by extreme weather events;
- closer to raw water intakes, there are a number of mechanical and biological approaches to calming the water currents, stabilizing bottom soil and vegetative matter and to retaining the shoreline.

If those steps are performed, there will be a much better understanding of how the watershed is evolving and what things are truly impacting raw water quality. *THEN*, appropriate solutions will become more apparent!

4) Recreational: I am in agreement with the parks planner (Howard County Department of Recreation and Parks) who stated at Laurel's June 18th meeting: "Prohibiting use of the recreational purposes would break faith with the groups that have been so instrumental in preserving the watershed" (THE LAUREL LEADER, June 21, 2012)

- Dear WSSC: that means when you partner with the community you get a lot of free maintenance and security;
- closing picnic areas during winter months and restricting equestrian use of internal paths do not address or impact water quality issues to any measurable extent and deny an important security component - in fact, I would like to see WSSC institute a program whereby a person owning property in neighborhoods contiguous to the watershed could obtain a permit to *walk*, at least on the perimeter road, and have the ability to report any adverse condition to a responsible WSSC employee;
- the Deer Management Program needs to be re-evaluated on an on-going basis.

Thank you for this opportunity to comment.

W.C. Trussell





**The Wildlife Achievement Chapter**  
of The Izaak Walton League of America, Inc.  
P.O. Box 118  
Damascus, Maryland 20872

Patuxent Watershed Study  
c/o EA Engineering, Science and Technology  
15 Loveton Circle  
Sparks, MD 21152

EA ENGINEERING July 11, 2012  
SCIENCE AND TECHNOLOGY

JUL 16 2012

RECEIVED  
SPARKS MD

Dear Ms. Eberhard:

On behalf of the Wildlife Achievement Chapter of the Izaak Walton League of America, I am forwarding comments for consideration during the ongoing study of the WSSC properties in the Patuxent Reservoirs Watershed. Our Chapter appreciated the opportunity to host one of the two public information meetings held in June on this study about how the WSSC properties are being used and how they should be used.

This year is the 90th anniversary of the League, a conservation organization founded by a group of hunters and fishermen and the 75th anniversary of our chapter. We consider ourselves important stakeholders in the protection of the Patuxent River Watershed and the reservoirs. We have formed partnerships with Montgomery County MNCPPC and with WSSC to protect the reservoirs and their tributary streams. To this end, we have conducted native tree plantings and invasives management work days on parkland and WSSC property, and have sponsored an annual clean up of the Upper Patuxent that predates the Potomac River Watershed clean up.

A primary goal of the League is to educate the next generation about the wise stewardship of the land and its resources. To do this, there must be access to large areas of open space maintained in as natural condition as possible, such as can be found on the WSSC reservoirs property. Without access, it is not likely that the youth of today will appreciate the beauty, function, and need for areas that provide habitat for wildlife as well as buffers for runoff from developed lands.

We advocate that you continue to allow recreational access for those activities that connect us with our natural environment. This would include fishing, canoeing and kayaking, birdwatching, hiking, and other passive recreational activities. We also support the DNR, Howard County Department of Recreation, and Montgomery County Parks staff who pointed out the need to continue managed hunts with a goal of achieving sustainable white-tail deer population throughout this region.

We look forward to continuing our partnership with WSSC for outreach and stewardship projects that will reduce pollutants and improve water quality in our local streams and the WSSC reservoirs.

Sincerely,

Jeff Deschamps  
President, Wildlife Achievement Chapter

To Tracy Eberhard  
EA Engineering, Science and Technology

Dear Tracy,

I attended the public hearings that EA Engineering Science and Technology conducted on behalf of the Washington Suburban Sanitary Commission (WSSC) concerning public use of Rocky Gorge and Triadelphia reservoirs and the associated impact this use may have on the water quality of both impoundments. While it appears that WSSC seems most concerned with the impact that equestrian trails may have on water quality, other recreational uses also seem to be under scrutiny during the current phase (Phase I) of EA's study.

Inland Fisheries monitors and manages the gamefish populations in both Rocky Gorge and Triadelphia and has stocked thousands of fish over the years. These species include walleye, smallmouth bass, striped bass, tiger musky, northern pike, among others. Both reservoirs provide valuable fishing resources to anglers covering a broad area of the State due to the high quality and diversity of fish found in the lakes. Losing access to either one of these impoundments to angling would be a great loss to fishermen and those businesses and local economies that support and benefit from them. The angling community shares the same characteristic as the equestrian users in that they act as additional eyes and ears for law enforcement on the lake and often report suspicious activities in and around the lake. More than once we were told of folks swimming in the lake or folks letting their pets swim in the lake when we were mistaken for reservoir security by anglers who we met during our fish surveys.

During our work we have noticed, over the last 10 – 15 years, an increase in turbidity in both Rocky Gorge and Triadelphia reservoirs. Siltation has increased, but this appears to correlate more with an increase in development within the watershed, particularly at Rocky Gorge on the Montgomery county side and the upper area of Triadelphia Reservoir. The headwaters of Triadelphia used to be a great spawning area for large striped bass in the lake. The amount of sediment in this area has increased so much over the last 10 years, that stripers no longer use this portion of the lake for a spawning..

Inland Fisheries would like to see Rocky Gorge Reservoir and Triadelphia Reservoir remain open to the angling community. The location and species of fish available to fishermen is unique for such a large metropolitan area like the Baltimore/Washington corridor. When compared to overall watershed influences, if the main concern of WSSC is to identify sedimentation issues within the lake, it is our opinion that the limited number of shoreline angling access points, in combination with the boat motor restrictions (self-propelled boats only) and limited number of boat ramps, should rank angling as a very low-impact activity within the watershed.

Best Regards  
Mary Groves  
Maryland DNR, Inland Fisheries  
Southern Region Manager



## Comments and Additional Material Submitted

COMMISSIONERS  
Gilbert B. Lessenco  
*Chairman*

Henry T. Arrington  
*Vice-Chairman*

Ada Koonce Blumenschein  
Waymond D. Bray  
Robert M. Potter  
Robert P. Will

Richard G. Hocevar  
*General Manager*



## WASHINGTON SUBURBAN SANITARY COMMISSION

January 23, 1991

EA ENGINEERING  
SCIENCE AND TECHNOLOGY

JUN 19 2012

Ms. Barbara Sollner-Webb

Dear Ms. Sollner-Webb:

This letter serves as official permission for you, Ms. Barbara Sollner-Webb, to erect and operate one (1) 4' x 6' wooden or earth tone metal gate as a special exemption, private, horseback riding entrance point onto WSSC Watershed Property from your future residence at 17200 Melbourne Dr. This gate will hinge so as to swing into and out of the WSSC property line with a double locking access system. This system will be secure at all times with your and the WSSC's lock always in place and locked. Upon the review and approval of this private entrance into our equestrian trail system by Watershed Protection Chief, Larry Iager, you were issued a WSSC lock on 1/17/91. WPC Iager marked and noted a spur horseback trail from your proposed entrance to our main horseback trail with orange ribbons. You will need to clear this trail with the least damage to trees and shrubs on the WSSC's property. All cost of materials and labor to clear the trail and erect the gate will be your responsibility. The WSSC will not bear any liability for the building, maintenance, or use of this private property owner's gate now or in the future.

Sincerely,

Larry Iager,  
Watershed Protection Chief

LHI:ssa

SAY "NO" TO DRUGS

Tuesday 6-19-12

JUN 19 2012

I am Barbara Sollner-Webb, West Laurel Civic Association board member, Johns Hopkins University Professor, and a true environmentalist, including a long term member of the State's Patuxent River Commission and of WSSC's prior Environmental Advisory Committee.

Like most most everyone who spoke last evening, we would not want to ride WSSC's trail if it damages the reservoir, as WSSC alleges.

But the trail is in excellent shape [PHOTOS], as determined by certified trail masters; the vast majority shows no hint of erosion (from its countless decades of use, because it is carefully used and diagonally countered). Most everyone who sees this trail -- including the WSSC Commissioner, State Senator, two State Delegates, and County Council member who I have taken out [PHOTOS] -- comment on its lack of erosion. WSSC's EAC members determined that far less than 1/10,000 of the reservoir's sediment is from the horse trail. [CALCULATION] Less than 1/100,000 of the reservoir's phosphate comes from this horses use.

Yet last year WSSC closed their equestrian trail, based on unsupported claims that its use makes "the reservoir water harder to treat" and was "the biggest factor" in generating the reservoirs' sediment and was generating "pollution". [p1 (quotes) in 4 p pdf]

Questioning those assertions are over 1100 signatures on petitions asking for their data [2011 & 2012 PETITIONS], plus requests in countless letters to WSSC and in 43 Maryland Public Information Act requests, filed on behalf of over 3500 citizens. Although extremely un-forthcoming, WSSC eventually released some documents with their data that notable demonstrate the reservoir's water quality actually improves as it runs parallel to the length of the equestrian trail [p2 (water data) in 4 p pdf], quite unlike their claim of water quality damages from trail use. And Maryland's multi-million dollar TMDL analysis (plus discussions with their expert preparers) confirm less than 1/100,000 of the reservoir's phosphate comes from use of WSSC's horse trail use [PDF]. WSSC moved riding to their access road, proclaiming it "very flat and very negotiable", yet topo maps [USGS MAP] confirm much is extremely steep; most of that is seriously eroding [PHOTO] and channeled directly into the reservoir. WSSC also banned all winter riding on their lands, claiming those "the wettest months of the year", completely opposite to WSSC's own data obtained through the MPIA processes [p3 (rain data) in 4 p pdf]. Thus WSSC's claimed reasons for stopping equestrian use just don't hold water.

In fact, equestrians markedly help the reservoir! WSSC's previous watershed patrol repeatedly called the equestrians their "eyes and ears". For instance, we discovered an enormous sediment flow, traced it to an uncontrolled highway project, and shepherded through its correction with Maryland Department of the Environment, who estimated we saved the reservoir 15,000 to 50,000 tons of sediment. And we re-initiated work correcting WSSC's severely neglected culverts, several of which have blown out the access road since WSSC's decision to stop culvert maintainance.

Thus equestrians are not damaging but helping the reservoir, and their use of the sound trail should be retained.

Finally, please accept my offer to take you out on the trail, so you can see its high quality.

Barbara Sollner-Webb

Professor, Department of Biological Chemistry, The Johns Hopkins University Schol of Medicine  
Vice-President, West Laurel Civic Association

12 year member of the Governotr-appointed Patuxent River Commission

10 year member (5 as its chair) of WSSC's on Environmental Advisory Committee



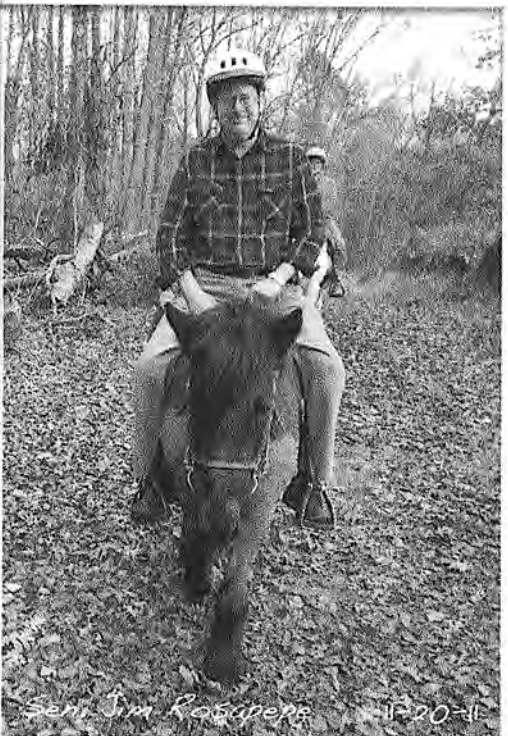
27  
10500 #2

Typical of the contoured, un-eroded equestrian trail

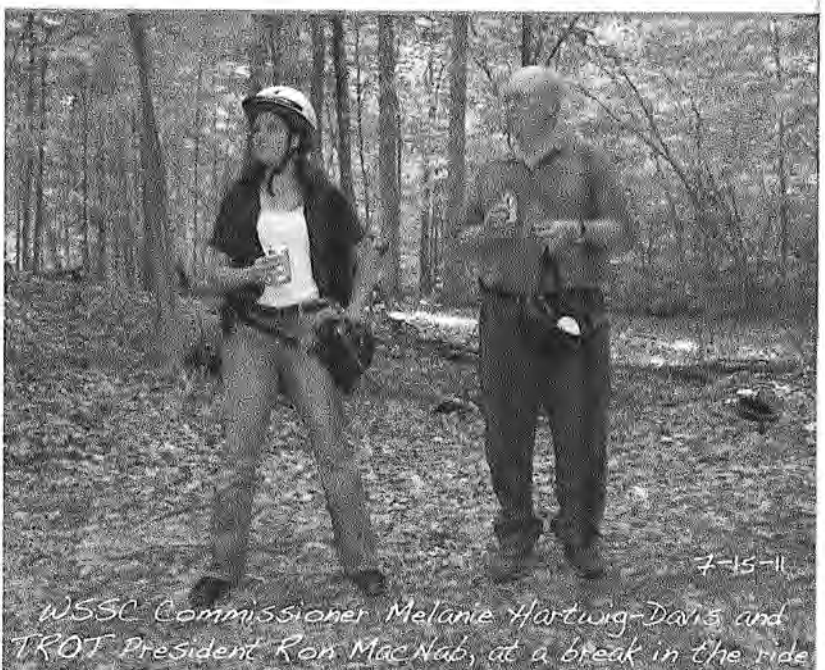




6500 #3



Sen. Jim Rosapepe 11-20-11



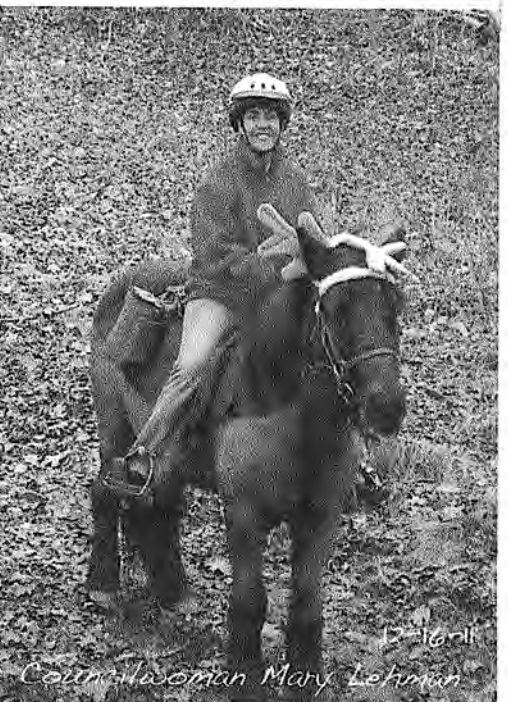
7-15-11  
WSSC Commissioner Melanie Hartwig-Davis and  
TROT President Ron MacNab, at a break in the ride



Del. Ben Barnes 16-10-12

Officials who commented on the  
lack of erosion on WSSC's trail

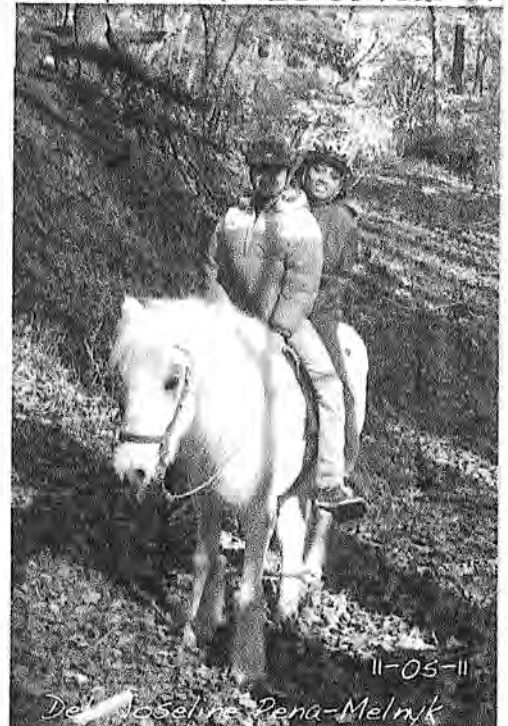
(unlike on the access road ↓)



12-16-11  
Councilwoman Mary Lehman



11-05-11  
Del. Joseline Pena-Melnik and family



11-03-11  
Del. Joseline Pena-Melnik

b s w - #4

# Calculations of Sediment, Phosphorus and Animal Wastes getting into the Rocky Gorge Reservoir due to horses on WSSC's Equestrian Trail, and of the effects from WSSC's changed regulations

Assessing whether enough sediment and horse waste could run off the equestrian trail to make the reservoir's water any harder to treat, as WSSC asserts, below are the trail's calculated contributions. This shows the trail use could provide at most a negligibly small fraction of the reservoir's total sediment [much less than 1/10,000 (more likely 1/100,000)], phosphorus [ $\sim 1/1,000,000$ ], and animal waste [much less than 1/1,000]. Indeed, more sediment and waste will get into the reservoir from riding the fire access road, previously forbidden because much of it is very steep, already severely eroding, without vegetated buffer and flows directly into streams that feed the reservoir.

EA ENGINEERING  
SCIENCE AND TECHNOLOGY

JUN 19 2012

## Sediment:

Determined as the fraction of the total sediment in the reservoirs, which is about  $7 \times 10^6 \text{ m}^3$  (14 billion gal reservoir capacity, reported to be about 12% sedimented in)<sup>[1]</sup>

Sediment from the:	equestrian trail -- <u>maximal possible</u> <sup>[2]</sup>	equestrian trail -- <u>more realistic</u> <sup>[4]</sup>	access road -- <u>likely estimate</u>	access road washout <u>at Burtons Lane</u> <sup>[6]</sup>
section length	18 mi (= 30 km)	1/2 mi (= 0.8 km)	~1/4 of 12 mi (= 5 km)	50' (= 16 m)
its width	~1.5' (= 1/2 m)	~1' (= 1/3 m)	15' (= 5 m)	15-25' (~7 m)
its depth	<2" (= <5 cm)	1/2 - 1' (= ~1/4 m)	1-12' (= average ~1.5 m)	~18' (~6 m)
sediment volume:	less than $750 \text{ m}^3$	~ $70 \text{ m}^3$	$37,000 \text{ m}^3$ <sup>[5]</sup>	~ $675 \text{ m}^3$ <sup>[7]</sup>
Fraction of total sediment:	<1/10,000 <sup>[3]</sup>	1/100,000	1/200	~1/10,000

The trail sediment is minimal relative to the 10,000-30,000 cubic meters of sediment that MDE judged equestrians' efforts saved from entering the reservoir (discovering sediment from overflowing road construction ponds and working for its resolution).

<sup>[1]</sup> These are then numbers WSSC has publicly reported; various studies WSSC has contracted to determine the sediment, which are available online, reach widely varying conclusions, with 12% about the average.

<sup>[2]</sup> Calculating sediment from the average depression of the equestrian trail is a major overestimate of erosion, since the depression in most of the trail is from compaction & lateral movement, not erosion. Further, because the equestrian trail is contoured to diagonally ascent hills and shed water sideways, most of any trail erosion is caught by the adjoining woods into which it runs, so much less actually reaches the reservoir.

<sup>[3]</sup> This calculation was originally performed by WSSC's Environmental Advisory Committee in 2001.

<sup>[4]</sup> While most of the equestrian trail evidences no erosion, this calculation accounts for the short stretches of trail where some erosion has occurred during its 50 years. WSSC has refused equestrians' offers to re-route these less good sections. Note that most of even this sediment will have run into the adjoining woods parts and caught before reaching reach the reservoir (see <sup>[2]</sup> above).

<sup>[5]</sup> Most of this sediment is channeled directly into the stream at the bottom of each hill and then into the reservoir.

<sup>[6]</sup> This is only one of several wash-outs of the fire access road, from blocked culverts which should divert the water.

## Phosphorus:

(the nutrient for which the Rocky Gorge reservoir is impaired according to the State's TMDL document)

Total phosphorus into the Rocky Gorge reservoir is 47,000 lbs/yr.

A 1000 lb horse is recognized to excrete ~16 lb phosphorus / year.

~20 horses out ~2 hr/week each calculate to leave ~4 lb of phosphorus per year on WSSC's trail. That is <1/10,000 of the reservoir's phosphorus. However, only a small fraction of that phosphorus gets into the reservoir, as most is absorbed in the woods through which the trail's run-off flows (see <sup>[2]</sup> above).

Thus, ~1/100,000-th of reservoir's phosphorus is from use of the equestrian trail. <sup>[7]</sup>

<sup>[7]</sup> Note further that the state's TMDL study determined that zero lbs of the 47,000 lbs of phosphorus that get into the Rocky Gorge Reservoir each year come from animal wastes from Prince George's County (that includes its several horse farms and the county's portion of WSSC's trail) (see appendix E table 1).]



### Animal wastes:

One can compare the amounts of animal wastes left on WSSC's reservoir land by horses on the trail vs. by their reservoir's resident deer, from estimating the number of animals and hours they are out and their relative body surface area <sup>[8]</sup>:

Animals out on WSSC's reservoir lands:	Horses	Deer
approximate number out per week	~20	~5,000 <sup>[9]</sup>
approximate hours each out per week	~2	24 x 7
relative body surface area	1 to	1/5
ratio of the product	1 to	4200

So deer alone should provide over 4,000 times more animal waste than horse using the equestrian trail. But there are additional significant animal wastes from geese in the reservoir, dogs, problematic septic, etc.

<sup>[8]</sup> The amount of body wastes from warm-blooded animals is known to scale with their body surface area.

<sup>[9]</sup> This value was provided by Jim Benton to WSSC's EAC; WSSC's website suggests it may be 2-4 fold less, but in any case the horses contribute less than 1/1,000 the wastes relative to the deer.

### Possible health concern:

WSSC voiced rightful concern about cryptosporidium getting into the water supply. However, it is well-documented that this pathogen is not shed by riding horses, only by very young or very ill horses <sup>[10]</sup>, so that is not an issue for the equestrian trail. Rather, the concern should be for this pathogen coming from all the young deer that inhabit the reservoir, as well as from dogs of all ages and from human waste that may flow in.

<sup>[10]</sup> e.g., Equine Vet J. 26(1):14-7; JAVMA 213: 1296-1302; Equine Vet. J. 32: 247-252.

### Economic effects:

Several barns in the area are concerned that they will be forced to close down and lose their livelihood, as their boarders can't legally use the equestrian trail and move elsewhere. This problem is exacerbated by WSSC banning their prior-approved direct barn entrances, forcing riders to have to get a truck and trailer, and drive to one of only a few public entrances that facilitate trailer parking.

### Environmental and safety effects of moving riding to the fire access road:

The fire access road, to which WSSC has moved riding when closing down the long-term equestrian trail, is in large part very steep and severely eroded, forming deep channels that flow directly into the stream at the bottom of each hill, which are the tributaries of the reservoir. There is no vegetative buffer to catch that sediment. Riding on this environmentally unsound road will exacerbate its erosion. [In contrast, the equestrian trail is contoured to diagonally ascend hills and direct any run-off into the abutting forest to get filtered.] Thus, although the fire access road is further from the reservoir "as the crow flies" than the equestrian trail, much more sediment and waste will get into the reservoir from riding the fire access road.

There also is a safety concern from WSSC having moved riding to the access road and banning use of the equestrian trail. That eliminates the safe underpass that exists in the equestrian trail at Rt. 29, instead demanding riders dodge high-speed traffic as they dash across the four lanes of Rt. 29.

### Months of banning equestrian use:

WSSC banned riding during the winter, claiming those months have the most rain. However, these are the months where the reservoir gets the least rain, according to NOAA and to WSSC's own data, obtained through a MPIO request. Furthermore, any trail erosion would be most efficiently stopped in the winter, when the trail is covered by a dense layer of fallen leaves (that last well into spring); instead, in summer that forest casts a deep shade that supports only minimal ground vegetation. [Plus, riding is already banned whenever the ground is wet and soft, to avoid trail damage and erosion.]



JUN 19 2012

Here are interesting documents provided by WSSC for MPIA requests about their closing the long-used equestrian trail (that observers feel is in very good shape), moving riding to the (steep and severely eroding) access road, and banning all riding in winter. The requested material includes data supporting their claims mandating those changes, specifically:

- "horse waste and sediment running off the trail makes the reservoir water harder to treat." (Washington Post article, 7/2/11);
- "Riding near the reservoir pollutes drinking water." ( New Channel 8, 7/6/11);
- "we [WSSC] have problems with horse waste;" (News Channel 8, 7/6/11);
- Horse waste in the reservoir from equestrian use of the equestrian trail poses a safety risk. (News Channel 8, 7/6/11);
- in generating the erosion that impairs WSSC's drinking water supply, "the biggest factor is horses." (7/20/11 letter to elected officials);
- WSSC closed its lands to horseback riding "Nov. 15 to April 1 since they are the wettest months of the year, according to official rainfall data collected at the WSSC water-treatment plan at Sweitzer Lane" (Laurel Leader 8/17/11);

None of the provided documents show any damage the trail use has caused to the water supply. Most were e-mails and petitions from equestrians upset about the changes and internal WSSC deliberations how to respond. Notable, only a few documents were relevant to the above claims used to justify their trail use change, and all of those reveal the opposite of the claims:

- (1) WSSC's measurements (of nitrogen, phosphate, and dissolved oxygen concentrations) reveal that the reservoir's water quality actually improves along the length of the equestrian trail. This is quite opposite to WSSC's claiming their data show the trail use is impairs the water and makes it hard to treat.
- (2) WSSC's measured monthly rainfall over multiple years reveal that the winter months have the least rainfall. This is completely opposite of WSSC's claim that they "decided to close the park to horseback riders from Nov. 15 to April 1 since they are the wettest months of the year".
- (3) Evidently, WSSC's calculations affirm that the trail use could cause only negligibly small amount of sediment to enter the reservoir, again contrary to their public claims that it is the major cause and the reason for their banning trail use.

(1) Document #154c- WSSC's data from monitoring the reservoir water:

measERROR: limitcheckdissolved OFFENDING COMMAND: image	total nitrogen	NO <sub>2</sub> + NO <sub>3</sub>	total phosphate
note - iSTACK: water it is: (true) -mark-	high	low	low

data for water at the surface

SURFACE Station	Date	TDC mg/L	TKN mg/L as N	NO <sub>2</sub> +NO <sub>3</sub> mg/L as N	TP mg/L as P
RG-11S Downstream Near Dam	17-Mar	4.43	0.512	1.56	0.024
	19-Apr	2.53	0.626	1.53	<0.02
	18-May	2.54	<0.5	1.43	<0.02
	14-Jun	2.33	<0.5	1.27	<0.02
	12-Jul	3.10	<0.5	1.04	<0.02
	9-Aug	2.73	<0.5	0.669	<0.01
	6-Sep				
	4-Oct				
	1-Nov				
	29-Nov				
RG-2S Upstream Route 29 Br.	17-Mar	3.19	0.640	1.38	0.059
	19-Apr	2.71	0.762	1.59	<0.02
	18-May	2.59	0.592	1.45	<0.02
	14-Jun	2.64	0.522	1.34	<0.02
	12-Jul	3.00	<0.5	0.914	<0.02
	9-Aug	2.69	<0.5	0.717	0.016
	6-Sep				
	4-Oct				
	1-Nov				
	29-Nov				
RG-3S Far Upstream	17-Mar	2.44	<0.5	1.85	0.028
	19-Apr	3.30	0.686	1.59	0.026
	18-May	2.65	0.516	1.50	0.022
	14-Jun	2.41	0.527	1.35	0.021
	12-Jul	2.97	<0.5	0.955	<0.02
	9-Aug	4.64	<0.5	0.716	<0.01
	6-Sep				
	4-Oct				
	1-Nov				
	29-Nov				

data for water at the bottom

BOTTOM Station	Date	TDC mg/L	TKN mg/L as N	NO <sub>2</sub> +NO <sub>3</sub> mg/L as N	TP mg/L as P
RG-11B Downstream Near Dam	17-Mar	-	<0.5	1.53	<0.02
	19-Apr	-	0.691	1.54	<0.02
	18-May	-	0.690	1.34	0.024
	14-Jun	-	0.614	1.35	<0.02
	12-Jul	-	0.886	0.292	0.027
	9-Aug	-	0.697	0.356	<0.01
	6-Sep				
	4-Oct				
	1-Nov				
	29-Nov				
RG-2B Upstream Route 29 Br.	17-Mar	-	<0.5	1.53	0.026
	19-Apr	-	0.719	1.59	0.022
	18-May	-	0.753	1.42	0.023
	14-Jun	-	0.897	1.20	<0.02
	12-Jul	-	0.817	0.698	0.035
	9-Aug	-	0.818	0.670	0.025
	6-Sep				
	4-Oct				
	1-Nov				
	29-Nov				

TKN value not reliable

WSSC's data show the nitrogen & phosphate concentrations go down, and dissolved oxygen goes up, in the reservoir along the length of the equestrian trail (which runs parallel to the Rocky Gorge reservoir).

All these measures show the water quality in the reservoir actually improves from the upstream to the middle to the downstream end of the equestrian trail.

The opposite should occur if use of the equestrian trail damaged the water, as WSSC claims.

(2) Document #155e- WSSC's data monitoring rainfall over four years

Month	Yr	Rainfall	Month	Yr	Rainfall	Month	Yr	Rainfall	Month	Yr	Rainfall
Dec	06	1.92	Dec	07	3.80	Dec	08	4.13	Dec	09	7.38
Jan	07	2.97	Jan	08	1.54	Jan	09	3.34	Jan	10	2.38
Feb	07	1.85	Feb	08	4.79	Feb	09	0.38	Feb	10	3.74
Mar	07	3.99	Mar	08	3.43	Mar	09	3.04	Mar	10	4.78
Apr	07	4.55	Apr	08	5.43	Apr	09	6.22	Apr	10	2.07
May	07	0.98	May	08	7.68	May	09	8.36	May	10	4.12
Jun	07	2.32	Jun	08	3.47	Jun	09	7.11	Jun	10	3.42
Jul	07	1.98	Jul	08	3.29	Jul	09	2.22	Jul	10	3.65
Aug	07	3.01	Aug	08	2.08	Aug	09	5.31	Aug	10	6.55
Sep	07	0.62	Sep	08	6.05	Sep	09	3.49	Sep	10	6.43
Oct	07	6.01	Oct	08	2.03	Oct	09	6.22	Oct	10	2.93
Nov	07	1.74	Nov	08	2.74	Nov	09	5.17	Nov	10	2.38
Dec-Mar		10.73	Dec-Mar		13.56	Dec-Mar		10.89	Dec-Mar		18.28
Apr-Jul		9.83	Apr-Jul		19.23	Apr-Jul		22.51	Apr-Jul		13.26
Aug-Nov		11.38	Aug-Nov		12.90	Aug-Nov		20.19	Aug-Nov		11.33

averaging their rainfall data over those four years:

- Dec-Mar: 13.36 inches ← winter months have the least rain
- Apr-Jul: 16.72 inches
- Aug-Nov: 15.68 inches

Thus, WSSC's actual data are completely opposite to WSSC's claims that they "decided to close the park to horseback riders from Nov. 15 to April 1 since they are the wettest months of the year, according to official rainfall data collected at the WSSC water-treatment plant at Sweitzer Lane and Route 198" (as quoted in the Laurel Leader, 8/17/11, but repeated many times).

### (3) WSSC's analysis of sediment calculations

WSSC made an additional important document available for review pursuant to West Laurel Civic Association's MPIA on the trails issue, but would not permit copies without payment of \$485/page to copy only seven requested pages (despite a written assurance that copies would be \$0.25/page). WLCA representatives who reviewed the documents reported they included WSSC's analysis of calculations WSSC had been presented last summer, which were minor updates of calculations that had been performed by WSSC's Environmental Advisory Committee and quantitatively determined that erosion of the equine trail contributes less than 1/100,000 of the reservoir's sediment. The WLCA reviewers reported that WSSC's analysis claimed there was a two fold error somewhere in that calculation.

That would mean WSSC affirms the equestrian trail use contributes only negligible amounts of sediment to the reservoir. This is completely contrary to WSSC's written explanation for closing the trail, sent to State Senators and Representatives last summer, claiming "the biggest factor is horses [which] contribute to the erosion" that causes the harmful sediment in the reservoir and "substantially impair drinking water".

That retrieved document also commented on additional calculations WSSC was presented last summer, which determined that the horse wastes from use of the equestrian trail were negligible in amount, relative to the wastes from the deer that live on the reservoir lands (using the number of deer WSSC had told its Environmental Advisory Committee were on the land). WLCA reviewers reported WSSC's new document claims only very few deer live around the reservoir, so horse wastes are a more significant fraction. However, WSSC's current website provides an estimate of the number of deer much closer to the original number, and recalculating using the number they give on their website shows the horse wastes are still insignificantly small relative to the deer wastes. [Plus, the deer, many of who are juveniles, shed the pathogen *Cryptosporidium*, in their feces, while horses of riding age are well documented in the medical literature to not pose this danger.]

Thus, it appears that the analyses in this document (which was the focus of another person's MPIA request that WSSC refused to honor) contradicts WSSC's claim that the trail use significantly damages the reservoir water.



bsw  
#1

Here is a 2011 petition on WSSC trails, set up by Lisa Pineles



## Save Equestrian Access to the WSSC Watershed Bridle Trails!

**PETITION CLOSED**

The time period for signing this petition has ended.

[Info / Feedback](#) < < [Petition Inquiries](#)



Signatures

438 of 500

Petitioning

WSSC Commissioners



Created By  
Lisa Pineles

Member Since: 04/11

About this Petition

### Changes to WSSC watershed regulations

Dear Commisioners:

As local small business owners and patrons, we are committed to improving water quality in the WSSC watershed, knowing its effect on the Patuxent River and the Chesapeake Bay. We are troubled by the recent decision to severely restrict horseback riding to access roads and to shorten the riding season by four months. This decision will have a negative impact on businesses. The decision underestimates the importance of the WSSC trails, which have been used by equestrians for over 100 years and are the major attraction for dozens of stables in the area. Equestrians and their friends and families frequently patronize our local businesses and the loss of the WSSC trails will directly affect our livelihoods.

We are concerned that you came to this decision with no discussion with the local community and users, particularly those who have already paid WSSC their \$60 permit fee for the year and are now subject to these new regulations, which clearly differ from what was allowed at the time of purchase. With the WSSC requesting a rate increase from its customers for the sixth year in a row, it seems that decisions that will result in loss of revenue, i.e., less permits sold, should be considered more carefully.

If WSSC limits trail riding to the access roads and requires riders to enter at specified locations, riders will likely stop purchasing permits at all. Most equestrians who have land backing to the WSSC reservoir currently access the watershed trails through their own land. With these new regulations, they will no longer be able to use the watershed trails because they cannot get to the specified entrances without leaving their property and traveling on busy roads.

In addition, there are safety concerns regarding the use of the access roads. To our knowledge, the access roads are designed to allow vehicles to pass through in case of fire. Previously, WSSC permit holders were banned from riding on the access roads because of concerns about erosion. Unfortunately, the current state of the access roads is impassable due to fallen trees, barbed wire from the ill-maintained access road border fence and other debris. Because of the hazardous conditions, the majority of equestrians will not continue to purchase permits to ride in such conditions. Attached to this letter are several images of the access road conditions. Moreover, these obstructions prevent vehicles from entering in case of fire.

We have not seen any environmental studies that support the allegations that equestrian use of the watershed trails causes erosion or environmental damage. The local equestrian community is more than willing to work with the WSSC, as they have in the past, to protect this valuable resource; however, this opportunity was never offered. Instead, you made this decision without

EA ENGINEERING  
SCIENCE AND TECHNOLOGY

JUN 19 2012

input from the local community. Historically, equestrians have assisted the WSSC in cleaning and maintaining the trails as well as serving as "eyes and ears" for the WSSC. Minutes from Commission meetings provide no evidence that this decision and its impact on the community were discussed in depth prior to its enactment.

As a community, we strongly feel that you should discuss this matter with all stakeholders, including local government officials, local businesses and trail riders. We ask that you immediately consider this request to open the discussion of these new regulations to all such parties. We also request that you provide public access to the environmental studies used to support this decision. Lastly, please provide the names and dates of the publication of the proposed regulations in Howard, Montgomery and Prince George's County newspapers for public comment, as required by Maryland law.

Should you have any questions, please feel free to contact Lisa Pineles at (240-988-5606 or wssctrails@gmail.com) or Debby Poole at 301-641-8594. Thank you for your attention to this issue. We look forward to working with you to preserve and protect the WSSC watershed.

Sincerely,

[Your name]

---

[following the change.org description and representative comments of the 438 individuals who signed the petition online is the list of their names and the 62 Individuals who signed the hard-copy petition]

The change.org petition information consisted of 10 pages

Our MPIA search to WSSC returned a hard-copy version of the petition with the following 62 signatures (some duplicative of the on-line signatures).

Debby Poole

*Owner, Belle Cote Farm*

Ron MacNab

*Chairman, Maryland Horse Council Trails & Greenways Committee*

*President, Trail Riders of Today*

*Belle Cote Farm employees, boarders, leasers riders & horse owners*

*Maria Schwartz, also owns property adjoining WSSC*

Lisa Pineles

Carolyn Clark

Rachel Kelly

Jennifer Poole

Mary Dorr

Dana Grabiner

Robert and Lauren Baden

Kerry Phelps

Fran Koch

Elizabeth Gammon

Kelley O'Neal

Bruce Fries

Jim and Becky Carter

Cheri Galas

Virginia Henriksen

Jeanie Kemp

*Riders at Reddemeade Farm*

Susan Droulette

Carolyn Hoolihan

Deborah Rosenfeldt

*Michelle McCarron, Horse Owner, Riding instructor and Farm manager*

*Robert, Ann, and Robin Petrusek, Owners of Tulbot Run Farm*

*Susan Crockett, Manager of Drayton Farm*

*Larry Thompson, Owner of Oak Hill Farm*

*Matthew Kirtland, Fulbright Law Firm*

*Kelley Hunt- Horse and Land Owner*

*Anne and KC Cowles - Owners of Greystone Farm*

*Maggie Vaughan, horse owner*

*Julia Bartels, horse owner*

*Ainslee Sadler, Pike and Fisher, owns property adjoining WSSC*

*Irina Berra -- Rider and horse owner, owns property adjoining WSSC*

*Pat Bobb, Rider and horse owner*

*Linda Foxwell, Rider and horse owner*

*Mandy Lethbridge, land owner (Family)*

*Stephanie Hollen - land and farm owner*

*Chris and Cindy Tenney- land and farm owner*

*Robert Harris- land owner*

*Elizabeth Drewer- Veterinarian and rider*

*Owner, 4Steps Therapeutic Riding Center*

*Kaitlyn Fitzhugh, Volunteer, 4Steps Therapeutic Riding Center*

*Bryan and Nicole Brigner*

*Fay Moore*

*Charlie Hostetler*

*Jeff Graf*

*Mike Kirtland*

*Alan and Rebecca Miller*

*Hugo and Wendi Almanza*

*Sandy Winter*

*Emily Gscheidle*

*RI, Nicholson*

*Kimberly Floystad-Griffith*



BSA  
SCIENCE AND TECHNOLOGY  
MAY 19 2012  
AEA ENGINEERING

Below are 480 signatures of Maryland citizens collected by 43 contributions for this petition on the WSSC trails; the on-line version has 149 signatures, making 629 total

Petition started March, 2012

We citizens (equestrians, sympathizers, local business people who are affected, and others) appreciate the many decades WSSC permitted equestrian use of their Rocky Gorge Reservoir trail (when the ground is dry). Equestrians have revered this magnificent, negligibly eroded trail. We question WSSC's claims (repeatedly delivered to citizens, the media, and elected officials)<sup>1</sup> that this equestrian trail use causes so much sediment and wastes in the reservoir to mandate their: (1) banning use of the equestrian trail, (2) moving riding to the "access road" (previously off-limits to horses because riding its very steep and severely eroding sections was deemed damaging and potentially dangerous), (3) banning all winter riding (citing these months as having the most rain), and (4) banning the use of barn entrances (which had been approved for decades, now preventing use by riders without a truck and trailer, to drive to a few entrances).

If WSSC's claims of equestrian-induced damage were true, equestrians would not want to ride there and degrade the reservoir.<sup>2</sup> However, almost everyone who sees this trail (equestrians, non-riders, several elected officials, even a WSSC Commissioner) notes its minimal erosion and environmentally sensitive layout, and thus cannot understand WSSC's claims that this trail use causes great environmental damage and poses severe health risks. For decades WSSC's Watershed Patrol Force praised equestrians for being their "eyes and ears". And Maryland's Department of the Environment has credited equestrian vigilance for saving the reservoir from over 10,000 tons of sediment, greatly helping the reservoir's condition.<sup>3</sup>

Many hundreds of local citizens have expressed dismay at WSSC's changes in equestrian use regulations and requested the evidence WSSC repeatedly claims to show equestrian-induced damage to the reservoir. These requests were delivered through more than 60 individuals visits to the WSSC headquarters, more than 70 individual letters and e-mails to WSSC, over 450 signatures on petitions, uncounted phone calls, and 43 official Maryland Public Information Act (MPIA) requests filed by Maryland citizens. However, no evidence of such damage has been forthcoming from WSSC. [Instead, limited partial information WSSC thus far provided to the only MPIA request where they permitted copies actually refutes several of WSSC's claims.]

We thus respectfully request that WSSC rescind their 2011 changes in equestrian use policy and return to the regulations of previous decades until such time as WSSC may provide authenticable evidence for equestrian-induced damage as they publicly cite for basing their regulation changes.

Footnotes:

1 Examples of WSSC's claims:

- Washington Post (7/2/11): "...horse waste and sediment running off the trail make the reservoir water harder to treat."
- News Channel 8 (7/6/11): "Riding near reservoir pollutes drinking water"; "We have problems with erosion, we have problems with horse waste and...the problem of things coming down into the water that eventually people are going to drink."
- letter from to numerous elected officials (7/20/11): "... contribute to the erosion but the biggest factor is horses.... This soil and excess nitrogen from horse waste eventually wash into the reservoir affecting water quality."
- Laurel Leader (8/17/11): "...the commission has also decided to close the park to horseback riders from Nov. 15 to April 1 since they are the wettest months of the year, according to official rainfall data collected at the WSSC water-treatment plant at Sweitzer Lane and Route 198."

2. However, if trail use were so damaging, how does WSSC deem it less damaging to ride the steep and badly eroded hills of the access road, where run-off flows directly into creeks feeding the reservoir?

3. Equestrians discovered an unrecognized major sediment flow from a large constructions site and worked with authorities to get it corrected (see e.g., Laurel Leader article of August 7, 2003).

Signature

Printed name

Address

Telephone/e-mail

So far, 480 hard-copy signatures of Maryland citizens (copied here)  
plus 149 signatures on-line:

page	# on page	from	subtotal of MD signatures	page	# on page	from	subtotal of MD signatures
1		(petition)		39	8(&2)	GS p1 5-12-12	336
2		(signature tally)		40	9(&1)	GS p2 5-12-12	345
3	10	got 3-16-12-p1	10	41	14	GS p3 5-12-12	359
4	10	got 3-16-12-p2	20	42	4	GS p4 5-12-12	353
5	11	got 3-16-12-p3	31	43	19	Tom etc p1 5-12-12	372
6	10	got 3-16-12-p4	41	44	13	Tom etc p2 5-12-12	385
7	10	got 3-16-12-p5	51	45	3	DR 6-1 & DP 6-2	388
8	10	got 3-16-12-p6	61	46	16	DP 6-2-12 p2	404
9	10	got 3-16-12-p7	71	47	17	DP 6-2-12 p3	421
10	10	got 3-16-12-p8	81	48	8	N Tract 6-3-12	429
11	5	from JHU 3-23-12	86	49	9	DP got 6-15-12	438
12	10	Bro RN sent 3-24 p1	96	50	12	DP got 6-15-12	450
13	8	Bro RN sent p2,3 & b	104 (6 + 2)	51	11	DP got 6-15-12	461
14	11	DR sent 3-26-12 p1,3	115	52	7	DP got 6-15-12	468
15	17	DR sent 3-26-12 p2	132 (28)	53	10	6-15-12	478
16	1	SD/CMSC 3-38-12	133	54	2	6-15-12	480
17	19	SD/CSMC p2	152				
18	12	SD/CSMC p3	164 sent 32)				
19	4	TC/FIRC sent 3-31-12	168				
20	1	CH sent	169				
20	8	JK sent 4-6-12	177				
21	4	PH faxed 4-4-12	181				
22	11	MP faxed 4-5-12 p1,2	192				
23	4	DD e-mailed 4-6-12	196				
23	4	BW e-mailed 4-10-12	200				
23	4	SW e-mailed pdf	204				
24	2	culvert work 4-7-12	206				
25	10	LE p1	216				
26	10	LE p2	226				
27	9	LE p3	235 (29)				
28	1	ELM e-mailed pdf	236				
28	1	ST e-mailed 4-10-12	237				
28	4	BF faxed 4-15-12	241				
29	7	WLCA bd 4-12-12	248				
30	3	trail work 4-15-12	251				
31	10	WL Stables p1	261				
32	2	WL Stables p2	263				
33	7	Rosaryville 4-21-12	270				
34	9	IG 4-22-12	279				
35	11	LP faxed 4-28-12 p1,2	300				
36	9	MS p1,2 5-12-12	309				
37	9 (&3)	MS p3 5-12-12	318				
38	10(&1)	MS p4,5 5-12-12	328				

In addition to the 480 hard-copy signatures of Maryland citizens (plus a few from out of state that were not included in this tally), as of 6-15-12, there are also 149 signatures on this petition posted online by Lisa Pineles, at <https://www.change.org/petitions/restore-access-to-the-wssc-equestrian-trails>.

To make this file more compact, where people returned sheets with signatures below the text of the petition, only the signatures are reproduced here.

52 pages of signatures for the petition were provided, removed to keep confidential information safe

b2048

EA ENGINEERING  
SCIENCE AND TECHNOLOGY

JUN 19 2012

There is a major study specifically of impairments in the WSSC's Reservoirs, entitled:

**Total Maximum Daily Loads of  
Phosphorus and Sediments for Triadelphia Reservoir (Brighton Dam)  
and Total Maximum Daily Loads of  
Phosphorus for Rocky Gorge Reservoir,  
Howard, Montgomery, and Prince George's Counties, Maryland**

by the: **DEPARTMENT OF THE ENVIRONMENT**  
1800 Washington Boulevard, Suite 540  
Baltimore, MD 21230-1718

[ see: [http://www.mde.state.md.us/programs/Water/TMDL/ApprovedFinalTMDLs/Pages/Programs/WaterPrograms/TMDL/approvedfinaltmdl/tmdl\\_pax\\_res\\_p\\_sed.aspx](http://www.mde.state.md.us/programs/Water/TMDL/ApprovedFinalTMDLs/Pages/Programs/WaterPrograms/TMDL/approvedfinaltmdl/tmdl_pax_res_p_sed.aspx) ]

date: **June 2008**

*Note: this is part of the very comprehensive, highly reputed Bay TMDL Analysis, deemed accurate enough to be directing about \$30 billion of future environmental upgrades*

The document contains a great deal of useful information, including in :

**Appendix E Table E.1: Baseline Scenario Loads By County and Source**

<b>Total Phosphorus (lbs/yr), Rocky Gorge Reservoir</b>				
<b>Type</b>	<b>Montgomery</b>	<b>Howard</b>	<b>Prince George's</b>	<b>Total</b>
Crop	9,379	2,102	0	11,480
Developed	6,566	1,779	181	8,526
Forest	1,804	743	97	2,644
Animal Waste	1,666	325	0	1,991
Pasture	2,307	550	0	2,857
Scour	3,302	478	24	3,804
Point Source	6			6
Triadelphia Reservoir				15,627
<b>Total</b>	<b>25,030</b>	<b>5,976</b>	<b>302</b>	<b>46,935</b>

Thus, this highly regarded analysis determined that the combined effect of all the animal wastes and all the pastures in Prince George's County (including our and multiple other farms, with their scores of horses and their compost piles, plus the vastly more numerous deer and other animals) contribute ZERO of the 47,000 pounds of phosphorus that enters the Rocky Gorge each year!

Because animal wastes are rich in phosphorus, this analysis determined that the horses' refuse is not meaningfully entering the reservoir.

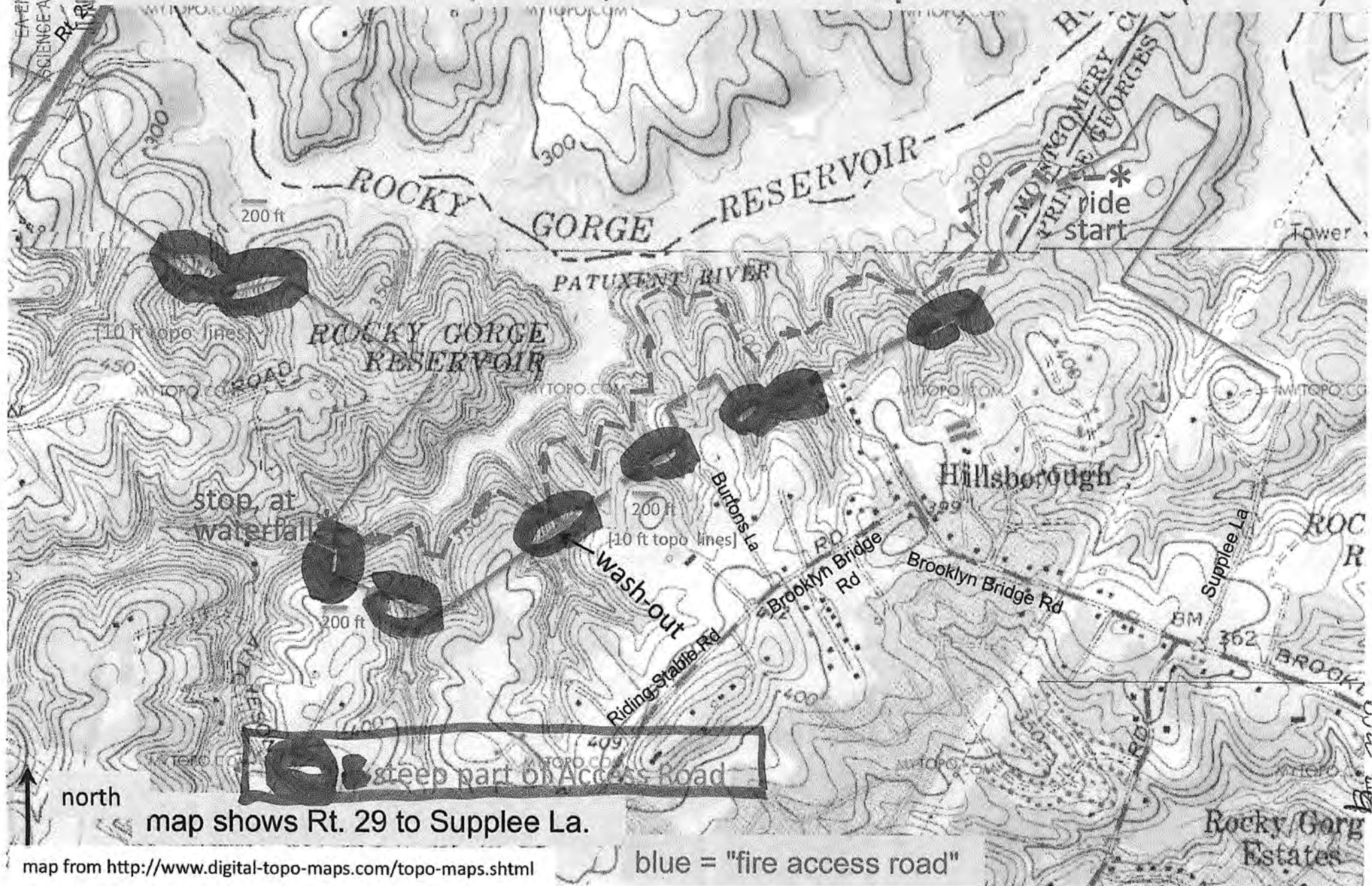
Discussions with the MDE experts who performed the TMDL analysis confirm that because Prince George's County abuts about 1/4 of the length of the trail and contributes over 1/4 of the riders, whose horses are out only a tiny fraction of the time they are at their farms, the phosphate from the trail use is less than from our county's farms (even though the trail is somewhat closer to the water).



# Ride with Commissioner Hartwig-Davis 7/15/11

ENGINEERING  
SCIENCE AND TECHNOLOGY  
Rt 29 2012

stop on "access road" ( - - - ); then on equestrian trail ( - - - )



stop at waterfall

steep part of Access Road

north

map shows Rt. 29 to Supplee La.

map from <http://www.digital-topo-maps.com/topo-maps.shtml>

blue = "fire access road"



One of many bad sections of the access road

1/2  
#1



Leading directly into the reservoir's tributaries

WSSC

**These are typical views of WSSC's lovely equestrian trail (that they have now closed for riding).**

Note that this trail is contoured to gradually (diagonally) descend hillsides -- thus minimizing erosion -- and is generally quite far from the water. Despite 30 years of continual, low-intensity, equestrian use, there is **virtually no indication of erosion** along almost the entire length of the trail.

EA ENGINEERING  
SCIENCE AND TECHNOLOGY

JUN 19 2012



As shown in these un-selected photographs, typical for almost all its length, the trail is not identifiable by any major depression in the ground, but by less dense fallen leaves being and occasional orange tree blazes.

In contrast, the fire access road is very steep and highly eroded, some long ruts over 2 feet deep. Note that fishermen's trails do run right along the water, and may be mistaken by WSSC for the equestrian trail.



While a few short places on the equestrian trail have experienced some limited erosion, much of that is from the sporadic trespassing by bikers and from the use of ATVs during WSSC-sanctioned police exercises, as their wheels create bad ruts.

None of these places are nearly as badly eroded as are vast stretches of the Fire Access Road -- which runs straight up and down many steep hills, and thus channels the run-off water, creating bad erosion.

[Note that the fishermen's trails do run right along the water and may have been mistaken by WSSC for the equestrian trail.]

**Examples typical of the many steep and eroded sections of the fire access road:**





**A bit of history:**



WSSC's photo from their ceremony dedicating the equestrian trail to Terry Ledley.

A 1980 newspaper article in "The Sentinel" reported WSSC extending its equestrian trail (designed by WSSC's Watershed Supervisor). The dedication ceremony included WSSC's Richard Hovevar (for who the WSSC building is now named, shown unveiling the equestrian sign).

**Now you can get there from here**

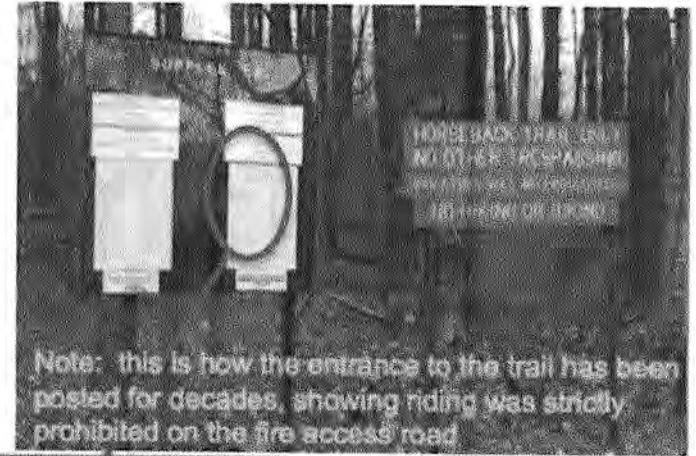
By Julia B. Crabbard, Annual Staff Writer

**Trailblazers**

Richard D. Hovevar of WSSC and Edwin E. Goodwin (wearing hat) unveil sign at Saturday's dedication. THAT president Judy Richardson looks on. (Sentinel Photos by Philby Wombles)

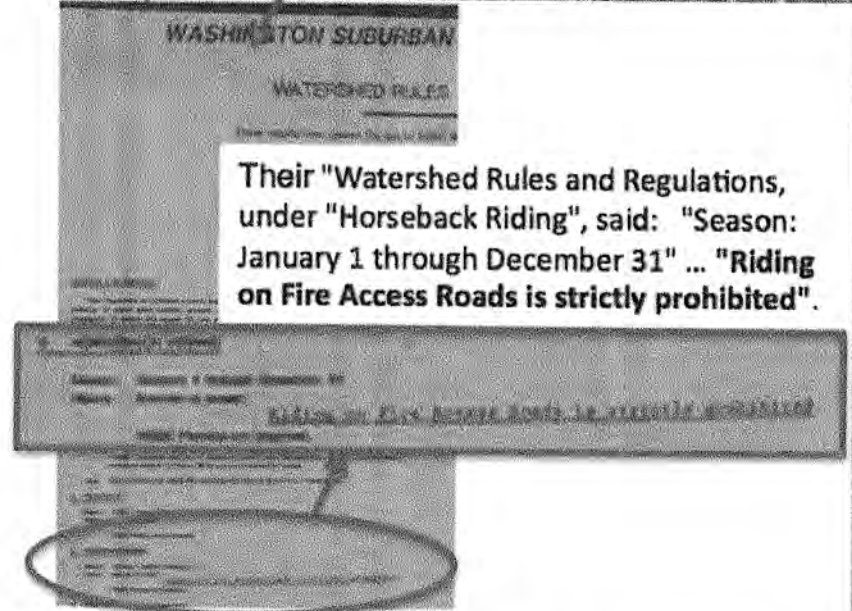


For all the past decades, riding was forbidden on the steep "fire access road":



Note: this is how the entrance to the trail has been posted for decades, showing riding was strictly prohibited on the fire access road

blow-up



WSSC has now also banned riding in the winter (it used to be allowed year-round), citing that as the wettest time – but NOAA data shows those are the driest months in this area!

Also, for no apparent reason (other than apparently to deter riding) WSSC has now banned entering the trail from ones barn (despite we still have our 1991 permission letter for that) forcing riders to have access to a truck and trailer, and then drive to one of very few entrances that accommodate trailers.

## **Sediment sources of the Rocky Gorge: estimate initiated by WSSC's Environmental Advisory Committee**

submitted by: Barbara Sollner-Webb (bsw@jhmi.edu) EAC member (1998-2009); EAC chair (2001-2009)  
Professor, Johns Hopkins University School of Medicine (1986-present) w: 410-955-6278

Members of WSSC's volunteer Environmental Advisory Committee (EAC) had considered sources of reservoir sediment (and phosphorous) from within WSSC's ~4,500 acres.<sup>1,2</sup> This document summarizes my notes and memories from those discussions, plus a few updates.

EAC members concluded that the vast majority of the reservoirs' impairing sediment and phosphorus derived from the ~78,000 acres of the watershed that WSSC does not control and only a small fraction from WSSC's ~4,500 acres, and of that only a miniscule fraction was from WSSC's permitted recreational uses.

EAC members estimated the sediment contributions from various sources and evaluated them relative to the total sediment that had accumulated in the reservoirs, determined from the 12% value<sup>3,4</sup> WSSC cited in its watershed brochure for the reservoirs having sedimented in, using the cited original reservoirs capacity (14 billion gallons. Thus,  $\sim 6 \times 10^6$  cubic meters (=  $12\% \times \sim 50 \times 10^6 \text{ m}^3$ ) of sediment accumulated over the years.<sup>5</sup> The various sediment sources noted below were then estimated and compared to that value.<sup>6</sup>

**Shoreline erosion:** EAC members felt that a large sediment contribution to the overall depth of the reservoirs from WSSC's ~4,500 acres was from shoreline erosion. Over the years, the reservoirs' shoreline has substantially eroded away, with many sections (e.g., just west of Supplee Lane) having a 1-2 foot drop-off (due in part to water levels being repeatedly raised and lowered). Assuming 50 miles of the reservoirs' shoreline are eroded to such a ~1.5 foot high ledge, which tapers out over ~30 feet toward the lake, that comprised ( $50 \times 1.6 \text{ km} \times 1/2 \text{ m} \times 10 \text{ m} \times 1/2 =$ )  $\sim 2 \times 10^5 \text{ m}^3$ , or ~3% of the reservoirs' assessed sediment.<sup>6</sup> Note that this source doesn't actually alter the reservoirs' capacity, as it only changes the location of dirt within the reservoir. However, WSSC's contractors who determined the extent of sedimentation evidently did this by measuring the reservoir's depths at various locations but assumed gradual elevation changes near the shoreline, not the ledge that is actually present. Thus, it apparently would be part of the "sedimentation" in the contractors' determinations. and a not insignificant part, although it does not reduce the reservoirs' capacity.

**Fire-break/access road erosion:** EAC members felt the largest actual contribution to the reservoirs' sedimentation from WSSC's ~4,500 acres is erosion from what is now called their "access road" <sup>7</sup> -- the path along the perimeter of WSSC's land, estimated about 50 miles in length. While limited sections of the access road are relatively flat, and these are in fine shape, much of the access road is quite steep (despite public assertion<sup>8</sup>, but easily verified by inspection or from USGS topo maps), and most of that is carved 5-10 feet deep below the flanking ground. Unfortunately all of the erosion from the access road hillsides will flow straight down that channeled road (basically a gully) into the stream at the bottom of each hill, and then directly into the reservoir, generating true sedimentation. If only 10 miles of the access road are hills with such depressions (say, ~6 ft deep by ~15 ft wide) that is  $1.6 \times 10^5 \text{ m}^3$  (=  $16 \text{ km} \times 2 \text{ m} \times 5\text{-}6 \text{ m}$ ), or potentially ~2.5% of the reservoirs' sediment.<sup>6</sup> While a considerable amount of the access road's depression is from actual erosion (indeed, local residents have witnessed vast sections of the access road erode 1-2 feet deeper since we have lived in the area), some amount of these depressions was presumably intentionally carved there, by bulldozers during its original construction. [The EAC was unable to discern how much was bulldozed out and whether there was attention to preventing the removed soil from being carried into the reservoir as sediment.] But even if much of the height of those depressions was intentionally and safely bulldozed away during construction, the erosion that has been observed would generate ~0.5% of the reservoirs' sediment.<sup>6,9</sup> The EAC felt these access road hills need stabilization (silt cloth, rocks, even asphalt at parts) and that drainage channels should be cut into the side walls, so water and sediment can dissipate into the forest rather than run into the reservoir.

**Fire-break/access road wash-outs at failed culverts:** Another unfortunate (and readily preventable) source of reservoir sediment from the access road is its "wash-outs" that have occurred in the last dozen years, since WSSC stopped maintaining the culverts that were to carry streams and storm water below the access road. Naturally, blockages occur at these un-maintained culverts, causing water over-topping and eventually complete washing out of the access road. The EAC focused on the enormous wash-out of the access road just west of Burtons Lane<sup>11</sup>, that contributed its (~50 foot of length x 20 foot height x 12'-30' breadth [narrower near the top and quite wide near the bottom] =  $15 \text{ m} \times 7 \text{ m} \times 7 \text{ m} =$ )  $\sim 730 \text{ m}^3$  of sediment to the reservoir.<sup>6</sup> However, there have been several more such wash-outs of the access road due to

unmaintained culverts.<sup>12</sup> Unfortunately, WSSC staff's rush to improve (bulldoze) the access road before the GM's inspection last year, cut the access road abutting the wash-out just west of Brogden Lane down to stream level, evidently by bulldozing that soil into the stream, from where it becomes more sediment in the reservoir. EA Engineering's assessment of the entire access road will reveal how many access road washouts have resulted from blocked culverts and how much more sediment they have contributed to the reservoirs.

**Stream scour:** EAC members determined that another significant contribution from WSSC's ~4,500 acres to the reservoirs' sedimentation is stream scour. At the bottom of each of the enumerable hills along the access road are streams that flow to the reservoir across WSSC's 300-500 foot wide buffer of land. Where this water makes a wide swath, it generally shows little erosion. However, many of the streams have extensive stream scour, especially the ones where WSSC's culverts concentrate the flow, which appears to exacerbate the stream scour. Some of these eroded streams are carved ~5 feet deep and 5-10 feet wide over much of their length. EAC members did not know the number of such highly eroded reservoir tributaries<sup>13</sup>, but if ~25 per reservoir side (x 2 sides x 2 reservoirs = ~100) and if so eroded for ~200 feet of the streams pathway through WSSC's land, that would be (100 x ~1.5 m deep x 2.5 m wide x 67 m long =)  $2.5 \times 10^4 \text{ m}^3$  of sediment into the reservoir over the years, or 0.4% of the reservoir's sediment.<sup>6</sup>

**Forest Erosion:** Surely there is some erosion from the forest that comprises most of WSSC's land-holdings surrounding the reservoirs. But because it is basically healthy, the forest is likely a minimal factor.<sup>14</sup>

**Recreational use - equestrian:** The EAC recognized that some sediment came from WSSC's permitted recreational uses. There is a long-term equestrian trail. While not perceptibly eroded for most of its 18 mile length, several sections have slightly depressions with the adjacent soil pushed upward relative to the surrounding ground, which indicates lateral movement, not erosion. However, there are a few shorter stretches with some erosion.<sup>15</sup> Because the equestrian trail is contoured to ascent hills diagonally and drain sideways, most any erosion from the trail should be stopped as it flows through the abutting forest before reaching the reservoir. Nonetheless, for an upper limit on the sediment that could possibly have come from the equestrian trail, EAC members calculated that even if its entire length had eroded 2 inches deep, it could be under  $750 \text{ m}^3$  (= ~30 km long x ~1/2 m wide x ~5 cm deep), or only  $\sim 10^{-4}$  of the reservoir's sediment.<sup>6</sup> However, a more realistic values is to estimate the sections that actually are eroded (~1/2 mile in length total, from ~1/2 to 1 foot deep, ~1 foot wide) making  $70 \text{ m}^3$ , or only  $\sim 10^{-5}$  of the reservoir's sediment,<sup>6</sup> a totally negligible fraction.<sup>16,17</sup>

EAC members also noted that equestrians can markedly help the reservoirs' conditions and advocated that WSSC take advantage of this service. As one example, after equestrians discovered a massive sediment flow entering the Rocky Gorge reservoir, with political pressure offered by the EAC and the Patuxent River Commission, they got the situation resolved through MDE -- who estimated this effort saved over 15,000 tons of sediment from entering the reservoir. Expanding equestrian use and vigilance to the Tridelphia could similarly help this more distressed reservoir.

**Recreational use - other:** This includes run-off from WSSC's picnic areas, ball-fields, and boat launch areas. WSSC has deemed the area at Scott's Cove to be especially problematic, installing landscaping and planting to abate its run-off. However, its denuded area is relatively small, a few hundred square yards, so even if that entire region was 6 inches eroded, it would be only  $50 \text{ m}^3$  (=  $\sim 300 \text{ m}^3 \times 1/6 \text{ m}$ ), or  $\sim 10^{-5}$  of the reservoir's sediment,<sup>6</sup> again negligible relative to the other sources.

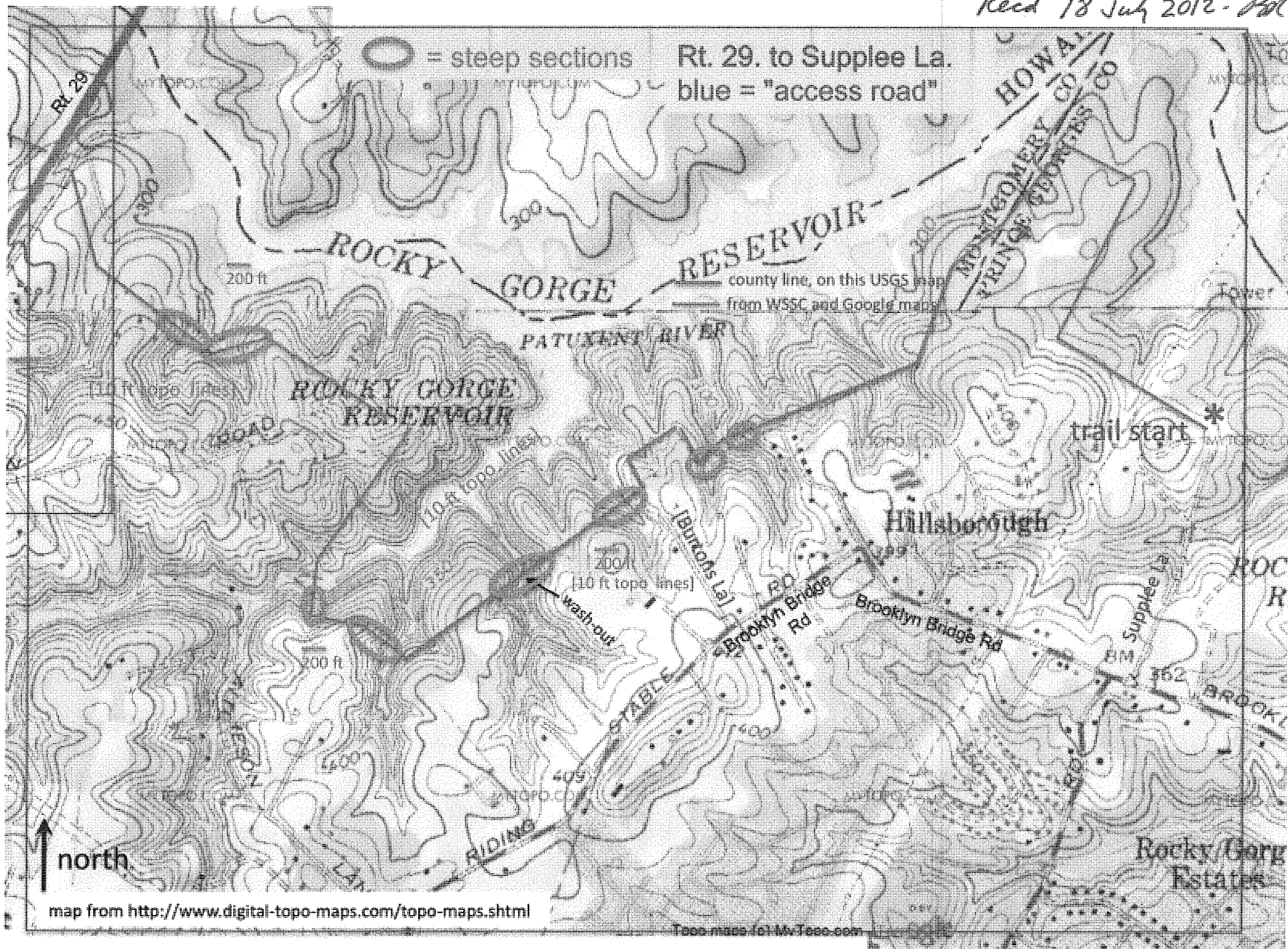
**Conclusion:** Seeing this minimal effect from recreational use, EAC members repeatedly urged WSSC to not neglect its access road and to barter is recreational use for increased environmental caring by the users'. Options discussed were that all users (including picnickers, who now use the land free) either pay a daily use fee or agree to: [1] minimize lawn fertilizing, [2] use only phosphate-free fertilizer on established lawns, and [3] apply fertilizer in the fall, with consideration of predicted weather, gently watering in the applied materials, plus to consider [4] adding rain gardens and rain barrels and [5] striving to minimize impervious surface, favoring trees over lawns -- and/or whatever WSSC desired; plus users would be asked to encourage their friends to follow suit. EAC members felt that getting increased environmental buy-in by local residents would be of a far greater benefit to the reservoirs conditions. They also feared that banning public access could encourage less care for the reservoirs' condition.

## Footnotes:

1. This interest was stimulated by WSSC's Recreational Use Study (performed by the University of New Hampshire and Maryland Department of the Environment), which never considered closing public access to the reservoir lands -- the long-standing desire of WSSC's liaison for this study, Jim Benton.
2. Over the years, WSSC told the EAC the reservoir lands they owned were from 4,000 to 5,500 acres.
3. The EAC's assessment was before the State's TMDL analysis that gives a lot of information on sediment and phosphorus, so focused largely on sediment (see also <sup>17</sup> below).
4. Presumably in the subsequent dozen years the reservoirs have sediments in yet further. To assess the reservoirs' sedimentation, WSSC contracted several studies over the years, whose conclusions varies widely, from well below to far above 12%, as shown by searching the Internet. This document will stick with that 12%.
5. Information from those above studies and the TMDL document show the Tridelphia (where horseback riding is not permitted) is more sedimented in than the Rocky Gorge (where riding has been permitted for probably its entire about 60 years, certainly since 1960, according to a history prepared by WSSC's Jodye Russell).
6. In retrospect, the EAC's calculations neglected that much of the sediment carried into the reservoir does not settle but is carried out in run-off, making the EAC's estimations somewhat too high.
7. In the previous many decades this was known as their "fire-break".
8. The article on WSSC's trails in the Laurel Leader newspaper (8/17/11) stated "[GM] Johnson described the access road as 'very flat and very negotiable.' "
9. WSSC used to carefully maintain the access road but has not in the past dozen years. WSSC's extensive bulldozing last spring<sup>10</sup>, to make the access road passable and presentable for the GM's motorcade to assess the access road, unfortunately resulted in much of that moved dirt flowing into the streams at the hill-bottoms.
10. This bulldozing was observed by numerous local residents but denied to the Commissioners, one of who then saw the recent and extensive bulldozing first-hand, when taken out by local residents.
11. Ironically, the unidentified photograph in slide #4 of WSSC's PowerPoint in their 7/28/11 Equestrian Stakeholders' Meeting ([http://www.wsscwater.com/file/Communications/horse\\_stakeholder7282011.pdf](http://www.wsscwater.com/file/Communications/horse_stakeholder7282011.pdf)) was this wash-out -- even though that presentation supposedly focused on equestrian-induced reservoir damage, and equestrians had for decades been forbidden to use the access road.
12. At the WSSC Commissioners' Meeting of October, 2011, equestrians made a formal presentation to start maintaining those culverts which WSSC has neglected and they saw while being forced to ride the access road. [Soon thereafter, WSSC's Kim Knox started a citizen volunteer effort to open culverts, four of which have taken place (with the equestrian volunteers doing much of the actual work).]
13. This stream scour is easy to see in the winter but generally camouflaged by vegetation in the summer.
14. Several years ago, Maryland's DNR has almost convinced WSSC to a plan to log (basically clear-cut) economically profitable sections of WSSC's reservoir lands, which could have introduced considerable sediment. But fortunately, the EAC was given this plan to review and strongly advocated advised against it.
15. Several short sections of trail that look notably deep are not erosion but were intentionally shoveled out by WSSC's prior Watershed Patrol members, on work sessions they organized to improve the equestrian trail.
16. This is quite unlike WSSC's letter to numerous State Senators, Delegates and Count Council-people (July, 2012) claiming that of the reservoir's sediment (erosion) "the biggest factor is horses", and other untenable claims.
17. The State's TMDL document for WSSC's reservoirs gives considerable additional data. For instance, considering phosphorus, it determines (Table E.1) that of the 47,000 lbs of P getting into the Rocky Gorge annually, Prince George's County (which abuts about 1/4 of the equestrian trail) contributes zero lbs from animal wastes and zero lbs from pasture. Yet there are seven horse farms in that portion of the watershed, four immediately abutting WSSC's lands. Recent discussions with various officials have concluded that the contribution to the reservoir's P from these barns' horses riding the reservoir trail is much less than the farms total contribution (or "zero lbs" of P) since even though the equestrian trail is closer to the water than the actual farms, only a small fraction of their horses are ridden on the trail and they are out for only a tiny fraction of the total hours per week.



Rec'd 13 July 2012 - PDL



map from <http://www.digital-topo-maps.com/topo-maps.shtml>

Topo maps for MyTee.com



# Culverts worked on

(Rocky Gorge reservoir's south side)

map: slightly west of Route 29 to Supplee Lane

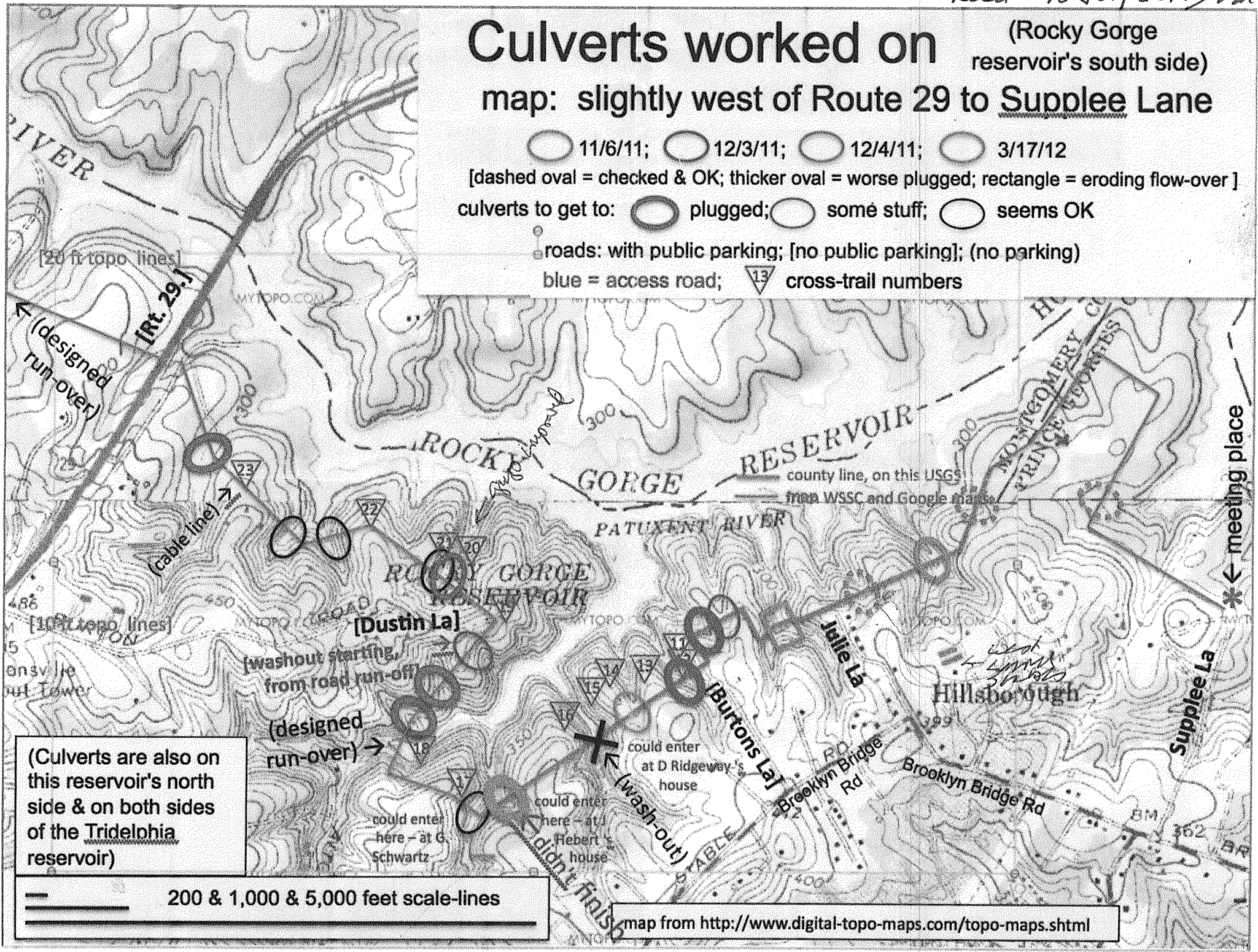
- 11/6/11; ○ 12/3/11; ○ 12/4/11; ○ 3/17/12

[dashed oval = checked & OK; thicker oval = worse plugged; rectangle = eroding flow-over]

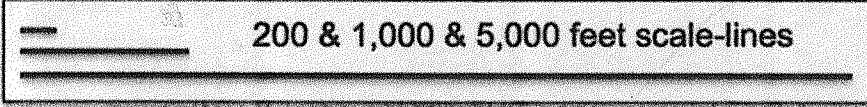
culverts to get to: ○ plugged; ○ some stuff; ○ seems OK

roads: with public parking; [no public parking]; (no parking)

blue = access road; ▽ cross-trail numbers



(Culverts are also on this reservoir's north side & on both sides of the Tridelphia reservoir)



map from <http://www.digital-topo-maps.com/topo-maps.shtml>



Rec'd 18 July 12 - BJD

this letter was sent from WSSC to elected officials, to explain WSSC's basis for closing the equestrian trail and moving riding to the access road [red lines added by recipient]; below are some comments

**From:** [the office of an elected official]

**Date:** July 20, 2011 4:23:17 PM EDT

**Subject: FW: Response to your inquiry regarding WSSC Horse Trails**

This JUST came in... We look forward to your feedback....

**From:** Williams, Eugene E. [mailto:eWillia@wsscwater.com]

**Sent:** Wednesday, July 20, 2011 4:22 PM

**To:** Rosapepe, Jim Senator; Ramirez, Victor Senator; Wong, Alex; M.A. Lehman; Councilman William A. Campos; Pena-Melnyk, Joseline Delegate; Jack Johnson

**Cc:** Frush, Barbara Delegate; Hemphill, Johnnie R.; Wineland, Kirk; Payne, NikKia

[Additionally:] Congressman Chris Van Hollen, Senator James Rosapepe, Senator Victor Ramirez, Delegate Joseline Pena-Melnyk, County Executive Rushern Baker, Council Member Mary Lehman, Council Member William Campos,

**Subject:** Response to your inquiry regarding WSSC Horse Trails

In response to your inquiry regarding the changes to the WSSC Watershed Regulations, we are providing you with the following information with respect to our effort to further protect and preserve the watershed areas of Triadelphia and T. Howard Duckett reservoirs. As you know, the water from these reservoirs is used as a source of the water supply for the Washington Suburban Sanitary District, and the watershed regulations were modified for the purpose of protecting and improving the watershed.

Watershed Regulations were originally adopted in 1944. In 1983, the previous Regulations were repealed and the body of regulations currently in use were adopted. The notice of the most recent changes to these Watershed Regulations was published April 13 and April 14 in the Montgomery and Prince George's editions of the Gazette newspapers.

As you may know, nutrients, sediments, dissolved oxygen, and biological organisms can substantially impair drinking water supplies at their sources, including our reservoirs, and erosion is believed to be a major contributor. For many years, only fishermen, boaters and horseback riders have been allowed beyond the picnic areas at the Rock Gorge Reservoir. There is no hiking allowed and any hunting is done during a narrow period of time and in managed groups. The fishermen contribute to the erosion but the biggest factor is horses (no motorized vehicle riding has ever been permitted at these watershed locations).

The new Watershed Regulation became effective on May 14, but senior WSSC staff met with a group of stakeholders representing horseback riders on May 10, 2011 to discuss the new regulations and made a commitment to continue the dialogue. At that time, stakeholders encouraged WSSC to allow the previous level of access to existing horse trails which had been accessible year round. Several representatives of horse riders also provided statements at the regular June 15, 2011 WSSC Commissioner Meeting. A follow-up meeting in July between WSSC staff and representatives of the commercial and private interests who have voiced concern is planned to continue that dialogue.

The difficult and critically important problem of protecting our source water is actually a shared responsibility. There are critically important issues around, for example, public safety and security, various threats of contamination, stormwater management and streambed erosion, just to name a few. Effectively managing these challenges requires working with both private and other public land owners and users.



We have worked closely in the past with local and state authorities to try to develop a more robust approach to watershed protection planning and programs. Our General Manager, Mr. Jerry Johnson is taking steps to re-invigorate these longstanding efforts, and we will keep you apprised of developments.

Again thank you for your continuing interest in these genuinely important watershed protection issues, and please feel free to contact our office if we can be of assistance to you or provide additional information.

With respect to the conditions that prompted WSSC to act, in some cases, nearly two feet of soil has eroded from horse trails, and over time the network of horse trails continues to result in additional soil loss. There are a multitude of these trails all over the reservoir. These trails are stripped of the natural vegetation by use and intentional clearing. Many of them pass extremely close to the water's edge (probably because of the scenic views) and a number of unauthorized trails have been established over time. This soil and excess nitrogen from horse waste eventually wash into the reservoir affecting water quality. The Public Utility Article, Division II, §29-106, prohibits leaving unburied animal fecal matter on the Watershed. According to those who work on the Watershed, manure is seldom picked up or buried by the riders. Under the new rules, horseback riding will no longer be permitted on the various trails. Horseback riding can cause particular environmental damage during the wet season, and this prompted the seasonal closing of the watershed to horse riding. Under the new regulations, horseback riding will now be limited to the same yearly closings of the watershed to which the other activities were always limited.

Again, the most important reason for limiting access onto the reservoir and for limiting horseback riding to the certain areas (an access road) within the reservoir is to prevent further erosion of the trails that has an impact on the reservoirs, a source of our community drinking water supply. However, the revised regulations do permit the continued but limited use of the reservoirs for fishing, recreational boating, and picnicking, hunting, as well as horseback riding. Also, the WSSC plans to work with interested parties to improve and maintain the existing access road.

Thank you for allowing me to assist you in this matter.

Gene Williams  
Eugene Williams  
Washington Suburban Sanitary Commission  
Government Relations Manager  
Intergovernmental Relations Office  
(301)206-8228 Office  
(301)204-7938 Mobile  
Email: [ewillia@wsscwater.com](mailto:ewillia@wsscwater.com)

[boldface highlighting added by bsw for emphasis]

Comments:

The letter asserts that of the sources which **"contribute to the erosion ... the biggest factor is horses"**. However, simple math shows that this can not be. Indeed, WSSC's Environmental Advisory Committee provided a straightforward calculation years ago, showing only a negligibly small fraction (much less than 1/10,000<sup>th</sup>, likely less than 1/100,000<sup>th</sup>) of the sediment in the reservoir could come from the equestrian trail.

The letter asserts **"There is no hiking allowed"** but WSSC sanctions numerous organized hikes there, plus permits a large school track team to train by regularly running on those trails. The letter also asserts **"no motorized vehicle riding has ever been permitted at these watershed locations"** but WSSC, staff and their hunters, and others, not frequently use vehicles there; indeed ATVs used on the trails during the police "Iron Man" competition WSSC sanctioned on a very wet day this year caused considerable trail rutting and trail widening.

The letter asserts that **"Many of the [trails] pass extremely close to the water's edge"**. However, equestrians report that is not the case, that their trail remains removed from the water's edge, while paths that go down to the water are from other users of WSSC's lands (e.g., workers who maintain the public utilities that cross the reservoir, the boaters, the shore fishermen, etc). To date, the single example of a trail that runs down to the water that WSSC has cited to the equestrians turned out to not be the equestrian trail (which is marked entirely in orange), as WSSC reported this path was marked in blue (not orange).

The letter asserts **"horse waste eventually wash into the reservoir affecting water quality"**. However, a similar simple calculation (analogous to the one cited above) shows that use of the equestrian trail could contribute only a negligibly small fraction of the animal wastes in the reservoir (e.g., deer alone contribute more than 1000 times more animal wastes).

The letter cites that **"The Public Utility Article, Division II, §29-106, prohibits leaving unburied animal fecal matter on the Watershed."** That is not the language of that statute, which is "A person may not leave unburied for a period longer than 24 hours a dead animal or fecal matter in the sanitary district or on a watershed from which the commission gets its water supply". Thus, it is not directed at WSSC's reservoir lands, but the sanitary district (suburban Montgomery and Prince George's counties that WSSC services) plus the watersheds that supply their water (so the entire Patuxent and Potomac watersheds upstream of WSSC's intakes, which are 131 and 11,000 square miles, respectively, and include almost all of western Maryland, plus approximately equal land areas in Virginia and West Virginia, and about half that much in Pennsylvania). That wording has been passed down since the law's initial writing, in 1924, decades before WSSC's Patuxent reservoirs existed. Importantly, the "fecal matter" surely meant human, not animal, for otherwise the 1924 Maryland legislature would have criminalized all farmers in almost a million acres in four states, as no farmer ever buries his horses', cows' etc, droppings. [Legislative Services in Annapolis has assured me there has never been a court case related to this statute, in its 87 years.]

The letter continues by saying **"manure is seldom picked up or buried by the riders"**, but WSSC has never requested that riders do this, and indeed, no one I have talked to has known about this obscure statute.

The letter asserts that **"Horseback riding can cause particular environmental damage during the wet season, and this prompted the seasonal closing of the watershed to horse riding"**. However, according to multiple sites -- including NOAA data specifically for the the location of WSSC's dam -- the period WSSC has now banned riding (mid Nov through the end of March) is the driest time of the year.

The letter states that **"most important reason for limiting access onto the reservoir and for limiting horseback riding to the certain areas (an access road) within the reservoir is to prevent further erosion of the trails that has an impact on the reservoirs"**. However, equestrians fear that because the access road to which WSSC has moved riding is very steep and already highly eroded in long stretches, riding there will just exacerbate its erosion. Troublingly, that sediment washes straight down the carved out access road hills and into the stream below. from where it is carried directly into the reservoir. In contrast, the equestrian trail is countered to ascend hills diagonally and drain to the side, so virtually any erosion there would run off the side and become trapped by 20-100 feet of woods before reaching the reservoir.

If WSSC's reasons for closing the equestrian trail are scary (over)statements, while quantitative data indicated the equestrian use has not been perceptibly damaging to the water, and that riding on the access road (where equestrians have been forbidden for the past 50 years) is likely to be damaging, we fail to see any valid basis for their changes in equestrian use.

[Please note that when a WSSC staffmember unilaterally announced these same changes in 2007, then-GM Andy Brunhart insisted riding be returned to the equestrian trail, and year-round, citing his first-hand knowledge that use of the equestrian trail is not causing any appreciable harm while use of the access road would be damaging.]

Recd 18 July 12 - OBA

**WSSC's quoted reasons for banning riding on the equestrian trail, from newspapers & TV spots & their letter**  
useful comments from the newspapers, in blue and a few comments from me, in [red]

Quotes are from WSSC, in the:

- Gazette articles 6/8/11; 6/15/11; 7/29/11
- PGC-TV 6/10/11
- Washington Post 7/2/11
- abc7 7/3/11
- Channel 8 news 7/6/11
- WSSC's letter to elected officials 7/20/11
- Laurel Leader article 8/17/11
- The Gazette** 11/18/11 "just a matter of days" for consultant

**Gazette 6/8/11 "Trail closure kicks up disappointment, criticism - WSSC says it must protect watershed"**  
by Margie Hyslop, Staff Writer Wednesday, June 08, 2011

"James Price, acting chief of plant operations for the water and sewer utility, which serves 1.8 million customers in Montgomery and Prince George's counties, told WSSC commissioners in March that the commission's reservoirs Duckett near Burtonsville and Laurel and Triadelphia near Brighton and Sunshine have been impaired by erosion that has allowed sediment and animal waste to wash into the water." [- true, but unrelated to horses, esp. at Tridelphia with no riding!]

**"Shorter hours and more limited access, which General Manager Jerry N. Johnson approved when he changed regulations last month, will improve the environment and safety, the utility says.**

**"The primary purpose is to preserve the water,"** said John C. White, a WSSC spokesman.

"Some spots along the horse trails have erosion two feet deep, White said. [they refuse to specify where this is]

"We're going to try to maintain the access road so that it would be [suitable] for riding horses," White said. And he added that the utility is "willing to have continued dialogue on this issue."

"White said he does not think there was "deliberate disregard" and noted that the proposed changes were advertised in The Gazette 30 days before they were made.

"We did what's required legally," he said. "We try to be fair to all people who use the watershed." "

**Gazette 6/15/11 "WSSC loosening reins on horse trails decision - Commission vows to preserve access for riders"**  
by Margie Hyslop, Staff Writer Wednesday, June 15, 2011 [no relevant quotes from WSSC, but the Gazette's photo captions said:] "...the heavily eroded fire road that surrounds the Rocky Gorge Reservoir in Laurel. The WSSC has moved riders off the safer bridle trails (shown in the background)..."

**PGC-TV 6/10/11**

Quotes from John White, WSSC spokesperson:

"Some of the horse trails have gone very close to the water. There has been erosion, and there has been, as a result of that erosion, nutrients gone into the water that we don't want there. **This is all about protecting the water.**"

**Washington Post article 7/2/11 WSSC limits horseback riding near reservoir**

By Katherine Shaver, Published: July 2

"WSSC spokesman Jim Neustadt said the utility has encouraged the public to use its land and reservoirs for fishing, some boating, picnics and horseback riding since the 1970s. But, he said, **horse waste and sediment running off the trail make the reservoir water harder to treat.** [they refuse to provide any evidence for this]

"It's not like we have anything against horseback riders," Neustadt said. "It's what we think is best for the watershed and to protect the drinking water for our customers."

**"Neustadt said horseback riding has been restricted during the 4 1/2-month period because those months have high rainfall** and little vegetation to help absorb water and slow runoff that causes erosion."

[but NOAA says it is the driest time of year, and the amount of ground vegetation in there is always minimal]

"Chairman Roscoe M. Moore Jr., a veterinarian and a former assistant U.S. surgeon general, said the commissioners asked WSSC General Manager Jerry N. Johnson last month to provide more details about the ban within 60 days." [was this done?]

[the Post on-line also induces 40 excellent on-line blog comments]

**abc TV channel 7 7/3/11 Horseback riders battle WSSC over trail access**

"The WSSC says the trail is sending horse waste and sediment into the drinking water supply."

#### News Channel 8 7/6/11 WSSC Trails

"Riding near reservoir pollutes drinking water, says commission. [they refuse to provide any evidence for this]

" "We have problems with erosion, **we have problems with horse waste** and anytime you have significant rainfall -- which we've had in the past and very little vegetation to slow it down -- **you have the problem of things coming down into the water that eventually people are going to drink,**" I.J. Hudson of the commission said. [again, they refuse to provide any evidence for this]

"To avoid **that potential safety risk**, WSSC closed the existing trail, but still allows riders along the access road farther from the reservoir.

" "We certainly have nothing against **the horseback riding people they've been good stewards in the past** but again looking at our watershed and preserving it, that's priority number one," Hudson said.

"WSSC says its general manager is willing to learn more about the growing concerns."

---

**letter from WSSC's spokesperson, Williams, Eugene, 7/20/11, to:** Senator Jim Rosapepe, Senator Victor Ramirez, Delegate Joseline Pena-Melnyk, Delegate Barbara Frush, Congressman Chris Van Hollen, Councilperson M A. Lehman, Councilman William Campos, County Executive Rushern Baker, and Jack Johnson  
**Subject:** Response to your inquiry regarding WSSC Horse Trails

In response to your inquiry regarding the changes to the WSSC Watershed Regulations, we are providing you with the following information with respect to **our effort to further protect and preserve the watershed areas of Triadelphia and T. Howard Duckett reservoirs**. As you know, the water from these reservoirs is used as a source of the water supply for the Washington Suburban Sanitary District, and the watershed regulations were modified for the purpose of protecting and improving the watershed.

Watershed Regulations were originally adopted in 1944. In 1983, the previous Regulations were repealed and the body of regulations currently in use were adopted. The notice of the most recent changes to these Watershed Regulations was published April 13 and April 14 in the Montgomery and Prince George's editions of the Gazette newspapers.

As you may know, nutrients, sediments, dissolved oxygen, and biological organisms can substantially impair drinking water supplies at their sources, including our reservoirs, and erosion is believed to be a major contributor. For many years, only fishermen, boaters and horseback riders have been allowed beyond the picnic areas at the Rock Gorge Reservoir. There is no hiking allowed and any hunting is done during a narrow period of time and in managed groups. The fishermen contribute to the **erosion but the biggest factor is horses** (no motorized vehicle riding has ever been permitted at these watershed locations). [they refuse to provide any evidence that horse cause a problem, and of course they take and allow some others to take motorized vehicles out there]

The new Watershed Regulation became effective on May 14, but senior WSSC staff met with a group of stakeholders representing horseback riders on May 10, 2011 to discuss the new regulations and made a commitment to continue the dialogue. At that time, stakeholders encouraged WSSC to allow the previous level of access to existing horse trails which had been accessible year round. Several representatives of horse riders also provided statements at the regular June 15, 2011 WSSC Commissioner Meeting. A follow-up meeting in July between WSSC staff and representatives of the commercial and private interests who have voiced concern is planned to continue that dialogue.

The difficult and critically important problem of protecting our source water is actually a shared responsibility. There are critically important issues around, for example, public safety and security, various threats of contamination, stormwater management and streambed erosion, just to name a few. Effectively managing these challenges requires working with both private and other public land owners and users.

We have worked closely in the past with local and state authorities to try to develop a more robust approach to watershed protection planning and programs. Our General Manager, Mr. Jerry Johnson is taking steps to re-invigorate these longstanding efforts, and we will keep you apprised of developments.

Again thank you for your continuing interest in these genuinely important watershed protection issues, and please feel free to contact our office if we can be of assistance to you or provide additional information.

With respect to the conditions that prompted WSSC to act, **in some cases, nearly two feet of soil has eroded from horse trails**, and over time the network of horse trails continues to result in additional soil loss. There are a **multitude of these trails all over the reservoir**. These trails are stripped of the natural vegetation by use and intentional clearing. **Many of them pass extremely close to the water's edge** (probably because of the scenic views) and a number of unauthorized trails have been established over time. This soil and excess nitrogen from **horse waste eventually wash into the reservoir affecting water quality**. [they refuse to provide any evidence for those assertions]

The Public Utility Article, Division II, §29-106, prohibits leaving unburied animal fecal matter on the Watershed. According to those who work on the Watershed, manure is seldom picked up or buried by the riders. [this is a complete mis-statement of the law.] Under the new rules, horseback riding will no longer be permitted on the various trails.

**Horseback riding can cause particular environmental damage during the wet season, and this prompted the seasonal closing of the watershed to horse riding.** [but they are closing it in the season which NOAA says has the

least rainfall here.] Under the new regulations, horseback riding will now be limited to the same yearly closings of the watershed to which the other activities were always limited.

Again, **the most important reason** for limiting access onto the reservoir and for limiting horseback riding to the certain areas (an access road) within the reservoir **is to prevent further erosion of the trails that has an impact on the reservoirs**, a source of our community drinking water supply. However, the revised regulations do permit the continued but limited use of the reservoirs for fishing, recreational boating, and picnicking, hunting, as well as horseback riding. Also, the WSSC plans to work with interested parties to improve and maintain the existing access road.

Thank you for allowing me to assist you in this matter.

Eugene Williams

Washington Suburban Sanitary Commission Government Relations Manager Intergovernmental Relations Office  
(301)206-8228 Office (301)204-7938 Mobile Email: ewillia@wsscwater.com

### **Gazette 7/29/11 "WSSC to study further impact of horses on watershed"**

by Margie Hyslop, Staff Writer Wednesday, June 08, 2011

Washington Suburban Sanitary Commission announced that it will hire a consultant to help assess conditions in the watershed...

The scope, start and cost of the study have not been determined yet, WSSC spokesman I.J. Hudson said, but the plan is to **look at impacts in the entire watershed**, not just the portion around the reservoir, which is located near Laurel and is controlled by the water and sewer utility that serves Montgomery and Prince George's counties....

**Horseback riders may continue to ride only on the access roads and the utility is considering doing some repairs to them, Hudson said.**

**Riders spotted on the now-closed trails will be warned the first time, he said.**

A WSSC presentation given at the meeting noted that **at least two water utilities in the nation** have closed watershed land under their jurisdiction to horses.

### **Laurel Leader 8/17/11 "Not-so-happy trails at Rocky Gorge: WSSC bans use of decades-old equestrian trail"**

by Janene Holzberg August 17, 2011

... the new regulation, which was put in place May 15 by the Washington Suburban Sanitary Commission in an **effort to reduce the amount of trail dirt and horse waste being carried into the reservoir by storm-water runoff.**

This year has seen a turning point in WSSC's approach to carrying out their directives, with **new interpretations of best practices** leading to several new watershed regulations that affect all users, including boaters and fishermen.

"We know a whole lot more now about watershed management than we did 10, 15, 20 years ago," said Jerry Johnson, WSSC's CEO and general manager.

"**But you don't need a study** to know that we must protect the watershed," he said, **explaining WSSC's rationale for the new regulations.**

As resolved at a July 28 Equestrian Stakeholders meeting, WSSC is working to select an outside consultant, **though a timetable for completing this process has not yet been established**, Johnson said. **Nor could he say when a promised follow-up meeting would be scheduled.**

"This isn't a horse issue, though equestrians may be the most vocal about it," he said. **"We have lots of people using our land, and they are all affected.**

"**It's time to put contemporary measures into practice,**" he said. "We don't want to be in the same position as the Chesapeake Bay — doing retroactive things. **Water is more expensive to treat when it's polluted, so why get in that position?"...**

Johnson described the access road as **"very flat and very negotiable."** He added that **if necessary, horseback riders could detour around any rugged terrain....**

**But Johnson said some area horse facilities have dumped truckloads of manure at the edge of WSSC land, and it's been washing down during rainstorms.**

**"These are some of the practices that can't continue," he said.**

Johnson also said there are **equestrian trails marked in orange, blue and black** that have been established over time, adding, "The map shows one thing, **but (seeing) the actual watershed is an entirely different story."**

On top of shifting the equestrian trail, the commission has also decided to **close the park to horseback riders from Nov. 15 to April 1 since they are the wettest months of the year, according to official rainfall data collected at the WSSC water-treatment plant at Sweitzer Lane and Route 198, Johnson said.** Riding during these months, when vegetation also dies back, increases the potential for erosion and runoff, he noted....

Reporting problems and illegal acts is something Johnson said WSSC appreciates.

"This is not an 'us-versus-them' situation," he said. "Balance is in everyone's interest and will take a whole community effort."



[print article photo caption: " WSSC officials are encouraging equestrians to use fire roads instead of the horse trails that border the reservoir, **but riders are finding fire roads are mostly washed out, too steep and full of rocks**", "WSSC officials are encouraging equestrians to use fire roads instead of the horse trails that border the reservoir **for environmental reasons**", "A steep embankment caused by flooding in the last couple of years stops riders on a fire road along the Rocky Gorge reservoir]

captions to photos in the on-line version, which also has an image album, with captions copied below:

[main photo of article:] **"the trail is hard to notice because it blends into the woods."**

[supplemental photo and image 10:] "Teddy Ertter maneuvers Jack down a **steep fire road covered with loose rock** along Washington Suburban Sanitary Commission's Rocky Gorge reservoir."

[image 3:] "A steep embankment cause by flooding.. stops rides on a fire road."

[image 4:] "...through the woods on one of the trails" (where the photo shows no depression or erosion)

[image 5:] "Horses stand in the woods along a designated horse trail in the Rocky Gorge Reservoir (where the photo shows no depression or erosion)

[image 6:] "WSSC suggested using fire roads for riding, but they are mostly washed out, steep/unsafe in parts, and very rocky, which is bad for the horses."

[image 8:] "...along a horse trail" (the photo shows no depression or erosion); also "WSSC suggested using fire roads for riding, but they are mostly washed out, steep/unsafe in parts, and very rocky, which is bad for the horses."

[image 9:] "...a steep and rocky fire road along the WSSC's Rocky Gorge reservoir" ... "fire roads are mostly washed out, too step and full of rocks."

**The Gazette 11/18/11 "WSSC property riders on track for warnings - Users help commission clean access trails"**  
by Margie Hyslop

Horseback riders hoping to roll back the decision to close long-used trails around the T. Howard Duckett Reservoir got only reassurances this week that riders spotted on Washington Suburban Sanitary Commission property would be warned rather ticketed.

WSSC General Manager Jerry N. Johnson told 17 trail advocates and others attending the commission meeting Wednesday that continuing to issue warnings, even after horse access to WSSC land around the reservoirs is closed for the season, gives everyone a chance to become better informed.

The utility plans to continue studying what needs to be done to protect the water supply, which Johnson said is "our first overarching priority." The utility serves 1.8 million people in Montgomery and Prince George's counties. **He said it would be just "a matter of days" before the water and sewer utility hires a consultant** to assess conditions in the reservoir's watershed. Johnson announced in July that a consultant would be hired....