



MONROE COUNTY CONSERVATION DISTRICT BOARD MEETING MINUTES
THURSDAY, APRIL 20, 2017

MEMBERS PRESENT: Joseph Hanyon, Chairperson, Dave Moyer, Heidi Secord, Charles Garriss and Mark Sincavage

DISTRICT STAFF: Adam Schellhammer, Lori Kerrigan, Drew Wagner, Mike Wilk, Roger Spotts, Barbara Bistras and Debra Martin

ASSOCIATE BOARD MEMBER: Janet Weidensaul

COOPERATING AGENCIES: Jennifer Matthews, NRCS; Garrett Beers, DCNR; and Evan Makuvek, MCPC

PUBLIC: Jim Hendricks, Humber-Garick; John Jablowski, Jr., John Kerrick and Annie Lamberton, Tobyhanna Township; Ellen Lott, The Nature Conservancy; Drake Stinson, Papillon & Moyer; Bob Heil, Brodhead Watershed Association; George Ewald, Fran DePiano, and Steve Malaico, Tunkhannock Township; Josh Lookenbill, Mark Brickner and Bob Pitcavage, PA Department of Environmental Protection, Bur. of Clean Water; Ron Mishkin, Tunkhannock Creek Fishing Association; Don Miller, Pocono Heritage Land Trust, BWA, and Brodhead Trout Unlimited; Bernadette Ayre, Trout Unlimited; Abby Jones, Penn Future; L. Bauma and Nicole Walters, TV-13; Raymond Baratta; Duane Kerzk; Dick Wibson; Jack Fossett; Kathleen Flynn; Eric Baird; Tom VanZandt; Kathy and Dan Steere; and Craig Todd, Residents

Joseph Hanyon, Chairperson, called the regularly scheduled meeting of the Monroe County Conservation District Board of Directors to order for Thursday, April 20, 2017 at 8:03 a.m.

PUBLIC COMMENT-Joe asked if there was any public comment that does not have to do with the Tunkhannock Creek re-designation. Duane Kerzk said he attended the Dirt & Gravel Road Workshop presented by John Motz from MCCD. He said John did a great job and it was a very helpful program for members of the community and he encouraged more programs like it.

APPROVAL OF THE MARCH 16, 2017 BOARD MEETING MINUTES-Joe asked for approval of the March 16 minutes. A motion was made by Charles Garriss, seconded by Heidi Secord, to approve the March 16, 2017 Board meeting minutes. Mark Sincavage abstained as he was not present. The motion carried.

APPROVAL OF THE APRIL 11, 2017 ASSOCIATE DIRECTOR/AD HOC COMMITTEE MEETING MINUTES-Joe asked if there was a quorum to approve the Associate Director/Ad Hoc Committee meeting minutes. Adam stated that Board members could approve the minutes even if they are not on that committee. A motion was made by Heidi Secord, seconded by Dave Moyer, to accept the minutes, but not approve until the committees meet again to approve those minutes. Joseph Hanyon abstained as he was not present. The motion carried.

Heidi asked to add 'Media Outreach by the Board' to the meeting agenda and Joe agreed.

DEP Presentation Tunkhannock Creek Stream Re-designation Evaluation-Josh Lookenbill, DEP Bureau of Clean Water, said he was in attendance to make a presentation and answer questions on the petition to upgrade the Tunkhannock Creek from HQ to EV. Josh stated that the Tunkhannock Creek basin was designated as a Cold Water Fishes and a Conservation Area in 1972 which is now an old designation. Mark asked what department/authority came up with that designation. Josh said it was an older agency of DEP: the Environmental Water Board that no longer exists and it was under the state. Mark Brickner, PA DEP Water Quality Standards, noted that in many cases those designations were made under the counties themselves. Josh said in 1979 under Chapter 93, stream lists and Designated Uses (DU) became what they are today and the Conservation Areas were converted to High Quality-Cold Water Fishes and that remains the same today. In 2009 a Migratory Fishes designation was added to the entire Atlantic slope. Currently Tunkhannock Creek is designated as a High Quality-Cold Water Fishes, Migratory Fishes (HQ-CWF, MF). Josh showed a map which shows the Tunkhannock Creek basin as being designated as HQ-CWF, which has major landowners such as Bethlehem Water Authority, The Nature Conservancy, Weiser State Forest and State Game Land property which drove the EV qualifications for the creek. On March 2, 2005 a petition was received and accepted for study by the Environmental Quality Board (EQB) to re-designate the Tunkhannock Creek to EV and in April 2012 the PA DEP did a biological field survey. Joe asked who can file a petition. Josh said anyone can file a petition, noting that this one was filed by the Tobyhanna/Tunkhannock Creek Watershed Association. Josh said the results from the re-designation evaluation came from the Department's Biological Qualifier which determined that the entire upper portion of Tunkhannock Creek met the EV Biological Qualifier and in addition to that other reaches in the entire upper basin met an Outstanding Local Resource EV Qualifier primarily due to the Bethlehem Authority property and their management plan. He noted that on a small portion of State Game Lands it meets an

Outstanding State Resource Water Qualifier and within a portion of the Bethlehem Authority, the Nature Conservancy and the Long Pond Preserve where that area meets the Exceptional Ecological Significance Ecological Qualifier. Josh stated that when the Department (DEP) makes a determination they are required by the Clean Water Act to make an Existing Use (EU) determination and their data/information shows that these waters qualify for a higher use than what is currently designated. A DU is that which is listed in the regulation. He noted that if a permit were to be written today it would recognize the current designation of EV based on the three EV qualifiers. Joe asked about the date that information was gathered. Josh said the date that determination was made was December 5, 2016 and that date is listed on the DEP's website which is used to determine permitting. Joe asked why the delay of 11 years. Josh said it is a state agency and there are 20 petitions going through the process. Josh explained the process starts with a report being drafted, it is made available to the petitioner, and stake holders for review and comment, noting that the comment period is now. Multiple requests have been made for extensions and the comment period for the draft report has been extended until August 1, 2017. Joe asked if a copy of the draft report was available and had the District received one. Josh said it is on DEP's website and the District may have received a copy. Josh stated that the draft report will be edited to include all the comments received and the final report will be given to the EQB as part of the proposed regulatory package. The EQB publishes that information as a proposed regulatory change and as part of that process, another comment period is given. It is then presented again to the EQB as final regulatory change where they have the opportunity to accept or not accept. If they accept the final recommendation it is forwarded to the Independent Regulatory Review Commission (IRRC) where their review process allows for comments to be received for the third time. Once approved as final it will be published as a Final Regulatory change and then the DU is changed and the EU will match the DU. He stated that all streams go through the anti-degradation analysis every time PA DEP issues a permit or authorizes an activity; all NPDES permits are based on effluent limitations and permit conditions are designed to ensure that water quality criteria is achieved and the most restrictive use is protected. He noted that new and expanded discharges are required to treat the effluent according to water quality criteria associated with the EU and the revised DU. Josh noted that many of the comments received were related to permitting. Point source permitting for new and/or expanded discharges requires that non-discharge alternatives must be evaluated for both HQ and EV which includes the Tunkhannock basin. If a non-discharge alternative is not possible, a non-degrading discharge option must be implemented using best available technologies (ABACT) unless a Social and Economic Justification (SEJ) is approved. SEJ cannot be evaluated in EV waters so with the upgrade there is no option to use the SEJ. John Jablowski from Tobyhanna Township asked why that is. Josh stated it is in the regulations and that was deemed to protect an EV stream, noting that

a permitted discharge to an EV stream cannot change the existing water quality. Craig Todd asked if a proposed SEJ under a HQ stream is allowed to de-grade a stream. Josh said potentially yes. Annie Lamberton, Tobyhanna Township asked if Josh knew of any instances where that happened, noting that there are so many sites utilizing BMPs she does not think that would happen. Josh said specifically no, noting that some of the permits within the township did not obtain an SEJ and he will be discussing non-point source and Chapter 102/105 encroachment permits. Annie referenced an earlier slide that talks about the State Game Lands having a Water Management Plan (WMP) and asked what that is and what do they do. Josh said they have a plan and one water protective measure that they implement is inner and outer buffers around their stream corridors where they do not allow certain activities. She asked who inspects to see that they do that. Josh said he does not know, noting that if they were to do a logging project a state forester who is responsible for that tract would inspect. Annie asked who would know/inspect if the WMP's are being followed when there is no activity like logging and would they send in a report to DEP. Josh said it would be a Game Commission person and no report would be made to DEP. Annie said so you are saying that no one inspects on a regular basis to see if their WMP's are followed. Josh said not on regular basis. Josh continued stating that discharges in existence prior to the HQ or EV designation are 'grandfathered' and considered to be part of the of the existing quality of the waterbody so all point source discharges currently within the Tunkhannock Township would not be effected as long as they are not changed or expanded. George Ewald, Tunkhannock Township, asked if they would need to be expanded, would they be allowed under EV. Josh said yes, noting that they would need to follow the non-discharge alternatives and currently permitted discharges in the township have all gone through the non-discharge alternatives and would not be granted a SEJ. Joe asked if new projects that recently took place in Tunkhannock Township have gone through the criteria of the EV designation because that is on the books. Josh said no, because of the HQ designation which is special protection designation, noting that before 12/5/16 it would be HQ and after 12/5/16 it would be EV. Josh explained that there are not many differences between HQ and EV in regard to E&S for Chapter 102 where you still need to obtain an Individual Permit and non-discharge alternatives still must be evaluated for stormwater permits, noting that Best Management Practices (BMPs) become more stringent. BMPs with high sediment removal efficiencies are now required verses low or moderate for HQ. Joe questioned that DEP has already made the designation of EV in some parts of the Tunkhannock Creek. Josh said a DU has been noticed so any permitting occurring will be permitted to the DU of EV however the permittee has the opportunity to challenge the process of that permit permitted to EV which is different than it being a DU. DEP states that they receive information that the stream is EV and permits will be written as EV however you have the opportunity to challenge that process as if it was a DU of EV you wouldn't have the opportunity of a challenge. Discussion was held on EU and DU. Josh reviewed the Chapter 105

Water Obstructions, Encroachment and Wetlands Permit requirements of an Individual Permit being required for EV and an EV stream designation qualifies wetlands located in or along the floodplain and the floodplain of streams tributary thereto as EV wetlands. Mark questioned whether wetlands associated with HQ are also considered EV. Josh said not necessarily but in the Tunkhannock basin most are, noting that most permits written under Chapter 105 are permitted under EV wetlands. Josh noted that there are streams designated EV and wetlands designated EV and they are different; there is a wetlands encroachment permitting program which is Chapter 105 and a streams permitting program and an EV wetland is not the same as an EV Tunkhannock Creek. He noted that if a wetland in Tunkhannock basin does not qualify for EV it will now because the Tunkhannock basin is EV. He discussed when a wetland is filled it now needs to be replaced with the functionality of an EV wetland. Craig asked for clarification; under Chapter 105 there is a separate criterion that designates a wetland as EV but by the stream being upgraded to EV it creates another criterion that will take wetlands within the EV watershed to EV if they weren't under Chapter 105. Josh agreed. Craig asked Josh to articulate why this upgrade is being considered by DEP, the law, and why permits are being reviewed as EV even though the regulations have not changed. Josh said that federal law states that we cannot degrade streams from the quality that they currently are as of November 28, 1975. When DEP receives a petition, work is done that shows that a particular stream qualifies for an upgrade, then in order to prevent degradation DEP issues an EU so if permits are issued between the time/date the information was gathered and until final rulemaking we are complying with the part of the Clean Water Act that does not allow us to degrade streams. He noted that there are other discharges that degrade streams and some are permitted to some degree but all discharges to all streams must go through the anti-degradation evaluation to ensure that these activities do not degrade streams to a point lower than what was documented on November 28, 1975. Mark asked that he hears comments where HQ streams dry up in the summer so how can they be designated HQ when they go dry. Josh said lower watersheds have bigger streams and as you travel higher up the watershed the streams become smaller so there is a higher potential for a streambed to go dry. DEP is tasked to assign a use to those streams from the bottom all the way to the top of the watershed, so if that watercourse does not exist for a few months in the summer and there are discharges to a dry swale, that discharge must comply with the assigned use. He noted that if that use was not protected at that point it would not be protected downstream where the use was designated. Josh was asked to review the map of the area that the re-designation is going to encompass. Josh said it includes the entire upper Tunkhannock basin adjacent to Pocono Raceway and the lower main stem to the mouth of the Tobyhanna Creek. He noted that the Bethlehem Water Authority has worked hard to protect and maintain clean drinking water and that has created water that meets the EV qualifier down through the basin. Other small tributaries within the area have not implemented those same land use practices

therefore they do not qualify for an EV qualifier. Jim Hendricks, Tobyhanna Township said that seems like a contradiction of the DU that extends upstream and if it is on the main stem wouldn't it extend to all the tributaries. Josh explained the map area again noting that it accumulates tributaries of water along the way and all the same tests were applied through all the streams and the result was that not every single water course in the Tunkhannock Creek watershed met the EV qualification. It was asked if it is common to add lime to the stream to control the acidic value and it has been dumped into the Tunkhannock Creek. Josh said the creek naturally acidic and that may be done to promote trout habitat. Lori asked Josh to clarify NPDES permits for point-source discharges and permits for construction, their differences and affect. Josh said construction under Chapter 102 includes stormwater, silt fence, culvert modifications to reduce sediment. If you build a facility that disturbs over one acre you will then get a federal stormwater permit which will include a construction permit and a stormwater permit which includes silt fence, sediment controls, and also retention basins, stand pipes, 2-yr. storm capture rates, etc. Lori said that the HQ and EV designation is the same for that permit, noting that it will change for industrial non-point source discharge. Josh said you will be required to do high sediment removals. He noted that Tunkhannock Creek is HQ so you are already required to evaluate this. Joe noted that he and MCCD have received letters pro and con regarding the re-designation; but only science will make the determination as to whether the creek is HQ or EV and not persuasion by groups or individuals. Josh said not necessarily; the EQB and IRRC want public opinion, so as part of the process that is included and characterized in DEP's recommendation to the EQB and as the EQB makes recommendations to IRRC. The EQB will ask DEP if public comment was received and what the consensus was. Josh noted the initially it is a scientific evaluation. Joe asked how it can be looked at objectively from a regulatory standpoint when the EQB and IRRC look at this from Harrisburg and they have the discretion as to what suffers; the environment or development. Josh said the EQB is made up from 25-30 representatives from industry, non-profits, and state agencies (Fish & Boat, Department of Ag, Department of Health), and the legislature and they are looking for evidence that DEP has spoke to their constituent's, so there is the opportunity to influence the EQB. Joe asked under what standard they have that opportunity; letters for/against, science letters for/against, etc. Josh said it will come down to the regulation. Discussion was held on the make-up of the Board from IRRC. Mark asked if a large landowner had an HQ use in the watershed and sent a letter; would that have some influence on the EV designation and pull it back. Josh said it is a public process however he would like to think that DEP staff had done their job, noting that they could pull it back, but they have never exercised that. Don Miller, BTU, asked Josh if most streams statewide were designated HQ due to staff/time constraints and perhaps if more staff and time was given would more of those stream been designated as EV. Josh noted that is mostly correct, noting that there was not an EV designation at

that time and it wasn't until 1975 when the new EV designations came into play. There are 86,000 miles of streams and not all of them were reviewed in detail. Don noted that is why citizen organizations go out and do evaluations of streams to demonstrate that they are worthy of the EV designation. Don commented on the upper streams drying up, noting that we tend to just look at the surface flow which is just a small portion of the flow and when you study the headwater streams you will find that there is flow underground. Tom VanZandt, Pocono Township resident, asked what result or real harm would be done if all water permits and regulations were removed. Joe said he thinks we all know the answer to that. Tom said he does not, and asked if the protection that is in place now is doing anything. Josh said we would not have any drinking water, noting that all streams in Monroe County are designated HQ at a minimum. Abby Jones, Penn Future, commented that the health of our water quality and sustainable economic development are not exclusive and we can re-designate this creek to EV and still have development and economic growth within our counties. George stated that the Tunkhannock Township Board of Supervisors who are present today were opposed in 2005 and are still opposed now to the EV re-designation. They feel that the petition has a lot of flaws, the current HQ designation and Act 162 has protected the streams. He said that there is nothing in the petition concerning real estate interests and that should be included, noting that on Page 10 it notes that the economy in Tunkhannock Township depends on the anglers and birdwatchers but says nothing about other businesses. At the hearing in 2005 the other interests were brought up but are not in this current petition and that was noted as an oversight. They and Tobyhanna Township Supervisors want to protect the streams but feel it is unwarranted and unneeded at this time. George noted that originally the township received an incorrect cover letter for a creek in another county and then once the correct information was received they only had a 45-day comment period so they were hoping the MCCD Board would help them to request an extension. George noted that they did receive 120-day extension. Mark asked if the Tunkhannock Township Board wanted anything else from the MCCD Board. George said yes, they want MCCD to review the petition and come up with a comment on whether this is good or not. Adam stated that in 2005 the MCCD Board submitted a letter of support for the upgrade. George said the Board was given a packet of information with mapping and letters to review. A motion was made by Mark Sincavage, seconded by Dave Moyer, to table this till future review by the Board members. Joe agreed stating however, many people have spoke and perhaps there are more so if there are any more questions while Josh is still here he will take them. Ellen Lott, TNC, stated that they support the EV petition. TNC is an international organization who has identified the Tunkhannock Creek as one of the top greatest places in the world because of the exceptional things that are found there. They thank DEP for doing the research. The stream is already EV and if it is not protected then it can be degraded to HQ and we have seen this happen. She noted that the packet of information provided by Tunkhannock Township is a bit inaccurate and outdated

and there are new maps here from DEP showing the HQ tributaries. TNC respectfully requests that when and if the Board considers this; to protect the extraordinary values of this local creek which is recognized and protected by the County. George said that it has been brought to the townships attention that the Tunkhannock Fishing Association has been periodically treating the stream and asked if there is any permitting needed. Josh said yes. George said he would like that information as they are treating the acidic qualities of the streams. Dave Moyer asked Josh that if that were the case how would you get a good sample/determination of the water and know if that sample was a true sample of what is in the stream. Josh said they would not sample where they were treating. Dave said so if they were treating the stream it could change the characteristics of that stream. The motion carried. (See attached - DEP's presentation.)

Approve Providing Technical Assistance to the Monroe County Planning Commission on the Mt. Nebo Regional Park Trail in Smithfield Township-Adam said the MCPC is offering help in the construction of a two mile trail around the lake at Mt. Nebo and they are looking for assistance from the MCCD EE staff to provide interpretive trails and design. Adam noted that nine hours x 2 staff would be committed. A motion was made by Mark Sincavage, seconded by Heidi Secord, to approve providing nine staff hours from two environmental educators to the design of interpretive trails at the Mt. Nebo Regional Park in Smithfield Township. The motion carried.

Joe noted going back to the re-designation that he had received the packet from Tunkhannock Township and it will be made available and made a part of the MCCD April Board meeting minutes. (See attached.)

Approval of the District Manager to attend DEP/PACD New Managers Training in June-Adam noted that a three-day new manager training (under five years) is being offered and will include review of financials and the many funding programs. The training is being paid for by PACD and The Center for Leadership Development and Board approval is required before he can sign up for the training. A motion was made by Mark Sincavage, seconded by Heidi Secord, to approve Adam Schellhammer attend the DEP/PACD New District Managers Training on June 19-21, 2017 in Entriken, PA. The motion carried.

TECHNICAL REPORT-Site Status Report-Lori stated that four individual permits have been issued; two in Hamilton, one in Middle Smithfield and one in Coolbaugh. She noted that there are currently 37 projects under review and several sites had issues and are being resolved under voluntary compliance. One site which has been in enforcement for some time has now been settled. A Consent Order and Agreement was signed for the Hardrock/Perry fill site for violations of the Clean Streams Law, Title 25, Chapters 102/105, Dam Safety and Encroachment Act, Solid Waste and Management Fill Policy. Under the Consent Order and Agreement civil penalties and stipulated penalties were assessed and was signed to clean up and remove materials on the site. Joe questioned the Hardrock/Perry site. Lori reported that

they had been illegally hauling and dumping solid waste, testing has been done and the site has been in violation since 2006. Staff has been working to get this site rectified and now they have signed the agreement.

Dave said he has noticed hundreds of miles of dirt and salt along our highways from snow storms/plowing and asked if MCCD is working with PennDOT to clean this up as it is discharging into our streams and wetlands. Lori stated that if Dave gave her specific locations staff would look into it. Dave said to start at Route 940, take Kuhenbecker Road all the way across to Long Pond. Lori said she would log it as a complaint and look into it. Dave noted that as our technicians are driving the roads they can easily spot those locations.

Mark asked about #15 and the ongoing violations. Lori said they are under a Compliance Action Plan and their deadlines have passed for certain submittals. An inspection was recently completed and they have been given an extension to the end of the month to make those submittals and if not the site will go to enforcement.

Mark commented that the silt sock has been pushed up over the winter at the Dollar General in Blakeslee and he asked if it has been inspected lately and finalized with an NOT. Lori said she would check with staff on that site.

ENVIRONMENTAL EDUCATION-Program Status Report-Maple Sugaring Season-
Roger said that maple sugaring season has wrapped up. It took a little longer with the weather however staff was able to produce 38 gallons of syrup. He noted that the public and school program numbers were good and our tree sponsor numbers were up.

Kettle Creek Environmental Fund Annual Dinner/Auction, May 12-Roger reported that the KCEF Dinner/Auction is Friday, May 12 at Camelback and ticket and sponsorship information is available in the lobby. He noted that KCEF raises a large amount of money which goes directly to support our EE programs.

Nature Discovery Area Update-Roger noted that KCEF has started work with a contractor on the Nature Discovery Area on the other side of pavilion. The hope is to have the discovery area completed early this summer.

Approve Hiring Summer Work Crew at County-designated Salary Level-
Roger reported that the summer work crew seasonal positions were advertised. There is one supervisor position and two laborers who are all returning staff from last year's crew and will work for eight weeks on trail maintenance. A motion was made by Mark Sincavage, seconded by Dave Moyer, on the recommendation of staff to approve hiring Zachary DeSantis, as supervisor and Connor Lilley and Kenneth Dougher, as laborers for the summer work crew. The motion carried.

DISTRICT MANAGERS REPORT-Adam asked if anyone had any questions on his report. Mark asked about the status of the 2030 Action Committee meeting. Adam stated that they have developed the vision and mission statements. A meeting was held last Friday where similar model cities were reviewed and there is hope of modeling after those towns. They are looking into funding for a position to manage the whole 2030 movement. Mark said he feels that the Board should support that and having a fulltime planner was looked into back with the 2020 Plan and that did not happen. Joe asked Mark what type of support. Mark said the Board should write a letter stating that a planner is needed on the MCPC just for the 2030 Comp Plan.

Joe asked if Adam went to the Chestnuthill Supervisors meeting to introduce himself. Adam said yes in part and also due to the NPDES Checklist that was sent to all municipalities by MCCD for applicants to help them understand what they may need to do with permitting.

Review of Act 38 Delegation Agreement-Adam said that this would be a potential action item if the Board chooses to take on the Act 38 Delegation Agreement. Adam stated that Act 38 is for the Nutrient Management program which is designed to monitor and provide technical assistance to Confined Animal Operations (CAOs). Currently we have eight CAO's in the County and all technical assistance and monitoring for this program comes from the Williamsport Office. The Act 38 Delegation Agreement is primarily education based which will help to fund our ACT position and requirements for both programs can be met through our one ACT Position. Adam noted that this will not add a huge workload and we can provide local technical assistance to the farming community. Joe asked what we currently do. Adam said nothing, noting that enforcement would still come from DEP and the SCC Williamsport Office. Mark said he feels that we should support our local farmers and this would be a good service to them. A motion was made by Mark Sincavage, seconded by Heidi Secord, to approve MCCD entering into the Act 38 Nutrient Management Delegation Agreement with the State Conservation Commission. Dave Moyer was opposed. Charlie said you are asking for something that is random and funding from Harrisburg is questionable as programs are being slashed. Adam noted that the RC/ACT position is currently funded through review fees and the ACT program so if the funding dries up that position is still being funded; Act 38 is just an extra fund to draw from. Heidi noted that Act 38 and nutrient management programs are not going to be cut. Mark requested a roll call vote: Joseph Hanyon, Mark Sincavage and Heidi Secord voted yes and Charles Garriss and Dave Moyer voted no. Joe asked if the agreement can be withdrawn at any time. Adam said with a 30-day written notice. Adam noted that it will take six months for Matt to be trained and he will keep the Board updated on the progress. Joe said we are making this recommendation based on Adam saying that this will not take a great deal of additional time. Adam said he has been reviewing this since September and did not bring it up until he was sure staff could handle it. Charlie asked that all information be forwarded to the Board in case they wish to withdraw. The motion carried.

Report from DEP Regarding Inspection Protocol-Adam said he contacted Shane this week and there has been no action either way on the inspection protocols by DEP. Joe asked that this be placed on next month's agenda and if anything comes in prior to that meeting to see that Jeff Durney, MCCD's solicitor receives it.

Joe noted that Jeff had contacted the Board in regard that he can't make every meeting and Joe feels that is not an issue however he asked if the Board agrees or should we look for a different solicitor who can make the monthly meetings. Charlie said MCCD should continue to use him as needed. Heidi asked if the Board did an RFP for a solicitor. Mark said the Board did some investigating early on but he is strongly against changing as it takes about two years to understand the regulations. Heidi noted unless that person is already familiar. Mark agreed, noting that when they had looked previously and they did not find someone locally or in the surrounding counties with conservation district background. Tom VanZandt asked if the Board had checked with other Counties and those conservation districts and what they do. Mark said yes we did, noting that this Board operates independently even though the employees are County and the Board is appointed by the County, the Board follows state regulations. Tom said that he noticed that the Board checks with other conservation districts for other things and the Board seems unsure. Mark noted that the Board did check and he feels confident in Jeff's abilities. Discussion was held on having a solicitor on retainer verses paying as needed.

Progress of Stream Restoration and Repair-Adam reported that on April 27 MCCD staff, County Commissioner Christy and representatives from Congressman Matt Cartwright's office will be meeting at the State Game Lands site. MCCD has been providing technical and permitting assistance to USFWS on the Cherry Valley Golf Course restoration project. MCCD will be partnering with Trout Unlimited for a stream clean-up day on Saturday, May 6 to remove snags and trash and other debris from Pocono Creek in Tannersville behind the old NCC campus. Eric Baird, TU, stated that they are recruiting volunteers for that event also. Adam noted that staff has almost completed evaluations of parcels in the West End for buffer installation and cattle stream exclusion fencing to reduce stream degradation. Once parcel ownership is identified funding will be sought through DCNR. Joe said we had talked about several sites and picked the State Game Lands which appear to have some obstacles so he is suggesting that we look at a second place to start. Adam said they will have a second site by the May Board meeting. Dave stated that the easy sites are just looking at our highways and staff can look everyday when they drive and we can start to work with PennDOT. Adam noted that he met with Christine from the MCPC and Mary Ellen Keegan from Hazard Mitigation on our help with their Hazard Mitigation Plan, noting that they have had complaints on stream snags and flooding issues.

Report on Status of Application by Pocono Mountains Municipal Airport Authority (PMMAA)-Joe said he is looking to MCCC Board member Dave Moyer, Chairman for the PMMAA Board, for a report on the PMMAA project that is before the Conservation District and the issues, if any, that they are having. Dave said that there is an expansion project going on and he believes that a call is taking place today with the District and PMMAA engineers. Lori stated that 90% of the issues that were brought up in the letter the consultant had no problem with. One outstanding issue would be discussed at the meeting today. Mark said his understanding was that there was a problem with drainage to an HQ watershed. Lori said no; there was bedrock at the site. Mark noted that was not what he heard. Dave said in November the PMMAA started their permitting for the project for some T-hangers, runway expansions and taxi ways. Charlie said, from a County point of view on the PMMAA project, he received information on the items from the Conservation District that the airport was to comply with that had a price tag of \$800,000 over and above what their engineer said the project would run. Charlie asked if the airport hired the wrong engineer who did not see these items or are we digging too far in the leaves and what is the problem. Adam noted that this is pre-decisional but since Dave is on the PMMAA Board and if he would like to talk about it we could. Dave agreed. Adam said that MCCC has been waiting for almost a month to the day for a response on our comment letter from the airport authority, noting that MCCC staff did not design that project. Mike stated that there are some issues related to the bedrock and where their system is located. There are some opportunities based on what MCCC staff looked at that could be a potential cost savings for PMMAA, but we are not the designers of record. He noted that if the designers are willing to listen and evaluate some items MCCC staff saw in the design; there could be some savings with a more efficient design and would help them to resolve their issues. Joe asked if staff and PMMAA engineers are meeting the timelines. Mike stated that MCCC received PMMAA's application on January 10, 2017; 9 days later MCCC sent an incomplete letter, which is under the 15 day requirement. They responded back 13 days later and MCCC deemed it complete on February 13. MCCC's technical review was completed and we sent our comments to DEP on March 9 which took 16 days (47 day requirement) for our review. DEP sent their letter out on March 21 and MCCC staff was contacted on April 18 to set up today's conference call with PMMAA engineers. Dave said once this process moves forward perhaps Delta Engineering should come to a Board meeting, report their findings on how they felt the process went and an open discussion could be held on how they feel about what they went through to get here today. Heidi asked if a pre-application meeting was held. Lori said yes.

Dave questioned the Hardrock/Perry site and was there any fines levied. Lori said yes, there were civil penalties and stipulated penalties for meeting deadlines for items that that were outlined in the Consent Assessment.

MARCH REPORT-Financial Statement-Heidi noted that a large amount of Dirt & Gravel Road funding came in. A motion was made by Charles Garriss, seconded by Dave Moyer, to approve MCCD's March Financial Statement. The motion carried.

Invoice Lists-Heidi highlighted the rain barrels at \$2,775.00, snow removal costs at \$2,605.00, the electric invoice at \$1,457.65, the membership dinner balance to Trout Lake of \$1,908.58 and postage for \$1,000.00. Heidi asked Barbara to explain the LSA grant for a water meter. Barbara stated that MCCD applied for an LSA grant, we were approved but we had to pay money upfront before we received the 75% reimbursement. A motion was made by Mark Sincavage, seconded by Dave Moyer, to approve the Invoice Lists. The motion carried.

OTHER BUSINESS-Out of County Travel Requests-A motion was made by Heidi Secord, seconded by Mark Sincavage, to approve the Out of County Travel requests. Joe asked about the Bartram's Garden fieldtrip. Roger reported that fieldtrip is to Bartram's Garden in Philadelphia which is a follow-up from a program presentation that was requested by our membership. Staff will be taking the bus and the trip is sold out. The motion carried. (See attached list.)

Associate Directors-Review/Discussion of Applicants-Adam noted that since Pat Ross is not here he would report on the Associate Director Committee meeting. Adam said that the committee reviewed the two applications. After some discussion the committee agreed that Pat would follow-up with Jim Hendricks on his application and a decision would be made after Pat had that discussion. Adam stated that the committee is recommending to the Board the approval of Craig Todd as an Associate Director.

Associate Director Requirements and Obligations-Joe said he requested a list of discussion points be included for this meeting. Joe said the general overview is why do we have Associate Directors, what can they do to assist the Board, what is the optimal number of members, should they be on certain committees and should they have certain qualifications. Joe said so why do we have them. Mark said under District Law we can have them, we don't have to have them but the idea is that they would be up-to-speed and could come into the position of Director at the discretion of the Commissioners. Mark said he feels that they are necessary as they can help with media outreach and we get independent input from their various backgrounds. He noted that the current Associate Directors have offered good information on many topics. Heidi noted that they can be used in an advisory capacity. Joe noted that one Associate Director showed up to one Board meeting that he had never seen before and he said he would continue to attend and Joe has not seen him since. Heidi said that was John Leiser. Joe said he thinks there should be a minimum attendance requirement, 40%-50%, and they should be assigned to a committee. Dave asked how many are on the list and Adam said 7, noting that there is no set number. Joe said he would like to get someone on who would like to help Adam with the

stream restoration projects. Heidi noted that many Associate Directors attend other District functions other than Board meetings, like the membership dinner, so they do support MCCD. Joe said the list should be reviewed yearly and if they have not participated/attended a set number of Board meetings they will need to make their case to stay on as an Associate Director. Mark noted that we could use them better than we have; like for the stream restoration and by being on committees where they could advise the Board from their expertise. Adam said a request could be sent out to see if any Associate Directors would like to serve on a Stream Restoration Committee. Mark said the Chairperson or the Board would need to approve a Stream Restoration Committee and who serves on that committee. Heidi asked Janet to comment. Janet said she does try to attend meetings when she can and she does try to assist the Board when asked. She noted that there is a benefit to having Associate Directors and their input on any given subject, noting that we learn from different, opposing views. She suggested that inactive members be reviewed and polled and perhaps guidelines should be developed. Lori noted that MCCD does have Associate Director Guidelines and Adam said they were available at the committee meeting. Janet said that at the Associate Director Committee meeting it was agreed that Craig would add something to the Associate Director pool and she sees no reason to delay that action by the Board, noting that only this Board can take that action. Joe said he knows that Pat voiced a strong opposition to that and we should table it since Pat is not present. Heidi said that the committee did vote on it and a majority at that meeting did recommend Craig and she asked that the Board take action. Joe asked Heidi if she was making a motion. A motion was made by Heidi Secord, seconded by Mark Sincavage, to approve appointing Craig Todd as a MCCD Associate Director. Joseph Hanyon, Charles Garriis and Dave Moyer voted no. The motion failed.

Nominating Organization Discussion-Adam said no action/recommendations were made at the Ad Hoc Committee meeting for Nominating Organizations. Some discussion was held on who should be a Nominating Organization and Dave voiced that PMMAA had an interest. Adam said The Nature Conservancy was discussed and he is not sure if Dave had others he wanted to bring up today. Dave said no he would wait until they send in a letter.

COOPERATING AGENCY REPORTS-Jennifer Matthews, NRCS, said that staff has been working on the 2017 fiscal year allocations from the Farm Bill and within the next few months she will have the dollar amount that is coming to Monroe County. She said that she is required to annually review the Memorandum of Understanding between NRCS, the Department of Agriculture, the State Conservation Commission and MCCD that has been in place since 1997, noting that there have been minimal updates. She noted that after the review she is required to obtain Board member signatures which confirm that she has reviewed the MOU. Jennifer reviewed the MOU and highlighted several sections including privacy, discrimination and outreach. Jennifer stated that she had some Farm Bill funding numbers for Monroe County over the

last 10 years which includes 232 practices being installed on 8,498 acres totaling \$1,131,054.00 through EQIP, WHIP and AMA. Through WRP and WRE they purchased easements on 11 properties covering 362 acres, spending \$2,185,750.00. Currently there are 35 additional practices to install per contract at a cost of \$236,857 giving a total cost of \$3,553,631.00 spent in Monroe County over the last 10 years. Charlie asked if the MOU was in the Board packets. Adam said it was sent out in the digital Board packet, not the hardcopy packet. Jennifer noted that she did not read the entire MOU - she only highlighted part of it. Jennifer said that she does need Board member signatures for the MOU after the meeting. Joe said he would address that with Jennifer after the meeting.

Garrett Beers, DCNR, reported that he was at Earth Day and he has provided outreach to school students for the forestry portion of the Envirothon program/testing. He has provided technical assistance to private forest landowners and has been working with NRCS on various programs. He noted that springtime is a big wildfire season in PA however the cold, wet weather has kept the fire activity numbers down. Two prescribed fires are planned for this spring with one in Monroe County to restore an old field back to its natural habitat and another in Pike County within an old timber sale to promote the growth of oak trees. DCNR will be holding their PA Youth Corp where participants will be helping staff on state forest lands with trail maintenance, installing fish habitat structures and general maintenance. Dave asked when you burn off all that vegetation and until the new vegetation grows how you control the erosion. Garrett said that you don't get much erosion because only the top layers of leaf litter and sticks burn and the under layer of wood dirt/dust is moist. Dave said a few years ago he took photos during a heavy rain event of where a burn was done in the Long Pond area and erosion did take place and that whole program should be looked at because erosion is going into our streams. Garrett noted that was a TNC and State Game Land area burn and there may have been areas that had been mowed leaving tire ruts or it could have been a late summer or fall burn where there is not as much moisture in the soil.

Evan Makuvek, MCPC, stated that the deadline for the Farmland Preservation Program has been extended to May 3, 2017 due to the lack of the average number of applications. He noted that currently there are 110 farms in the program protecting approximately 7,500 acres of farmland.

Charlie asked about the gypsy moth program. Evan stated that there is a program at the township level with Hamilton, Eldred and Ross and anyone interested should contact those municipalities.

Bob Heil, BWA, noted that he has been on the job for four months now and has been very busy. He wanted to thank the Conservation District for co-hosting Earth Day on Saturday at NCC Monroe Campus and he is glad to see so many conservation groups working and coming together that day. He stated that he has had incidental contact

with the staff at MCCC but he is very impressed with the professionalism and friendliness.

Media Outreach by the Board-Heidi noted that she had requested that an additional item be added to the agenda on media outreach by the Board. Her concern was on the Board commenting on issues that have not been discussed by the Board; in particular the article in the Pocono Record about beaver dams. She noted that using beavers in that way was never discussed by the Board and that is not an appropriate use for our area. She wanted to discuss how the Board goes to the media. Mark said the protocol was that any Board member would take anything to the chairperson and the chairperson has the discretion to speak on any issue or not and then it would go to the District Manager. Mark clarified that the chairperson could speak for the Board but other Board members do not speak for the Board and the District Manager could speak for the District. Joe agreed and thanked Heidi for her comment.

PUBLIC COMMENT-Joe asked if there was any public comment that does not address Tunkhannock Creek as that has already been discussed.

Craig Todd said he does have a comment concerning Tunkhannock Creek. He noted that in the past the Board has asked staff to review petitions to upgrade streams in Monroe County as there have been many in the past. Staff has reviewed petitions to the criterion Chapter 93, looked at County Water Quality data and other data that the District may have had access to make a determination and recommendation to the Board as to whether to support or not support a petition. He noted that was what the staff did in 2005 when the Board supported the petition to upgrade the Tunkhannock Creek. Joe said that it was tabled for today and will be brought up again. Mark said he agreed with Craig that the staff should review the petition according to the regulations and report to the Board. Joe said a scientific review. Craig said both a professional review and a scientific review.

Craig questioned whether the comment in the Pocono Record from March concerning the downgrade of the Delegation Agreement from a Level III to a Level II is an accurate quote where Joe states 'that it has been his observation for the last 10-15 years that there has been a culture at the District to try to stop construction'. Craig stated that as someone who has worked at the District during that period that is a very compelling statement to make as a public official that there is an agency within the County that has a 'culture'. Whether it is staff or staff and Board that is trying to 'stop construction' is a significant comment to make as a Board member as it calls into question whether or not the District is complying with the Delegation Agreements, District Law, whether the staff is doing their duties and many other things. He was personally offended by that and asked if the Board has any compelling evidence to support that claim; they present it. He was at MCCC for 30 plus years and he never observed or was a part of an internal or external effort to

try to stop any type of construction in Monroe County. He and other staff sat on many advisory Boards, economic development committees, the 2020/2030 Comp Plan, etc. Mark stated that he was the Chairman of the Board at the time and he never witnessed anything like that and on the contrary the staff always tried to move projects forward in a timely manner. When he was Chairman we hired two PE's to expedite the process and that is a false statement, he resents it and finds it offensive also. Janet stated as a Chairperson of the County Commissioners for 8 years she will attest to what Mark has said. Noting that Craig served on the Executive Committee for the 2020 Comp Plan and all he ever did was to want to serve this County in the very best possible way including our quality of life which means our environment and our economic development. He always tried to bring balance and good advice and work toward giving us all of that. Craig noted as did the staff and the Board at that time.

Tom VanZandt asked if the Board meeting minutes had previously been made available on the table as 'draft'. Joe said the approved minutes are posted on MCCD's website. Mark said draft minutes had never been on the table while he was chairman and he would highly recommend that they are not available until they are approved. Joe noted that once they are published if an inaccuracy or an omission is noted; the District Manager or the Board would welcome those comments. Tom stated he was just looking to be up-to-speed as to what occurred at the previous meeting because one meeting usually builds onto the next. Adam noted that they are usually posted on MCCD's website within days of approval.

Tom stated concerning the vote taken denying the appointment of Craig Todd as an Associate Director; it was shameful as you are denying 30 years of institutional knowledge and he would like to know why people would think that was a wise move. Tom referenced a 2015 article where County Commission Moyer admitted that the Conservation District Board is loaded with developers; making the comment that 'it can be argued that we stacked the Board in the direction of developers, but if you look at the Board most votes are unanimous.' Tom said that statement is an example of the despicable action that was just taken by this Board to deny Craig Todd as an Associate Director. Mark Sincavage stated that this developer voted positive, noting that he tries to bring balance to this Board even though we may seem like we are stacked with developers. Joe questioned 'are we stacked with developers.' Heidi said yes and Mark agreed. Charlie asked who the developers on the Board are. Charlie said from the County's perspective, they have great respect for Craig Todd. However, we have a new District Manager and Craig is a very influential person in the conservation area of this County, and it was their feeling that Adam should get his walking legs first and if in a year from now Craig would like to come on the Board, so be it. Adam is a new person and we do not want him to be overly influenced by anyone. Tom asked if there are other developers other than Mark on the Board. Dave said he is a contractor not a developer. Charlie said Dave digs holes, he builds. Tom asked Joe if he had developer ties. Joe said he had one project that he did on

his land quite a while ago so that is not his profession. Tom asked if he represents developers in his practice. Joe said he has one developer that he represents. Tom stated that is part of your practice. Joe said that is accurate. Tom said for the record you could be seen as having developers interest on the Board as could Dave. Joe said that is up to you. Dave stated that developer interest for him adds 27%-30% to every project that he does, he does not think that is fair to people, but for his company that could be a good thing. Dave's concern is the streams and the reason why we want to change our focus. He took pictures again last week, everyone drives on the roadways and sees all this erosion yet we don't see anything on our technical reports. If we are really, truly trying to clean up our streams and our drinking water yet we see all of this that we do nothing about. We just let it go and let it go and this Board would like to see a change and clean this up. He has thousand of pictures to prove that we are not doing this. He has pictures from 20 years ago that show how are streams are degrading, trees are in the streams and the banks are eroding and as a person who lives in this County those are the things that he wants to change. We have not talked about this until these last few months and we need to use our staff that drives on these highways and roads to document these areas. He is here to improve the quality of our water. He has pictures of clear water coming from other areas but the water coming from this County into the Brodhead and Lehigh River is unclear. Lori stated that she takes exception to Dave's comment. Every time it rains staff is out and tracking where the plumes are coming from. She has seen Dave's photos and they are all at the confluence of the river and if he could help staff by finding the source of the problem that would be appreciated. Dave said he has 1,000's pictures of the source. Lori said that would be great if he would give staff the pictures. Dave said he has. Lori said when it rains staff is tracking and inspecting sites to prevent pollution events from happening and there are several incidents documented in this month's technical report. Joe said there are sites on the technical report that are not construction site related. He noted that we have identified 14 sites that are contributing erosion to our streams and we have been talking about restoration projects. Staff has been doing their job and the Board has been trying to do the larger job of really stopping the mud, noting that you can't deny the photos.

Duane Kerzk commented that after the last major snow storm and then a rain event the streams ran green which is indicative of chloride/salt, then they turned gray which is indicative of the traction material placed on the roads and then they finally cleared up. He noted that that the traction material is still all over the roads and with the next rain event it will be in the streams. Joe said he and Dave agree, noting that the Conservation District can only take on so much and he is glad that Duane has noticed. Duane noted that it was pointed out at the Dirt & Gravel program where dirt road beds keep eroding every time it rains. He noted that the paved parking lots also contribute problems to the streams.

ADJOURNMENT—Joseph Hanyon, Chairperson adjourned the Board meeting at approximately 10:17 am.

Respectfully submitted,



Debra L. Martin
Recording Secretary

THE NEXT MCCD BOARD OF DIRECTORS MEETING WILL BE HELD ON THURSDAY, MAY 18, 2017 AT 8:00 A.M. AT THE MONROE COUNTY CONSERVATION DISTRICT OFFICES IN BARTONSVILLE, PA.

Out of County Travel Requests for MCCD Board Approval on Thursday, April 20, 2017

4/4/17 (2017-0102)

Center for Watershed Protection 2017 Conference – MS4
Temple University Ambler Learning Center, Ambler PA

AM

4/6/17 (2017-0114)

DEP NERO Engineering Pow-wow
Wilkes-Barre, PA

DW,MW

4/6/17 (2017-0131)

DEP NERO and Farm Bureau Spring Mtg.
Wilkes-Barre, PA

MG

4/10/17 (2017-0120)

N.E. Square Table Meeting
Montour Preserve, Montour County, PA

MG

4/10/17 (2017-0147)

Meeting at DEP NERO on Smithfield Gateway
Wilkes-Barre, PA

MW, LK,AS

4/21/17 (2017-00150)

PACD N.E. Region Meeting
Wilkes-Barre, PA

AS

4/27/17 (2017-0146)

To receive the Excellence in Education Award
for Monroe County Conservation District
Blue Event Center, Bethlehem, PA

RS,DS,AS

5/12/17 (2017-0152)

DEP NERO District Manager's meeting
Wilkes-Barre, PA

AS

5/15-17/17 (2017-0100)

USACOE and NRCS Basic Wetland Identification Workshop
York CD, York PA

LK,AM

5/23-24/17 (2017-0151)

PA Envirothon State Competition
University of Pittsburgh at Johnston, Cambia County, PA

BH,KB

6/8/17 (2017-0126)

Bartram's Garden Public Fieldtrip
Philadelphia, PA

DS

6/6&7/17 (2017-0153)

PACD 2017 Management Summit
State College, PA

AS



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Office of Water Management

Tunkhannock Creek

Stream Redesignation Evaluation

**Division of Water Quality Standards
Bureau of Clean Water**

Background

1972 – Tunkhannock Creek basin designated Cold Water Fishes and as a Conservation Area

Conservation Area – Waters used within and suitable for the maintenance of an area now or in the future to be kept in a relatively primitive condition.

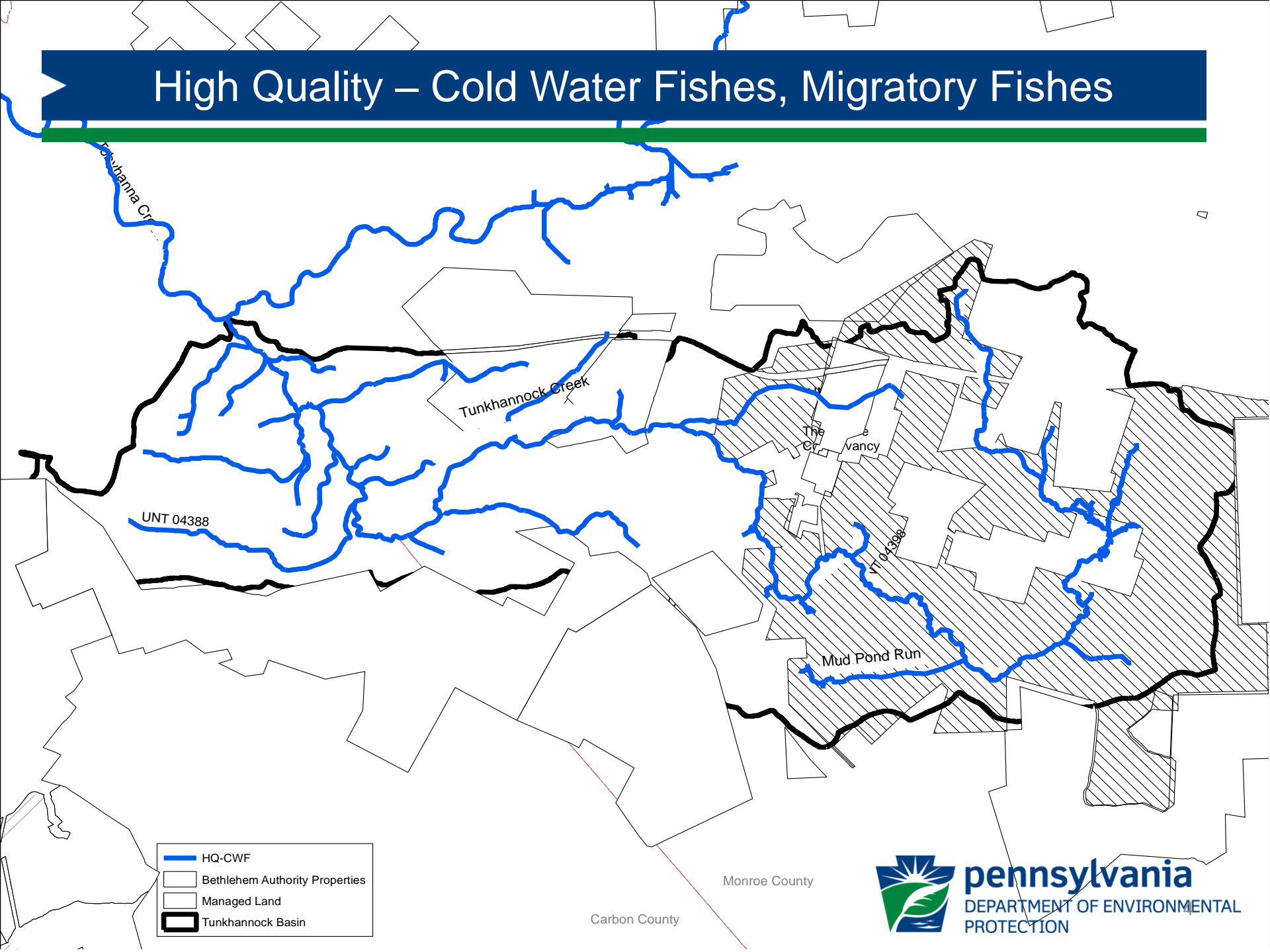
Background

1979 – Conservation Areas were converted to High Quality – Cold Water Fishes

2009 – Migratory Fishes designation added to the entire Atlantic slope basin

Currently – Tunkhannock Creek is designated High Quality – Cold Water Fishes, Migratory Fishes (HQ-CWF, MF)

High Quality – Cold Water Fishes, Migratory Fishes



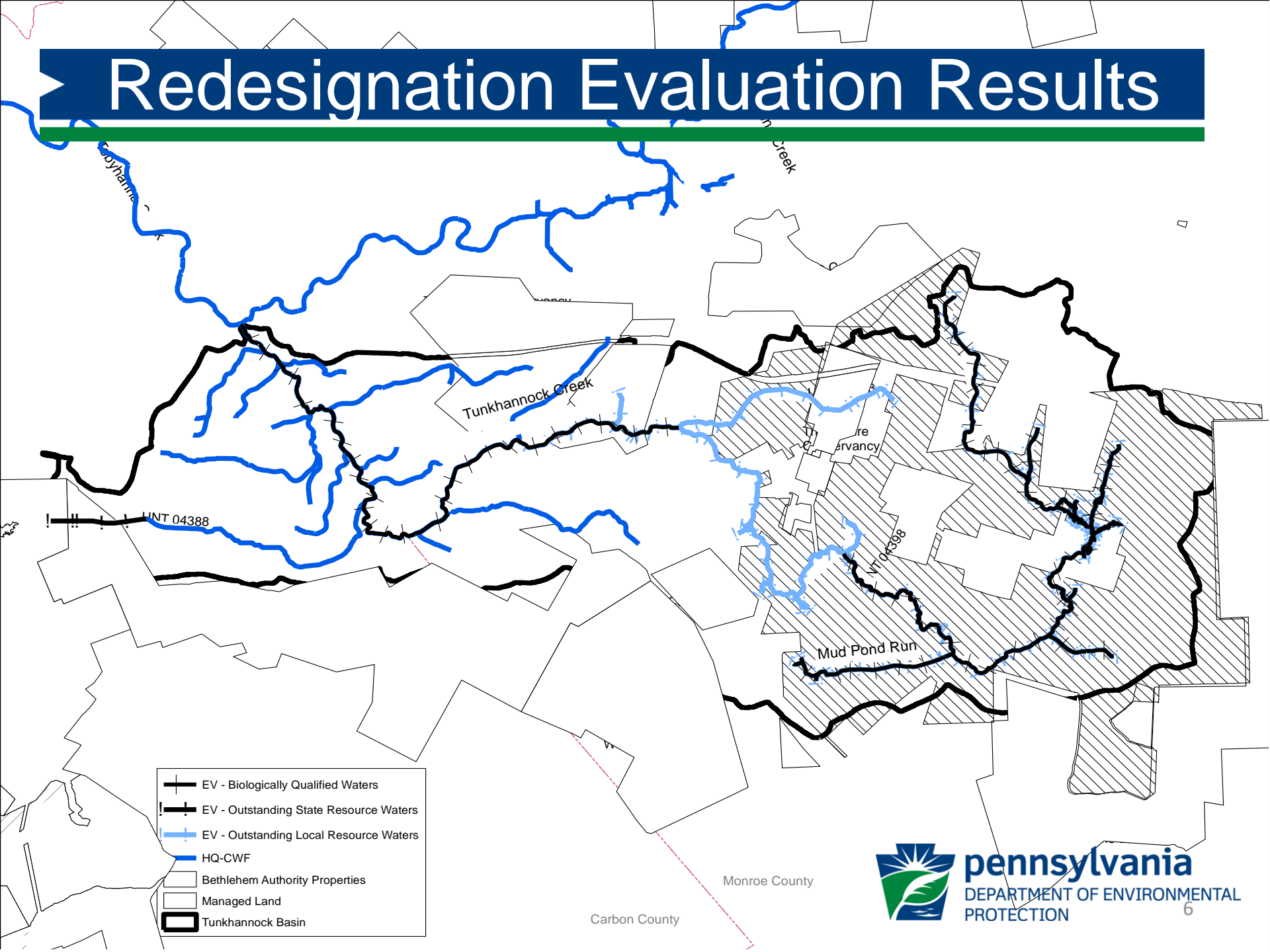
pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Petition for Redesignation

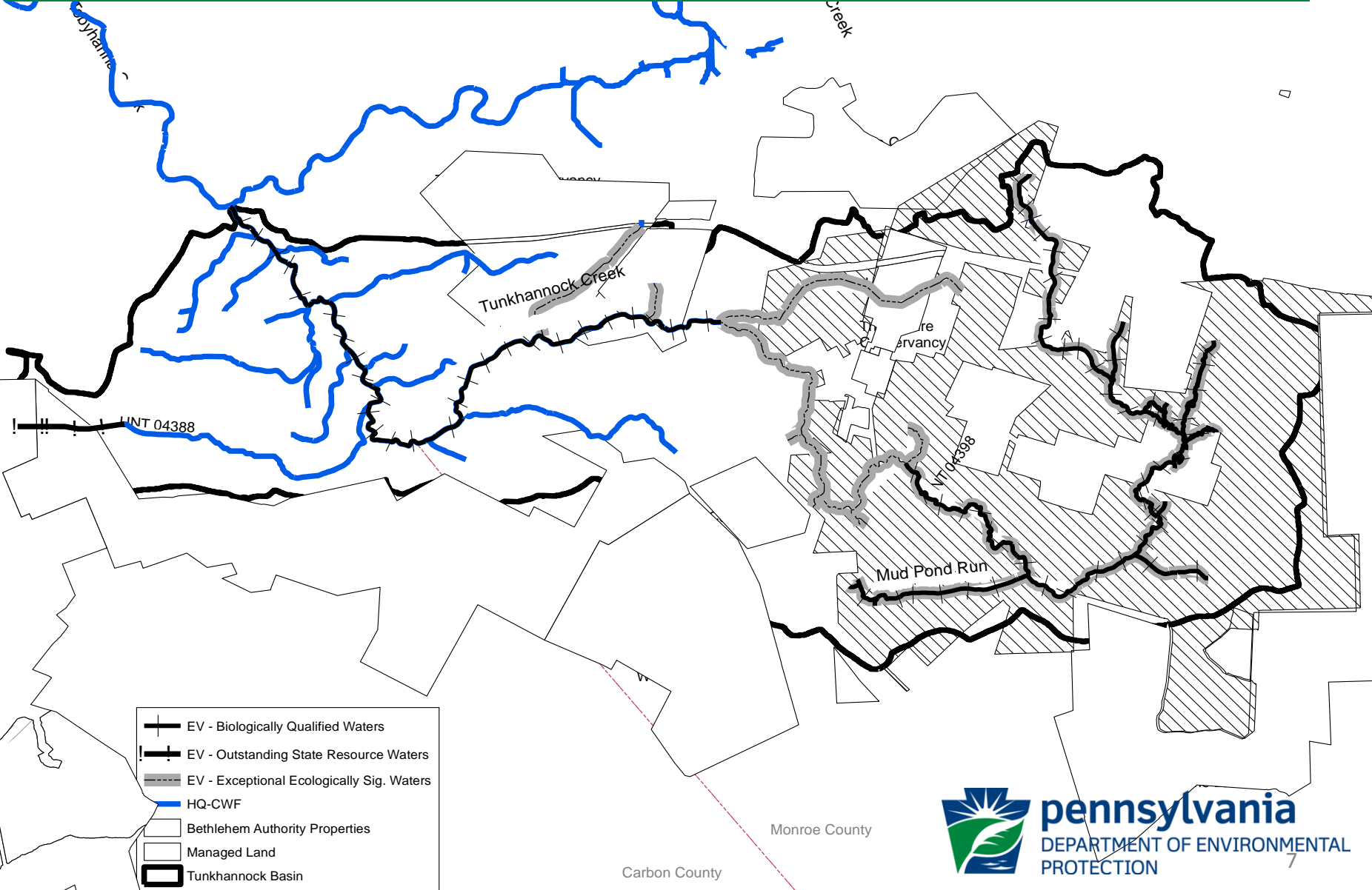
March 2, 2005 - Petition was received and accepted for study by Environmental Quality Board (EQB)

April 2012 – PA DEP Field Surveys

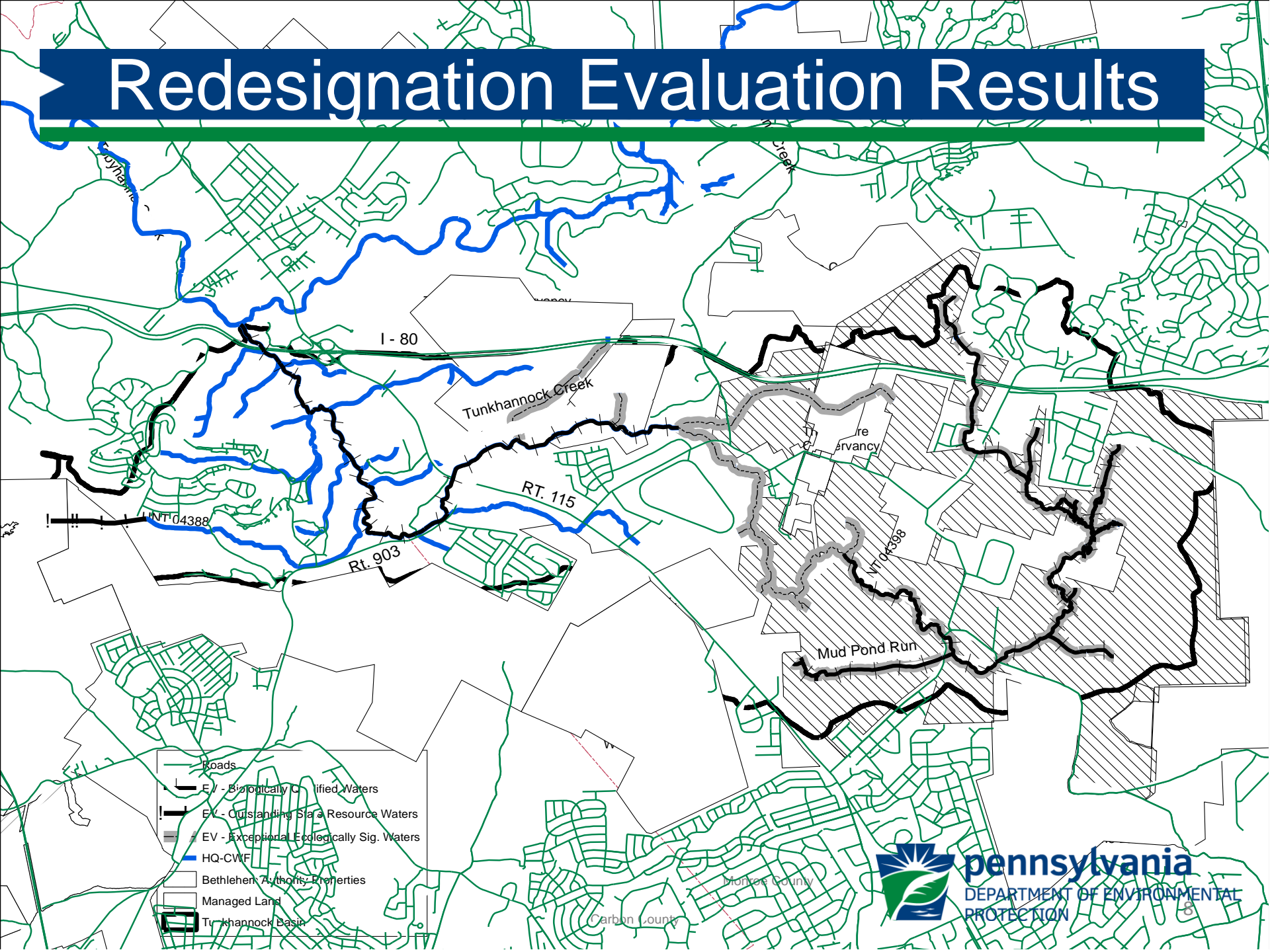
Redesignation Evaluation Results



Redesignation Evaluation Results



Redesignation Evaluation Results



Process

- A report is drafted
- The draft report is made available to petitioner, and stakeholders for review and comment
- Tunkhannock Creek Draft Report comment period will be extended until August 1, 2017
- PA DEP incorporates the final report into a stream redesignation package for EQB to accept for proposed regulatory changes
- Published as a proposed regulation change
- Public comment period
- PA DEP presents to EQB as Final Regulation Change
- Final recommendation is forwarded to Independent Regulatory Review Commission (IRRC) where comments can be sent prior to a scheduled public meeting.
- Published as a Final Regulation change

Implementation of Designated Use Changes

- An anti-degradation analysis is done every time PA DEP issues a permit or authorizes an activity
- NPDES permit bases effluent limitations on either the designated or existing use of the stream, whichever is more protective.
- Permit conditions designed to assure:
 - WQ criteria are achieved
 - DU's & EU's are protected
- New & expanded dischargers are required to treat the effluent according to WQ criteria associated with EU's and revised DU's.

➤ High Quality vs Exceptional Value

Point Source Permitting for New and/or Expanded Discharges

- Nondischarge alternatives must be evaluated for both HQ and EV
- If Nondischarge alternative is not possible, a non-degrading discharge option must be implemented using best available technologies (ABACT) unless social and economic justification (SEJ) is approved.
- SEJ can be evaluated in HQ but not EV waters. ABACT must be used where SEJ is approved to the extent practical.

➤ High Quality vs Exceptional Value

Discharges in existence prior to the HQ or EV designation are “grandfathered” and considered to be part of the existing quality of the waterbody.

“Grandfathered” flows are not subject to “the non-discharge alternatives/use of best technologies analysis” for as long as the quality and quantity of the discharge remains unchanged.

➤ High Quality vs Exceptional Value

Chapter 102 Erosion and Sediment Pollution Control Permitting

- Individual permit required for both HQ and EV
- Nondischarge alternatives must be evaluated for storm water discharges in both HQ and EV
- Best Management Practices (BMPs) become more stringent. Example – BMPs with high sediment removal efficiencies are now required vs. low or moderate (HQ).

➤ High Quality vs Exceptional Value

Chapter 105 Water Obstructions, Encroachments and Wetlands

- Individual permit required for EV
- An EV stream designation qualifies wetlands located in or along the floodplain and the floodplain of streams tributary thereto as Exceptional Value Wetlands

▶ Exceptional Value Wetlands

DEP will not grant a chapter 105 permit unless:

- The encroachment or obstruction will not have an adverse impact on the wetland
- The project is water dependent
- There is no practicable alternative
- The project will not cause a violation of Water Quality Standards
- The project will not result in impairment of EV wetland
- The applicant shall replace affected wetlands

Contact Info

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Department of Environmental Protection
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P.O. Box 8774, Harrisburg 17105-8774
717-787-9637 FAX 717-772-3249

mlookenbil@pa.gov

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 - c. Bethlehem Water Authority
 - d. Sam Newman
 - e. Ashwal
 - f. Matergia & Dunn
 - g. Jo-Ker, Inc.
5. Tunkhannock Township Engineer Review



February 24, 2017

Tunkhannock Township
Martina Kernan
1557 Long Pond Road
P.O. Box 203
Long Pond, PA 18334-0203

Dear Ms. Kernan:

As part of its ongoing review of water quality standards, the Department of Environmental Protection (DEP) is providing you with a copy of the draft Tunkhannock Creek evaluation report for comment before making a recommendation to the Environmental Quality Board (EQB). Please submit your comments within 45-days of the postmark date. Any comments received on the draft report will be summarized in the report that is presented to the EQB.

The Tunkhannock Creek basin was evaluated for a redesignation to Exceptional Value (EV) in response to a petition from the Tobyhanna Creek/Tunkhannock Creek Watershed Association and Tunkhanna Fishing Association, which was accepted by the EQB for further study on March 2, 2005. The Tunkhannock Creek basin is currently designated High Quality - Cold Water Fishes, Migratory Fishes (HQ-CWF, MF).

When DEP develops a proposed rulemaking and the EQB approves it, you will also have an opportunity to comment during the official public comment period. This comment period will begin with publication of the proposed rulemaking in the *Pennsylvania Bulletin*.

Please provide a copy of this notification and report to all municipal authorities that have property ownership in your municipality. Feel free to provide a copy to any other parties you believe may be affected by or interested in this possible redesignation.

For further information or to comment, please contact Mark Brickner, Water Quality Division, Bureau of Clean Water, 11th Floor, Rachel Carson State Office Building, P.O. Box 8774, Harrisburg, PA 17105-8774, 717.787.9637, e-mail to mbrickner@pa.gov. Persons with a disability may use the AT&T Relay Service by calling 1.800.654.5984 (TDD users) or 1.800.654.5988 (voice users).

DEP understands that you or others in the community may have questions or concerns regarding the relationship between a stream redesignation, DEP permits, and day-to-day activities in the watershed. Please feel free to contact us so that we can address the issues that are important to you, your citizens or local businesses and industries.

Sincerely,

A handwritten signature in black ink, appearing to read "Rodney Kime". The signature is fluid and cursive, with the first name "Rodney" being more prominent than the last name "Kime".

Rodney Kime
Chief

Division of Water Quality Standards

Enclosure

TUNKHANNOCK CREEK

MONROE AND CARBON COUNTIES

WATER QUALITY STANDARDS REVIEW STREAM REDESIGNATION EVALUATION REPORT

**Segment: Basin
Stream Code: 04376
Drainage List: D**

**WATER QUALITY MONITORING SECTION (MJL)
DIVISION OF WATER QUALITY STANDARDS
BUREAU OF CLEAN WATER
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

2016

INTRODUCTION

The Department conducted an evaluation of the Tunkhannock Creek basin on April 17-18, 2012 in response to a petition from the Tobyhanna Creek/Tunkhannock Creek Watershed Association and the Tunkhanna Fishing Association, which was accepted for study by the Environmental Quality Board (EQB) on March 2, 2005. The petition requests that the entire basin be redesignated to Exceptional Value (EV). The Tunkhannock Creek basin is currently designated High Quality – Cold Water Fishes, Migratory Fishes (HQ-CWF, MF). Components of this evaluation include field surveys conducted in April of 2012 as well as water quality protective measures implemented within the Tunkhannock Creek basin.

GENERAL WATERSHED DESCRIPTION

Tunkhannock Creek is a tributary to Tobyhanna Creek and is located southwest of Mount Pocono Borough and southeast of Blakeslee, PA. The candidate basin is located in Tobyhanna and Tunkhannock Townships in western Monroe County and Kidder Township in northeastern Carbon County. The Tunkhannock Creek basin drains approximately 32.1 square miles of the Glaciated Pocono Plateau and consists of 47.7 total stream miles (Figures 1 - 3). The upper reaches of the basin is best described as low gradient, and is dominated by pool/glide channel morphology, naturally lacking riffles. Gradient progressively increases through the basin's middle and lower reaches becoming a riffle/run dominant waterbody. Land use is approximately 88% forested, 10% agricultural, 1.5% wetlands and 0.5% low density urban. Much of the basin is in private and Bethlehem Water Authority ownership with the exception of relatively small land holdings owned by the PA Chapter of the Nature Conservancy, Hickory Run State Park, Weiser State Forest, State Game Lands 129, and State Game Lands 38. The basin contains the Long Pond and Fern Ridge Bog (Adams Swamp) Nature Reserves. The basin also contains developed areas including the Pocono International Speedway, Split Rock Resort, Big Boulder Resort, a few cul-de-sac developments, and Interstate 80 that cuts through the northern most portion of the basin.

WATER QUALITY AND USES

Surface Water

Biological data was collected to evaluate water quality conditions in the petitioned basin since the indigenous aquatic community is a better indicator of long-term water quality conditions. There are a total of 7 NPDES permits (1 mining discharge, 3 sewage treatment facilities, 2 pesticide application permits and 1 stormwater permit) and 2 active surface water withdrawals within the basin.

Water Chemistry

Water chemistry data were collected monthly beginning in 2005 through 2010 at the Department's Water Quality Network Station # 198 (WQN0198), which spatially coincides with station 1TC in the upper reaches of Tunkhannock Creek (Table 2). The Water Quality Network (WQN) is a statewide, fixed station water quality sampling system operated by the Department that is designed to assess both the quality of Pennsylvania's surface waters and the effectiveness of the water quality management program. One objective of the WQN is to monitor temporal water quality trends in selected reference waters. In addition, discrete water quality measurements were collected at 9 stations (6 candidate and 3 reference) during the April 2012 survey (Table 3).

The water chemistry in the upper reaches of Tunkhannock Creek can generally be described as acidic, with very low alkalinity and minimal evidence of anthropogenic influence. The minimum pH value was 4.7 and the maximum was 6.6 of approximately 60 water chemistry grab samples collected over the 5-year period. Alkalinity ranged from absolutely 0.0 mg/l to a maximum 5.2 mg/l. Aluminum and Iron concentrations are low to moderate. Other metals results ranged from below reporting limits to very low concentrations. As a result of acidic conditions, dissolved metals concentration results constitute most of the total metals concentration results. Nitrogen and Phosphorous range from below reporting limits to very low concentrations. No violations of water quality criteria, with the exception of pH, existed (Tables 2 & 3). The low pH conditions observed are expected in the wetland complexes that dominate the upper portions of the basin.

Aquatic Biota

The indigenous aquatic community is an excellent indicator of long-term conditions and is used as a measure of both water quality and ecological significance. Department staff collected habitat and benthic macroinvertebrate data at 9 stations (6 candidate and 3 reference) during the April 2012 survey (Figures 1 - 3, Table 1).

Habitat. Instream habitat was assessed at each station where benthic macroinvertebrates were sampled (Tables 4 & 5). The habitat evaluation consists of rating nine habitat parameters for low gradient stations and twelve parameters for riffle/run prevalence stations to derive a station habitat score. The total habitat scores for the low gradient reaches were 159 (1TC) and 171 (2TC) and ranged from 189 (3UNT) to 213 (6TC) throughout the riffle/run prevalence reaches. Tunkhannock Creek basin scores reflect optimal habitat conditions at all sites, with the exception of the suboptimal score at 3UNT.

Benthos. Benthic macroinvertebrate samples were collected at all stations using the Department's Rapid Bioassessment Protocols (RBP) benthic macroinvertebrate sampling technique, which is a modification of the US Environmental Protection Agency's (EPA) RBPs (Plafkin et al. 1989 and Barbour et al. 1999).

The Tunkhannock Creek basin supports a diverse benthic macroinvertebrate population dominated by genera sensitive to organic pollution and at least moderately tolerant of acidic conditions. Elevated taxa richness across most candidate stations (ranging 21-34) were very similar to reference stations (ranging 26-32) with the exception of 3UNT with only 9 taxa. Individuals from the Chironimidae family dominated all low gradient stations (candidate stations 1TC & 2TC and reference station 1LBK). Low gradient reaches typically have an elevated concentration of headwater ponds and wetlands and are optimal habitat for Chironomidae and other filter feeding macroinvertebrates. The lower reaches of the basin, with the exception of 3UNT, is dominated by taxa indicative of a healthy riffle/run prevalence community including Heptageniidae and Perlidae (Table 6).

BIOLOGICAL USE QUALIFICATIONS

The biological use qualifying criterion applied to the Tunkhannock Creek basin was the Department's integrated benthic macroinvertebrate scoring test

described at 25 Pa. Code § 93.4b(b)(1)(v). Selected benthic macroinvertebrate community metrics calculated for the Tunkhannock Creek basin stations were compared to those from EV reference streams of comparable drainage areas and stream type. Dimmick Meadow Brook (DMK) in Pike County, and Little Bush Kill (1LBK and 2LBK) in Pike County (Table 1) were used as the reference streams because they are of similar stream type, have comparable drainage areas and are found in similar geologic settings as their respective candidate stations. In addition, these streams have served as EV reference streams in other Departmental surveys. Low gradient stations 1TC and 2TC were compared to low gradient reference station 1LBK. Small (< 5 square miles) riffle/run prevalence stations 3UNT and 5UNT were compared to reference station DMK. Larger (21-32 square miles) riffle/run prevalence stations 4TC and 6TC were compared to reference station 2LBK. The comparisons were done using the following metrics that were selected as being indicative of community health: taxa richness, modified EPT index, modified Hilsenhoff Biotic Index (HBI), percent dominant taxon, and percent modified mayflies.

Based on these five metrics, candidate stations 1TC, 4TC, and 6TC exceeded the EV qualifying criterion of 92% (§ 93.4b(b)(1)(v)) (Table 7).

A total of 21.7 stream miles qualify as EV Waters under this criterion.

ADDITIONAL EXCEPTIONAL VALUE WATERS QUALIFYING CRITERIA

Based on petitioner information suggesting that additional EV regulatory criteria may apply, DEP evaluated additional antidegradation criteria listed in § 93.4b(b). These additional criteria include:

- A. The water is an outstanding National, State, regional or local resource water [§ 93.4b(b)(1)(iii) – see Appendix A¹];
- B. The water is a surface water of exceptional ecological significance [§ 93.4b(b)(2) – see Appendix A²].

A. Waters qualifying as EV as outstanding National, State, regional or local resource waters under § 93.4b(b)(1)(iii):

The “outstanding resource waters” EV criterion may be applied to the petitioned waters since they already have the prerequisite HQ designation. The definition of “Outstanding National, State, regional or local resource waters” in § 93.1 requires

adoption of “water quality protective measures” by National or State government agencies. “Coordinated water quality protective measures”, also defined at § 93.1, are required for regional or local governments (See Appendix A). Such water quality protective measures have been applied through management activities implemented on lands situated along watershed corridors in a manner that provide protection to substantial reaches of the Tunkhannock Creek basin as described below:

Outstanding National or State Resource Waters

The Department evaluated water quality protective measures developed by the Pennsylvania Game Commission (PGC) to protect aquatic and adjacent riparian areas as important habitats on state game lands. The PGC has issued aquatic habitat buffer guidelines with inner buffer zones of 100 feet for EV and 50 feet for HQ streams and with outer buffer zones of 50 and 100 feet respectively, for a total of 150 feet of protection. The management plans allow limited activities within the buffered areas, recommend elimination or minimization of existing roads or parking areas, and encourage restoration of riparian areas.

The water quality protective measures described in PGC resource management plans meet the “outstanding National, State, regional or local resource waters” definition and apply to stream segments where State Game Lands 129 are situated along watershed corridors in a manner that provides protection to substantial reaches of the corridor within the Tunkhannock Creek basin.

A total of 0.9 stream miles qualify as EV waters under this criterion.

Outstanding Regional or Local Resource Waters

The Department evaluated local ordinances described below, as “coordinated water quality protective measures” adopted by local governments along the Tunkhannock Creek watershed corridor. Tunkhannock and Tobyhanna Townships in Monroe County and Kidder Township in Carbon County have adopted water quality protective measures through ordinances that aim to conserve natural features, including land or water resource areas (e.g. wetlands, floodplain, vernal pools, springs, and steep slopes). The purpose of the regulations is to ensure that land uses minimize disturbances to natural features and that reasonable measures are taken to mitigate any adverse impacts from such uses.

Although the protective measures provided by these townships could enhance water quality protection, the regulations require that such measures be "coupled with" an interest in real estate, as described at § 93.1. Definitions - "*Coordinated water quality protective measures*". Such requisite real estate interests have not been identified along Tunkhannock Creek basin.

The Department evaluated the Bethlehem Authority Wild Creek and Tunkhannock Creek Forest Management Plan developed to guide the management activities of the Bethlehem Authority properties. The Bethlehem Authority properties encompass approximately 40% of the Tunkhannock Creek basin, primarily the upper portions of the basin. The Plan indicates that the Bethlehem Authority has entered into a conservation easement with The Nature Conservancy that establishes a primary goal of producing high quality potable drinking water. In addition, the properties will be managed as part of the Nature Conservancy's Working Woodlands program, managed in accordance with the Forest Stewardship Council (FSC) US 2010 National Standards (Woodland Management Services & The Nature Conservancy 2012).

FSC US 2010 National Standards define Streamside Management Zones (SMZ) for specific US regions. SMZ are defined as land and vegetation located next to waterbodies (riparian) where management practices are modified to protect water quality, fish, and other aquatic resources. Within the Appalachia Region Inner Zones for perennial streams are set at 25 feet and Outer Zones range from 55 to 140 feet dependent on slope for a Total Zone of 80 to 165 feet. Total Zone width for intermittent streams range 80 to 165 feet dependent on slope. Limited activities are permitted within zones, and additional restrictions are applied to HQ and EV waters (FSC-US 2010).

The Bethlehem Authority Wild Creek and Tunkhannock Creek Forest Management Plan indicates that all FSC US National SMZ management guidelines will be met or exceeded. Inner Zones will be increased to 50 feet and Outer Zones to 100 feet (Total Zone 150 feet) to be recognized along all surface waters. Inner and Outer Zones will be doubled along Tunkhannock Creek and around the perimeter of Long Pond. In addition, no harvesting will occur within the Inner Zones and no roads or main skid trails will be located within the Total Zone (Woodland Management Services & The Nature Conservancy 2012).

The water quality protective measures described in the FSC US 2010 National Standards and the Bethlehem Authority Wild Creek and Tunkhannock Creek Forest Management Plan meet the "outstanding National, State, regional or local

resource waters” definition and apply to stream segments where Bethlehem Authority properties are situated along watershed corridors in a manner that provides protection to substantial reaches of the corridor within the Tunkhannock Creek basin (Figure 1). The Bethlehem Authority properties are owned in simple fee by the Authority and are “coupled with” water quality protective measures incorporated into the Forest Management Plan.

A total of 24.2 stream miles qualify as EV waters under this criterion.

B. Waters Qualifying as EV as Surface Waters of Exceptional Ecological Significance under § 93.4b (b)(2):

The Department reviewed information gathered for the Pennsylvania Natural Heritage Program and reported in the Carbon County Natural Heritage Inventory (The Nature Conservancy 2005); the Monroe County Natural Heritage Inventory (The Nature Conservancy 1991, updated 1999) as well as the 2003 Tunkhannock Creek Watershed Plant and Aquatic Communities, and Rare Species Assessment (The Nature Conservancy 2003). The Monroe County Natural Heritage Inventory identified two areas with statewide or local ecological significance that is based upon the rarity and uniqueness of the areas’ endemic ecological community types. The two areas, Long Pond Macrosite Preserve and Fern Ridge Bog (Adams Swamp) (Figure 2), contain Acidic Shrub Swamp Natural Communities. Long Pond Macrosite Preserve also contains Glacial Bog and Boreal Conifer Swamp Natural Communities. All three Natural Communities are wetlands hydrologically connected to riverine surface waters and therefore, are water quality dependent.

The Long Pond Macrosite Preserve is also considered to be the most important site in Pennsylvania for the preservation of rare and endemic species and Natural Communities. Many of these unique and endemic plant communities are relics of past glaciations and are typical of the more northern latitudes of northern New England and Canada. In Pennsylvania, most of these endemic communities are found only in the Pocono region and are dependent on water quality and/or hydrology for their continued existence. The Natural Communities along with seven rare and endemic species that have been identified make this the highest concentration of rare and endemics in the State (The Nature Conservancy 1991, updated 1999).

The Monroe County Natural Areas Inventory referenced classifications of Pennsylvania’s plant communities first published by Tom Smith in 1983 with

revisions in 1991 and again in 1994. The classifications by Smith identified Natural Communities or community types, which included a range of classifications from broad habitat definitions to specific areas with unique landscape and soil characteristics. The Natural Communities classified by Smith could contain multiple plant communities. Pennsylvania's plant community classification was revised in 1999 by Jean Fike for DCNR's Bureau of Forestry. Fike applied a plant community approach using species and physiognomy based on the International Vegetation Classification (Zimmerman et al. 2012).

The 2003 Tunkhannock Creek Watershed Plant and Aquatic Communities, and Rare Species Assessment reference classifications by Fike. Plant communities identified include leatherleaf – sedge wetland, leatherleaf – bog rosemary peatland, dry oak – heath forest, red spruce – mixed hardwood palustrine forest, red spruce palustrine woodland, dry oak – heath forest, and northern hardwood forest (Figure 3). All of which, except dry oak – heath forest and northern hardwood forest, are rare and endemic community types hydrologically connected to riverine surface water and therefore, are water quality dependent. The presence of endemic plant communities dependent on water quality or hydrology and their rarity in Pennsylvania satisfies the exceptional ecological significance criterion at § 93.4b(b)(2).

Dry oak – heath forest and northern hardwood forest areas are terrestrial communities with no direct connection to riverine surface water. While they are not particularly rare in Pennsylvania, they provide an important function as ecological filtering systems (much like riparian buffers) for the Tunkhannock Creek basin. It is widely understood that the larger a buffer area is surrounding a body of water, the more effective it is in filtering pollutants; preventing them from entering the water. Thus, it is not just wetlands that are important in filtering potential pollutants but terrestrial areas as well.

The Long Pond Macrosite Preserve, Fern Ridge Bog (Adams Swamp) Preserve and the documented rare and endemic aquatic plant communities interspersed with significant and intact terrestrial communities are located in the upper portions of Tunkhannock Creek basin. In addition, over 14 square miles of the total 32.1 square mile Tunkhannock Creek basin is protected through Conservation Easements held by The Nature Conservancy, including Bethlehem Authority properties. The Conservation Easements spatially coincide with the documented rare and endemic aquatic plant communities and are subsequently located in the upper portions or headwater reaches of the basin. Disturbances to otherwise intact hydrological and biogeochemical processes in headwaters will

directly affect water quality in downstream reaches of the basin. Degradation of upstream reaches like headwaters has been demonstrated to impact downstream reaches (Alexander et al. 2007, Nadeau et al. 2007, Wipfli et al. 2007). The co-occurrence of rare and unique wetland and other terrestrial plant communities, the areas protected by Conservation Easements, and the excellent water quality demonstrated by the Department's benthic macroinvertebrate tests demonstrates an important ecological connectance that supports the significance of these areas of the Tunkhannock Creek basin. Because of the distribution of the ecologically significant rare and unique endemic natural communities and the protection afforded to headwater and interstitial watercourse segments, the reaches of Tunkhannock Creek basin within these areas as well as those reaches that flow to them are recommended for EV designation as surface waters of exceptional ecological significance (Figures 2 & 3).

A total of 24.7 stream miles qualify as EV waters under this criterion.

PUBLIC RESPONSE AND PARTICIPATION SUMMARY

Notice of acceptance of the petition by the EQB for study was published in the Pennsylvania Bulletin on July 9, 2005. The Department provided public notice of this stream redesignation evaluation and requested any technical data from the general public through publication in the Pennsylvania Bulletin on August 13, 2005 (35 Pa.B 4671). A similar notice was published in the Pocono Record on August 19, 2005. In addition, Tobyhanna, Tunkhannock, Kidder, Barrett Townships, the Carbon County Office of Planning, and the Monroe County Planning Commission were notified of the redesignation evaluation in a letter dated July 13, 2005.

RECOMMENDATIONS

Based on applicable regulatory definitions and requirements of § 93.4b, the Department recommends that the Tunkhannock Creek basin, from the source to and including UNT 04393, UNT 04392 and UNT 04391 be redesignated Exceptional Value, Migratory Fishes (EV, MF) based on § 93.4b (b)(2) (exceptional ecological significance) (Figures 2 & 3); Tunkhannock Creek mainstem from UNT 04393 to mouth be redesignated EV, MF based on § 93.4b(b)(1)(v) (the Department's integrated benthic macroinvertebrate scoring test), and UNT 04388 from the source to State Game Land 129 border be redesignated EV, MF based on § 93.4b(b)(1)(iii) (outstanding State resource waters) (Figures 1 – 3). In addition Tunkhannock Creek basin from the source to

UNT 04398 also meets the Department's benthic macroinvertebrate scoring test (Figures 1 – 3), and Tunkhannock Creek basin from the source to UNT 04391 also meets the outstanding National, State, regional or local resource waters qualifier (Figure 1). This recommendation adds approximately 32.1 stream miles of EV waters to Chapter 93.

APPENDIX A

¹Definition at 25 Pa. Code § 93.1: *Outstanding National, State, regional or local resource water*—A surface water for which a National or State government Agency has adopted water quality protective measures in a resource management plan, or regional or local governments have adopted coordinated water quality protective measures³ along a watershed corridor.

²Definition at 25 Pa. Code § 93.1: *Surface water of exceptional ecological significance*—A surface water which is important, unique or sensitive ecologically, but whose water quality as measured by traditional parameters (for example, chemical, physical or biological) may not be particularly high, or whose character cannot be adequately described by these parameters. These waters include:

- (i) Thermal springs.
- (ii) Wetlands which are exceptional value wetlands under § 105.17(1) (relating to wetlands).

³Definition at 25 Pa. Code § 93.1: *Coordinated water quality protective measures*—

- (i) Legally binding sound land use water quality protective measures coupled with an interest in real estate which expressly provide long-term water quality protection of a watershed corridor.
- (ii) Sound land use water quality protective measure include: surface or ground water protection zones, enhanced stormwater management measures, wetland protection zones or other measures which provide extraordinary water quality protection.
- (iii) Real estate interests include:
 - (A) Fee interests.
 - (B) Conservation easements.
 - (C) Government owned riparian parks or natural areas
 - (D) Other interests in land which enhance water quality in a watershed corridor area.

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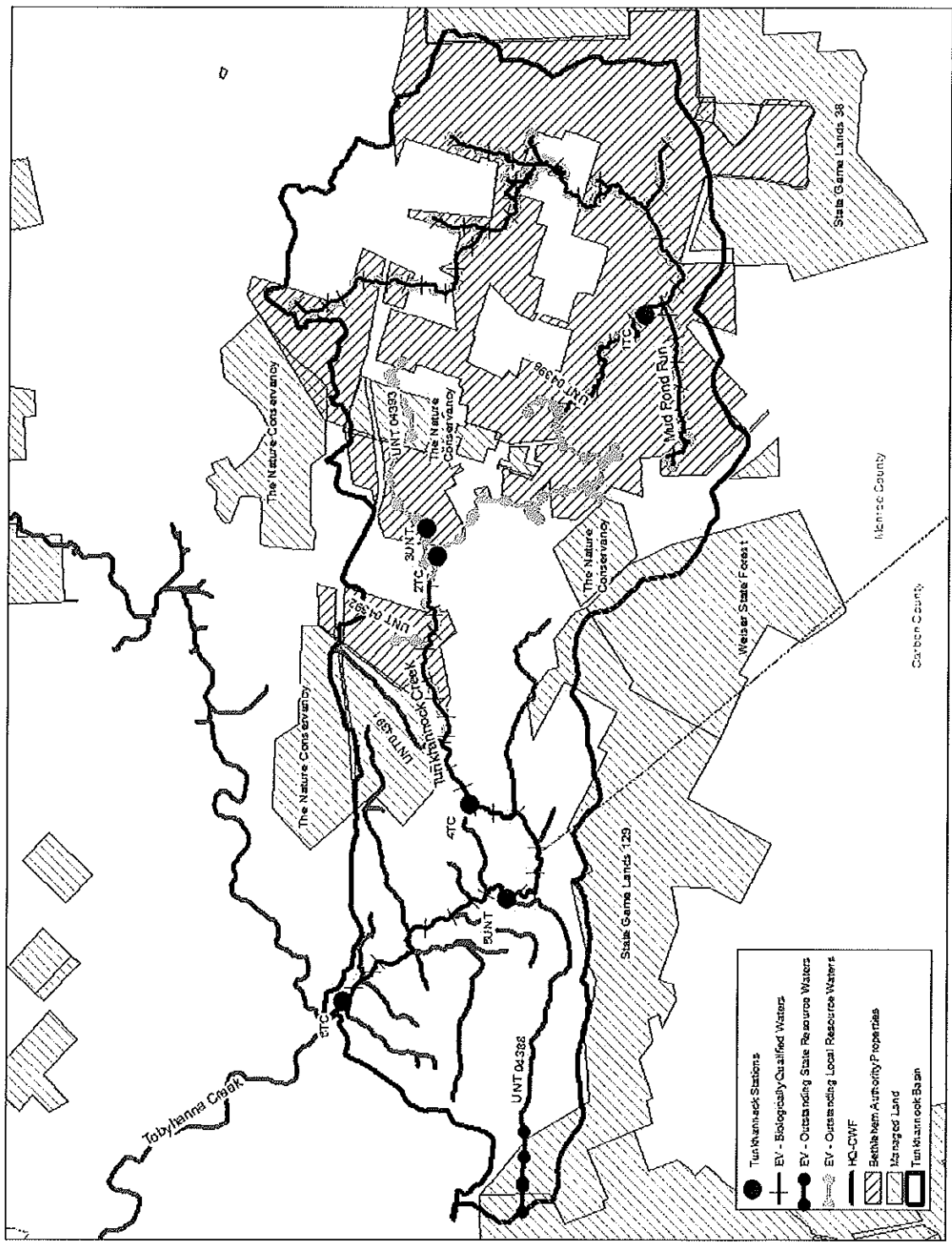


Figure 1. Tunkhannock Creek Basin – Station Locations

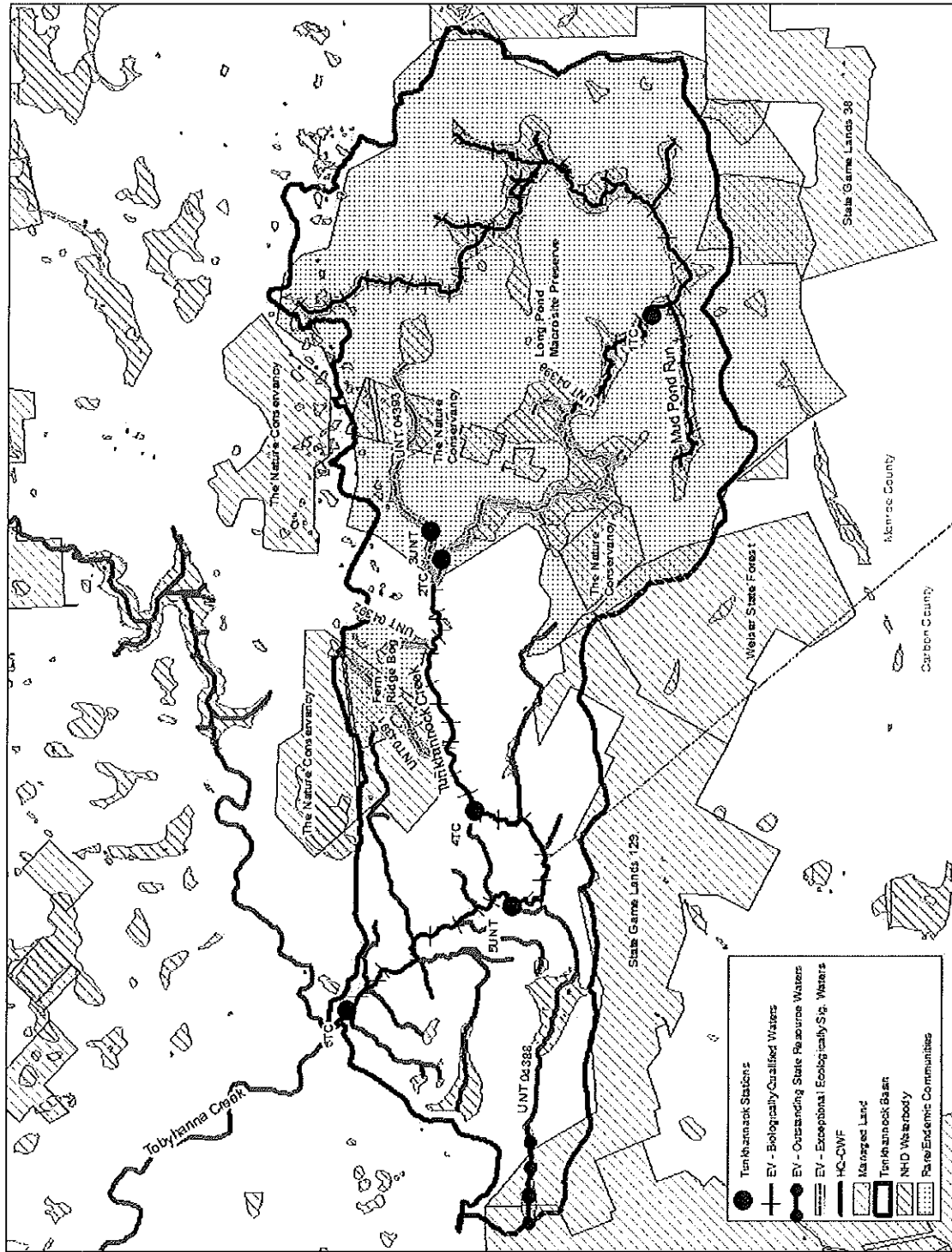


Figure 2. Tunkhannock Creek Basin – Station Locations and Rare/Endemic Natural Communities (The Nature Conservancy 1991, updated 1999)

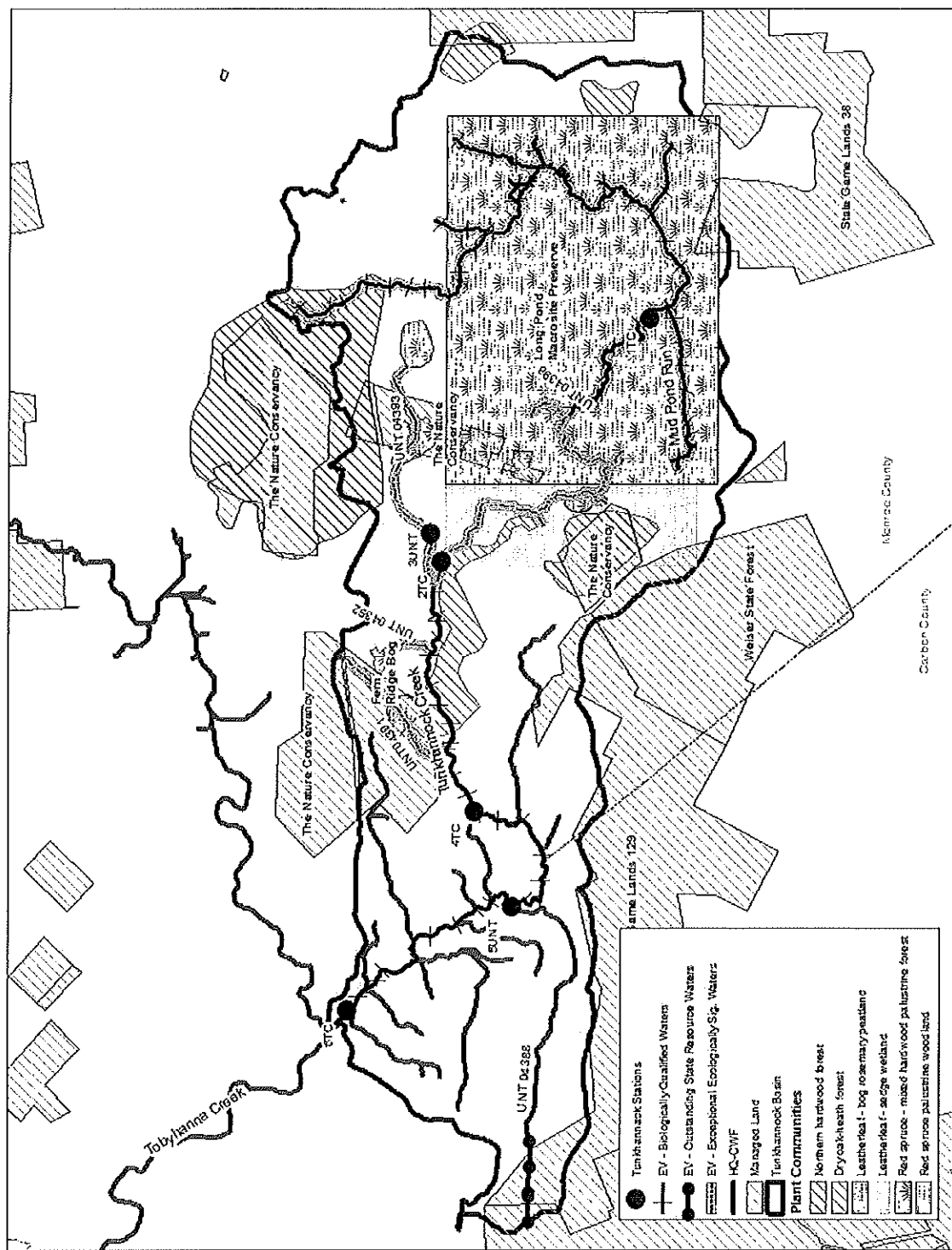


Table 1. Tunkhannock Creek Basin – Station Locations

<u>STATION</u>	<u>LOCATION</u>
1TC	Tunkhannock Creek, 100 meters downstream of Kuhenbeaker Road bridge. Tunkhannock Township, Monroe County Lat: 41.0346 Long: -75.4602
2TC	Tunkhannock Creek, 200 meters downstream of Long Pond Road bridge. Tunkhannock Township, Monroe County Lat: 41.0643 Long: -75.5058
3UNT	UNT 04393 to Tunkhannock Creek, 20 meters upstream of Stony Hollow Road crossing. Tunkhannock Township, Monroe County Lat: 41.0658 Long: -75.5005
4TC	Tunkhannock Creek, 100 meters upstream of Rt. 115. Tunkhannock Township, Monroe County Lat: 41.0595 Long: -75.5527
5UNT	UNT 04388 to Tunkhannock Creek (Boulder Run), 50 meters upstream of mouth. Kidder Township, Carbon County Lat: 41.0542 Long: -75.5707
6TC	Tunkhannock Creek, 50 meters upstream of mouth. Kidder Township, Carbon County Lat: 41.0805 Long: -75.5937
DMK (Ref)	Dimmick Meadow Brook, riffle/run prevalence, 50 meters upstream of bridge. Milford Township, Pike County Lat: 41.3492 Long: -74.8361
1LBK (Ref)	Little Bush Kill, low gradient, 200 meters downstream of bridge. Porter Township, Pike County Lat: 41.2574 Long: -74.9968
2LBK (Ref)	Little Bush Kill, riffle/run prevalence, 120 meters upstream of bridge. Bushkill Township, Pike County Lat: 41.1000 Long: -75.0041

Table 2. Tunkhannock Creek Water Quality Network Station (WQN0198) – Water Chemistry

PARAMETER	UNITS	2005			2006			2007			2008			2009			2010		
		Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
ALUMINUM D	UG/L	35.100	220.000	94.400	< 10	239.000	133.893	< 10	189.000	90.573	< 10	213.000	115.242	< 10	258.000	126.883	< 10	192.000	84.150
ALUMINUM T	UG/L	49.400	226.000	115.418	< 10	285.000	157.583	< 10	206.000	113.000	< 10	237.000	137.400	< 10	276.000	141.942	< 10	252.000	107.255
ARSENIC D	UG/L	< 4	< 4	< 4	< 4	< 4	< 4	< 3	< 4	< 3.25	< 3	< 3	< 3	< 3	< 3	< 3	< 3	3.000	3.000
BARIUM T	UG/L	9.400	14.700	11.182	< 2	19.000	11.267	< 2	18.800	11.545	< 2	14.200	10.900	< 2	13.900	11.250	< 2	44.900	14.418
CADMIUM D	UG/L	< 0.2	< 0.2	< 0.2	< 0.2	0.210	0.210	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
CALCIUM D	MG/L	1.580	2.117	1.784	0.030	2.212	1.512	< 0.03	2.660	1.926	< 0.03	1.890	1.640	< 0.03	2.997	1.819	< 0.03	3.032	1.824
CALCIUM T	MG/L	1.540	2.144	1.847	< 0.03	2.208	1.707	< 0.03	2.810	1.919	< 0.03	2.030	1.718	< 0.03	2.472	1.882	< 0.03	3.057	1.842
CHLORIDE T	MG/L	4.210	11.400	7.593	< 0.5	10.600	7.868	< 0.5	15.300	8.628	< 0.5	11.500	8.654	< 0.5	17.300	10.960	< 0.5	18.300	9.149
COPPER D	UG/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
COPPER T	UG/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	52.800	52.800
FLOURIDE T	MG/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
IRON D	UG/L	74.000	454.000	209.364	< 20	514.000	288.333	< 20	457.000	248.636	< 20	582.000	245.667	< 20	685.000	283.417	< 20	216.000	149.700
IRON T	UG/L	105.000	568.000	259.455	< 20	614.000	311.917	< 20	606.000	328.182	< 20	803.000	360.000	< 20	583.000	319.417	< 20	378.000	239.364
LEAD D	UG/L	< 1	1.100	1.100	< 1	1.200	1.133	< 1	< 1	< 1	< 1	1.600	1.310	< 1	1.600	1.400	< 1	< 1	< 1
LEAD T	UG/L	< 1	1.200	1.100	< 1	1.400	1.225	< 1	1.100	1.100	< 1	1.600	1.310	< 1	1.600	1.400	< 1	1.200	1.130
MAGNESIUM D	MG/L	0.535	0.726	0.641	< 0.01	0.716	0.562	< 0.01	0.916	0.701	< 0.01	0.711	0.585	< 0.01	0.754	0.637	< 0.01	1.107	0.635
MAGNESIUM T	MG/L	0.546	0.732	0.669	0.408	0.734	0.585	0.542	0.976	0.700	0.427	0.767	0.616	0.544	0.788	0.659	0.115	1.107	0.640
MANGANESE D	UG/L	7.400	47.400	22.518	< 2	36.400	25.025	< 2	69.000	25.791	14.100	34.700	24.692	< 2	37.100	25.275	< 2	23.400	16.686
MANGANESE T	UG/L	8.500	47.100	23.409	< 2	37.500	26.433	< 2	70.700	27.000	11.800	35.500	24.262	< 2	37.400	25.692	< 2	25.300	17.236
NICKEL D	UG/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
NICKEL T	UG/L	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
SULFATE T	MG/L	< 1	5.190	1.876	< 1	6.950	2.487	< 1	7.110	2.211	< 1	2.920	1.755	< 1	2.440	1.770	< 1	5.010	1.932
ZINC D	UG/L	5.400	30.000	14.791	< 5	34.900	18.950	< 5	33.800	16.218	< 5	23.100	17.317	< 5	22.200	16.400	< 5	25.700	16.889
ZINC T	UG/L	6.100	30.000	15.073	< 5	41.000	19.450	< 5	34.200	15.991	< 5	26.500	17.500	< 5	22.400	16.408	< 5	61.700	18.373

" < " indicate concentrations below the reporting limit

Table 2 (cont.). Tunkhannock Creek Water Quality Network Station (WQN0198) – Water Chemistry

PARAMETER	UNITS	2005			2006			2007			2008			2009			2010		
		Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
PHENOLS T	UG/L	< 5	85.010	85.010	< 5	10.390	9.490	< 5	19.880	8.140	< 5	23.990	10.546	< 5	8.470	6.803	< 5	14.310	8.512
ALKALINITY	MG/L	0.600	5.200	2.840	< 0	2.600	1.320	1.400	3.600	2.475	< 0	4.000	2.025	< 0	2.200	1.353	0.400	5.200	2.433
ACIDITY T	MG/L	47.60	32.400	16.160	0.200	22.600	9.677	2.200	45.400	22.089	1.800	13.800	6.300	1.600	17.200	8.015	2.000	9.600	5.963
HARDNESS T	MG/L	6.000	8.000	7.364	0.000	8.000	6.154	0.000	11.000	6.917	0.000	8.000	6.308	0.000	9.000	6.923	0.000	12.000	6.750
OSMOTIC PRESSURE	MOS/KG	< 1	3.000	1.889	< 1	2.000	1.300	< 1	3.000	1.889	< 1	< 1	< 1	< 1	3.000	1.500	< 1	2.000	1.333
pH	pH units	5.2	6.4	5.9	4.7	6.4	5.66	5.7	6.6	6.2	5.0	6.2	5.7	5.4	6.2	5.7	5.5	6.4	6.0
SPECIFIC COND @ 25 C	umhos/cm	32.000	47.000	39.636	36.000	56.000	41.923	36.000	64.000	44.455	35.000	56.000	45.231	33.000	63.000	52.417	33.000	70.000	51.500
TDS	MG/L	24.000	380.000	104.545	16.000	132.000	68.462	16.000	300.000	92.000	10.000	60.000	47.846	12.000	66.000	46.769	< 5	54.000	38.909
TOC	MG/L	2.770	13.200	6.110	< 0.5	16.600	8.238	3.300	12.600	5.859	< 0.5	12.600	6.980	< 0.5	13.600	6.634	< 0.5	9.970	5.099
TSS	MG/L	< 2	8.000	4.400	< 2	52.000	16.333	< 2	14.000	10.000	< 2	10.000	6.667	< 5	6.000	6.000	< 5	12.000	12.000
AMMONIA T	MG/L	< 0.02	0.040	0.026	< 0.02	0.020	0.020	< 0.02	0.060	0.036	< 0.02	0.030	0.030	< 0.02	0.040	0.031	< 0.02	0.050	0.031
NITRATE T	MG/L	0.080	0.210	0.143	< 0.04	0.170	0.105	< 0.04	0.240	0.126	< 0.04	0.180	0.093	< 0.04	0.160	0.116	< 0.04	0.210	0.144
NITRITE T	MG/L	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
NITROGEN T	MG/L	0.260	6.060	0.903	0.240	0.670	0.364	0.080	0.490	0.366	< 0.064	0.620	0.370	< 0.064	0.550	0.378	< 0.064	0.580	0.393
ORTHO PHOSPH. T	MG/L	< 0.01	0.012	0.011	< 0.01	0.012	0.012	< 0.01	0.012	0.012	< 0.01	0.012	0.011	< 0.01	0.013	0.011	< 0.01	0.014	0.012
PHOSPHORUS T	MG/L	< 0.01	0.017	0.012	< 0.01	0.015	0.013	< 0.01	0.021	0.013	< 0.01	0.022	0.014	< 0.01	0.017	0.013	< 0.01	0.023	0.015
DISSOLVED OXYGEN	MG/L	8.390	14.730	11.069	6.620	13.360	10.609	9.910	17.880	12.347	6.180	14.190	10.250	6.510	12.200	9.765	8.320	12.390	10.318
BOD	MG/L	< 0.2	1.000	0.590	0.280	3.300	2.028	< 0.2	2.800	0.814	< 0.2	2.500	1.150	0.400	4.400	1.054	< 0.2	1.600	0.790

" < " indicate concentrations below the reporting limit

Table 3. Tunkhannock Creek Basin April 2012 – Discrete Measurements

FIELD PARAMETER	STATIONS ¹						REFERENCE ²		
	1TC	2TC	3UNT	4TC	5UNT	6TC	DMK	1LBK	2LBK
Temp (°C)	16.3	16.6	13.3	14.5	12.9	13.6	11	11.9	11.6
pH	5.91	6.26	4.29	6.63	6.42	7.13	6.98	6.78	7.05
Sp. Cond. (µS/cm ⁶)	52.5	63.9	157.5	62.4	68	81.8	16.7	36.5	48.7
D.O. (mg/L)	10.62	8.91	10.44	9.45	8.06	11.06	10.46	10.2	10.36

¹ Refer to Figures 1 - 3 & Table 1 for station locations

² Reference Stations– Refer to Table 1 for locations

Table 4. Tunkhannock Creek Basin – Habitat Assessment Results, Riffle/Run Prevalence

PARAMETER	STATIONS ¹				REFERENCE ²	
	3UNT	4TC	5UNT	6TC	DMK	2LBK
1. instream cover	14	16	18	17	19	20
2. epifaunal substrate	13	19	16	18	20	18
3. embeddedness	12	16	15	16	19	16
4. velocity/depth	10	19	13	15	19	17
5. channel alterations	19	19	19	18	20	15
6. sediment deposition	17	14	17	17	18	14
7. riffle frequency	15	17	16	18	20	19
8. channel flow status	18	17	17	17	19	16
9. bank condition	17	18	19	17	19	18
10. bank vegetative protection	17	17	20	20	20	16
11. grazing/disruptive pressures	18	17	19	20	20	18
12. riparian vegetation zone width	19	15	18	20	20	11
Total Score	189	204	207	213	233	198
Rating ³	SUB	OPT	OPT	OPT	OPT	OPT

¹ Refer to Figures 1 - 3 & Table 1 for station locations

² Reference Stations– Refer to Table 1 for locations

³ OPT=Optimal (≥192); SUB=Suboptimal (132-192)

Table 5. Tunkhannock Creek Basin – Habitat Assessment Results, Low Gradient

PARAMETER	STATIONS ¹		REFERENCE ²
	1TC	2TC	1LBK
1. epifaunal substrate/available cover	19	19	19
2. pool substrate characterization	18	18	13
3. pool variability	16	16	16
4. sediment deposition	14	19	14
5. channel flow status	18	19	19
6. channel alteration	18	20	20
7. bank stability	18	20	20
8. vegetative protection	18	20	20
9. riparian vegetative zone width	20	20	20
Total Score	159	171	161
Rating ³	OPT	OPT	OPT

¹ Refer to Figures 1 - 3 & Table 1 for station locations

² Reference Stations– Refer to Table 1 for locations

³ OPT=Optimal (≥144)

Table 6. Tunkhannock Creek Basin – Semi-Quantitative Benthic Macroinvertebrate Data

TAXA		Low Gradient			Small (<5mi ²) Riffle/Run			Large (21-32mi ²) Riffle/Run		
		STATIONS ¹		REF ²	STATIONS ¹		REF ²	STATIONS ¹		REF ²
		1TC	2TC	1LBK	3UNT	5UNT	DMK	4TC	6TC	2LBK
Ephemeroptera (Mayflies)										
Ameletidae	<i>Ameletus</i>						1			
Baetidae	<i>Acentrella</i>									1
	<i>Acerpenna</i>	22	3	6		17	3			
	<i>Baetis</i>					1	35			9
	<i>Dipheter</i>						2			
Heptageniidae	<i>Epeorus</i>					3	54	3	19	4
	<i>Heptagenia</i>							2		
	<i>Leucrocuta</i>						3	2		
	<i>Stenonema</i>					2			1	
	<i>Maccaffertium</i>	7	6			3	1	7	1	1
	<i>Cinygmula</i>						16			
Ephemerellidae	<i>Drunella</i>								1	12
	<i>Ephemerella</i>					34	15	33	13	11
	<i>Eurylophella</i>	8	1	22		9	1	8		
	<i>Serratella</i>								11	16
Caenidae	<i>Caenis</i>		4	1						
Leptophlebiidae	<i>Habrophlebia</i>			3		19		9		
	<i>Habrophlebiodes</i>					2	1		2	
	<i>Leptophlebia</i>	11	3	7						
	<i>Paraleptophlebia</i>	1	3	3			4	5	56	
Plecoptera (Stoneflies)										
Pteronarcidae	<i>Pteronarcys</i>						5			
Peltoperlidae	<i>Tallaperla</i>					1				1
Nemouridae	<i>Amphinemura</i>		1	1	110	4	4	1	5	2
	<i>Ostrocerca</i>		1		12					
Leuctridae	<i>Leuctra</i>	5		1	5	18	19	8	2	2
Perlidae	<i>Paragnetina</i>								2	
	<i>Acroneuria</i>					1	2	9	3	1
	<i>Perlesta</i>			1				16		
Perlodidae	<i>Isoperla</i>					10	8	1	15	8
Chloroperlidae	<i>Sweltsa</i>			1			2			4

¹ Refer to Figures 1 - 3 & Table 1 for station locations² Reference Stations – Refer to Table 1 for locations

Table 6 (cont.). Tunkhannock Creek Basin – Semi-Quantitative Benthic Macroinvertebrate Data

TAXA		Low Gradient			Small (<5mi ²) Riffle/Run			Large (21-32mi ²) Riffle/Run		
		STATIONS ¹		REF ²	STATIONS ¹		REF ²	STATIONS ¹		REF ²
		1TC	2TC	1LBK	3UNT	5UNT	DMK	4TC	6TC	2LBK
Tricoptera (Caddisflies)										
Philopotamidae	<i>Chimarra</i>							7		
	<i>Dolophilodes</i>						3		6	38
	<i>Wormaldia</i>	1								
Polycentropodidae	<i>Polycentropus</i>	1		2	1	1		3	1	1
Hydropsychidae	<i>Diplectronea</i>			1		7	8			3
	<i>Ceratopsyche</i>	6		1		6		7	13	13
	<i>Cheumatopsyche</i>	1				1			2	
Rhyacophilidae	<i>Rhyacophila</i>				1	7	4		2	1
Glossosomatidae	<i>Agapetus</i>					1		1		1
Hydroptilidae	<i>Hydroptila</i>		2	2				1		
Brachycentridae	<i>Micrasema</i>		1					11		
Lepidostomatidae	<i>Lepidostoma</i>	3			2	1	1			1
Limnephilidae	<i>Limnephilus</i>	1								
	<i>Platycentropus</i>	7		2						
	<i>Pycnopsyche</i>	7		1				1		
Uenoidae	<i>Neophylax</i>			4						
Odontoceridae	<i>Psilotreta</i>			2				1		
Molannidae	<i>Molanna</i>	1				2				
Helicopsychidae	<i>Helicopsyche</i>		2							
Leptoceridae	<i>Ceraclea</i>	2	3							
	<i>Mystacides</i>	3	1							
	<i>Nectopsyche</i>			4						
	<i>Oecetis</i>			1						
	<i>Setodes</i>							1		

¹ Refer to Figures 1 - 3 & Table 1 for station locations² Reference Stations – Refer to Table 1 for locations

Table 6 (cont.). Tunkhannock Creek Basin – Semi-Quantitative Benthic Macroinvertebrate Data

TAXA		Low Gradient			Small (<5mi ²) Riffle/Run			Large (21-32mi ²) Riffle/Run		
		STATIONS ¹		REF ²	STATIONS ¹		REF ²	STATIONS ¹		REF ²
		1TC	2TC	1LBK	3UNT	5UNT	DMK	4TC	6TC	2LBK
Diptera (True Flies)										
Blephariceridae	<i>Blepharicera</i>						1			
Ceratopogonidae	<i>Probezzia</i>		1	3						
Empididae	<i>Chelifera</i>	1								
	<i>Clinocera</i>								3	
Tabanidae	<i>Chrysops</i>			1						
Tipulidae	<i>Antocha</i>					1		1		
	<i>Dicranota</i>					2				
	<i>Hexatoma</i>					1			2	
	<i>Limnophila</i>					2				
Simuliidae	<i>Prosimulium</i>				9					36
	<i>Simulium</i>							1		
	<i>Stegopterna</i>				32	1			3	
Chironomidae		99	133	100	39	38	8	39	38	22
Megaloptera (Dobson/ Fishflies)										
Sialidae	<i>Sialis</i>							1		
Corydalidae	<i>Nigronia</i>		1			2		2		1
Odonata (Dragon/ Damselflies)										
Gomphidae	<i>Gomphus</i>		2							
	<i>Lanthus</i>									1
	<i>Stylogomphus</i>			1						
Calopterygidae	<i>Calopteryx</i>	1	1					1		
Coenagrionidae	<i>Argia</i>		3	2						

¹ Refer to Figures 1 - 3 & Table 1 for station locations

² Reference Stations – Refer to Table 1 for locations

Table 6 (cont.). Tunkhannock Creek Basin – Semi-Quantitative Benthic Macroinvertebrate Data

TAXA		Low Gradient			Small (<5mi ²) Riffle/Run			Large (21-32mi ²) Riffle/Run		
		STATIONS ¹		REF ²	STATIONS ¹		REF ²	STATIONS ¹		REF ²
		1TC	2TC	1LBK	3UNT	5UNT	DMK	4TC	6TC	2LBK
Coleoptera (Aquatic Beetles)										
Crambidae	<i>Parapoynx</i>	1								
Psephenidae	<i>Psephenus</i>						2	2	2	
Elmidae	<i>Ancyronyx</i>			3						
	<i>Dubiraphia</i>		4	1						
	<i>Macronychus</i>									1
	<i>Oulimnius</i>		1			9			1	
	<i>Promoresia</i>	2		9		13	4	12	2	
	<i>Stenelmis</i>			1		4	1	4	3	3
Ptilodactylidae	<i>Anchytarsus</i>					1				
Miscellaneous Insect Taxa										
Corixidae	<i>Sigara</i>	2								
Non-Insect Taxa										
Asellidae	<i>Caecidotea</i>	1		1						
Cambaridae	<i>Cambarus</i>						1			
Hyaellidae	<i>Hyaella</i>			21						
Sphaeriidae		2		4		1				
Oligochaeta							1	2		
Richness		25	21	32	9	34	29	32	26	26
Total number of individuals		196	177	213	211	225	210	202	209	194

¹ Refer to Figures 1 - 3 & Table 1 for station locations² Reference Stations – Refer to Table 1 for locations

Table 7. Tunkhannock Creek Basin – RBP Metric Comparison

METRIC	Low Gradient			Small (<5mi ²) Riffle/Run			Large (21-32mi ²) Riffle/Run		
	STATIONS ¹		REF ²	STATIONS ¹		REF ²	STATIONS ¹		REF ²
	1TC	2TC	1LBK	3UNT	5UNT	DMK	4TC	6TC	2LBK
1. TAXA RICHNESS	25	21	32	9	34	29	32	26	26
Cand/Ref (%)	78	66		31	117		123	100	
Biol. Cond. Score	7	2	8	0	8	8	8	8	8
2. MOD. EPT INDEX	12	10	14	5	15	18	22	14	17
Cand/Ref (%)	86	71		28	83		129	82	
Biol. Cond. Score	8	5	8	0	8	8	8	8	8
3. MOD. HBI	5.16	5.59	5.33	3.82	3.27	1.95	3.23	2.6	2.26
Cand-Ref	-0.17	0.26		1.87	1.32		0.97	0.34	
Biol. Cond. Score	8	8	8	0	0	8	5	8	8
4. % DOMINANT TAXA	50.51	75.14	46.95	52.13	16.89	25.71	19.31	26.79	19.59
Cand-Ref	3.56	28.19		26.42	-8.82		-0.28	7.2	
Biol. Cond. Score	8	0	8	8 ³	8	8	8	8	8
5. % MOD. MAYFLIES	13.78	7.34	16.43	0	31.11	45.24	34.16	48.8	23.2
Ref-Cand	2.65	9.09		45.24	14.13		-10.96	-25.6	
Biol. Cond. Score	8	8	8	0	7	8	8	8	8
TOTAL BIOLOGICAL CONDITION SCORE	39	23	40	8	31	40	37	40	40
% COMPARABILITY TO REFERENCE	98	58		20	78		93	100	

¹ Refer to Figures 1 - 3 & Table 1 for station locations² Reference Stations – Refer to Table 1 for locations³ Dominant Taxa ≤ 3 HBI



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

February 24, 2017

wrong letter

Tunkhannock Township
Martina Kernan
1557 Long Pond Road
P.O. Box 203
Long Pond, PA 18334-0203

Dear Ms. Kernan:

As part of its ongoing review of water quality standards, the Department of Environmental Protection (DEP) is providing you with a copy of the draft Two Lick Creek evaluation report for comment before making a recommendation to the Environmental Quality Board (EQB). Please submit your comments within 45 days of the postmark date. Any comments received on the draft report will be summarized in the report that is presented to the EQB.

The Two Lick Creek mainstem, from the tailrace of the Two Lick Reservoir downstream to Yellow Creek, was evaluated for a redesignation to High Quality – Cold Water Fishes (HQ-CWF). The petition was submitted by the Ken Sink Chapter of Trout Unlimited to the EQB on February 17, 2004. The Two Lick Creek mainstem is currently designated Trout Stocking (TSF).

When DEP develops a proposed rulemaking and the EQB approves it, you will also have an opportunity to comment during the official public comment period. This comment period will begin with publication of the proposed rulemaking in the *Pennsylvania Bulletin*.

Please provide a copy of this notification and report to all municipal authorities that have property ownership in your municipality. Feel free to provide a copy to any other parties you believe may be affected by or interested in this possible redesignation.

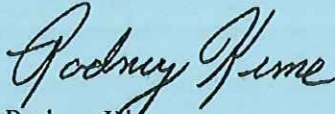
For further information or to comment, please contact Mark Brickner, Water Quality Division, Bureau of Clean Water, 11th Floor, Rachel Carson State Office Building, P.O. Box 8774, Harrisburg, PA 17105-8774, 717.787.9637, e-mail to mbrickner@pa.gov. Persons with a disability may use the AT&T Relay Service by calling 1.800.654.5984 (TDD users) or 1.800.654.5988 (voice users).

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MAR 07 2017

February 24, 2017

DEP understands that you or others in the community may have questions or concerns regarding the relationship between a stream redesignation, DEP permits, and day-to-day activities in the watershed. Please feel free to contact us so that we can address the issues that are important to you, your citizens or local businesses and industries.

Sincerely,

A handwritten signature in cursive script that reads "Rodney Kime".

Rodney Kime

Chief

Division of Water Quality Standards

Enclosure

Tina Kernan

From: Brickner, Mark <mbrickner@pa.gov>
Sent: Wednesday, March 22, 2017 1:58 PM
To: Tina Kernan
Subject: Re: Tunkhannock Creek draft report

Tina,

We sent out a letter granting an extension of 30 days, you should be receiving it soon.

Mark Brickner

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From: Tina Kernan <tunksec@longpondpa.com>
Sent: Wednesday, March 22, 2017 9:19:20 AM
To: Brickner, Mark
Cc: Senator Mario Scavello; jack@jackrader.com; John Jablowski; kidder.admin@pa.metrocast.net; davidbodnar@carboncounty.net; Kate Lambert; 'Fran DePiano'; 'George Ewald'; svasm@frontier.com; emakuvek@monroecountypa.gov; gchristine@monroecountypa.gov
Subject: FW: Tunkhannock Creek draft report

Hello Mark,

On Thursday, March 16, 2017 I sent you an email requesting an extension for the Tunkhannock Township Board of Supervisors to review the Tunkhannock Creek Draft report. As of Today, Wednesday, March 22, 2017, we had not received a response. DEP has had over 10 years to compile the report, and is asking our municipality and property owners to review something in 45 days that will greatly impact our township on many levels.

A response with an extension would be greatly appreciated.

Tina Kernan

*Secretary
Tunkhannock Township
1557 Long Pond Road
PO Box 203
Long Pond, PA 18334
Phone: 570-646-3008
Fax: 570-643-5469
Email: tunksec@longpondpa.com*

From: Tina Kernan
Sent: Thursday, March 16, 2017 2:10 PM
To: 'Brickner, Mark' <mbrickner@pa.gov>
Cc: 'Senator Mario Scavello' <mscavello@pasen.gov>; 'jack@jackrader.com' <jack@jackrader.com>; John Jablowski <jjablowski@tobyhannatwppa.gov>; 'kidder.admin@pa.metrocast.net' <kidder.admin@pa.metrocast.net>; 'davidbodnar@carboncounty.net' <davidbodnar@carboncounty.net>; Kate Lambert <tunkzone@longpondpa.com>; 'Fran DePiano' <guamnpop@ptd.net>; 'George Ewald' <ewaldpocono@gmail.com>; 'svasm@frontier.com'

<svasm@frontier.com>

Subject: RE: Tunkhannock Creek draft report

Hello Mark,

Thank you for forwarding me the correct cover letter dated February 24, 2017 for the Draft Tunkhannock Creek (Monroe & Carbon Counties) Water Quality Standards Review Stream ReDesignation Evaluation Report. We did not receive the actual cover letter until today, March 16, 2017, and the first letter (which was a letter about the Two Lick Creek mainstream) was received in our office on March 7, 2017. The cover letter states that we have 45 days of the postmark date to submit comments. Since Two Lick Creek is not located within Tunkhannock Township, the Tunkhannock Township Board of Supervisors did not start to review the report right away. They feel that need an extension to the review should be granted because the Township would like to send the report to property owners within the basin and to our engineer for review.

A response to with an extension would be greatly appreciated.

Thank you,

Tina Kernan

Secretary

Tunkhannock Township

1557 Long Pond Road

PO Box 203

Long Pond, PA 18334

Phone: 570-646-3008

Fax: 570-643-5469

Email: tunksec@longpondpa.com

From: Brickner, Mark [<mailto:mbrickner@pa.gov>]

Sent: Thursday, March 16, 2017 1:30 PM

To: Tina Kernan <tunksec@longpondpa.com>; Kate Lambert <tunkzone@longpondpa.com>

Subject: Tunkhannock Creek draft report

Please see the attached cover letter and draft stream report for Tunkhannock Creek.

Mark Brickner | Water Program Specialist | Monitoring Section

Department of Environmental Protection | Bureau of Clean Water

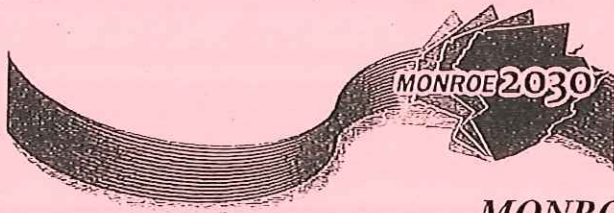
Rachel Carson State Office Building

400 Market Street | Harrisburg, PA 17105-8774

Phone: 717.783.9719 | Fax: 717.772.3249

www.dep.pa.us

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MONROE COUNTY PLANNING COMMISSION

ADMINISTRATIVE CENTER
1 Quaker Plaza, Room 106
Stroudsburg, PA 18360-2169
Phone: 570-517-3100
Fax: 570-517-3858
mcpc@monroecountypa.gov
www.monroecountypa.gov

April 12, 2017

Pennsylvania Department of Environmental Protection
Bureau of Clean Water
Rodney Kime, Chief Division of Water Quality Standards
Rachel Carson State Office Building
P.O. Box 8774
Harrisburg, Pa 17105-8774

Re: Tunkhannock Creek Basin Re-designation to Exceptional Value Petition

Dear Mr. Kime,

On behalf of the Monroe County Planning Commission Board, I respectfully request an additional 120 day extension to the comment period and subsequent hearing concerning the redesignation of the Tunkhannock Creek watershed.

The Board has been requested to provide comments to DEP, but feels further time is required to adequately study the documents provided to them by both the petitioner and the effected municipalities.

If the 120 day extension is granted, please provide my office with appropriate notification.

Sincerely,

Christine Meinhart-Fritz
Director



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

March 16, 2017

Tina Kernan, Secretary
Tunkhannock Township
1557 Long Pond Rd
P.O. Box 203
Long Pond, PA 18334

Dear Ms. Kernan:

In response to your request for an additional 30-day comment period extension, the Department of Environmental Protection (DEP) is extending the comment period for the additional 30 days. The public comment period for the Draft Tunkhannock Creek Stream Redesignation Evaluation Report will be extended until May 10, 2017. Any comments received will be considered as DEP finalizes the report.

If you have any questions, please do not hesitate to contact me by e-mail at mlookenbil@pa.gov or by telephone at 717.783.2959.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Lookenbill".

Michael (Josh) Lookenbill, Chief
Monitoring Section
Water Quality Division

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MAR 22 2017



April 14, 2017

Tunkhannock Township
Tina Kernan, Secretary
1557 Long Pond Rd
P.O. Box 203
Long Pond, PA 18334

Dear Ms. Kernan:

In response to multiple requests for comment period extensions, the Department of Environmental Protection (DEP) is extending the comment period for the Draft Tunkhannock Creek Stream Redesignation Evaluation Report until August 1, 2017. Any comments received will be considered as DEP finalizes the report.

If you have any questions, please do not hesitate to contact me by e-mail at mlookenbil@pa.gov or by telephone at 717.783.2959.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael (Josh) Lookenbill".

Michael (Josh) Lookenbill, Chief
Monitoring Section
Water Quality Division

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APR 18 2017



BOARD OF SUPERVISORS

Anne Lamberton – Chair
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105 GOVERNMENT CENTER WAY, POCONO PINES, PA 18350

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Fax: 570-646-9025
www.tobyhannatownship.org

March 28, 2017

Pennsylvania Department of Environmental Protection
Bureau of Clean Water
Rodney Kime, Chief-Division of Water Quality Standards
Rachel Carson State Office Building
P O Box 8774
Harrisburg PA 17105-8774

Dear Mr. Kime:

On behalf of Tobyhanna Township, I respectfully write to you in steadfast opposition to the resignation to Exceptional Value (EV) of the Tunkhannock Creek in Monroe County, Pennsylvania. We view this action as an unnecessary bureaucratic overreach with dire social and economic consequences to our community and its future.

As residents and property owners, the citizenry of this community are in the best position to enhance the quality of life in our respective region. It is with that in mind, that we do not believe this designation to be in the best interests of this community. We understand and appreciate the goals of the Environmental Quality Board (EQB) and ask that similar understanding is reciprocated in this case.

It is our firm belief that the current **High Quality – Cold Water Fishes, Migratory Fishes (HQ-CWF, MF)** is more than adequate to protect and maintain the outstanding quality of the Tunkhannock Creek.

On March 2, 2005, the EQB accepted the petition for further study. Now, over 4,380 days later you ask us to evaluate our thoughts and formulate an opinion in less than 45 days from the time you mailed us a letter. I appreciate that your department operates under a bureaucracy, but you must admit that this timeframe is far from realistic.

I submit that you expand the rulemaking process for an additional 120 day period to allow all stakeholders comment so that not just a few out of region/state interest groups that may have someone's political ear have they have an opportunity to exercise their rights to provide comment.

Over the past years, the Tobyhanna Township Board of Supervisors has stood firm on such matters and the Board's position has not changed. The Board does not support the petition for upgrading the designated use of the Tunkhannock Creek from

High Quality – Cold Water Fishes (HQ-CWF) to Exceptional Value (EV). We believe that the HQ-CWF designation alone sets forth sufficient water quality standards.

As you are aware, approximately 2% of the streams in Pennsylvania are designated as EV and per capita Monroe County has one of the largest number of EV streams in the Delaware River Basin Watershed and vastly more than a large majority of Pennsylvania's 67 Counties.

According to the Monroe County Conservation District, *"Nearly all of the streams in Monroe County are designated by the state as being of High Quality (HQ) or Exceptional Value (EV). In fact, of the 83,000 miles of streams in PA, only 2% are classified as EV, and 80% of those EV streams are here in the Monroe, Pike, and Wayne County portions of the Poconos.*

Therefore, to classify the entire Tunkhannock Creek basin as EV based on a petition from non-local residents that occasionally travel to the region to fish our streams does not take into account what the real community stakeholder's desire.

Why would the classification be re-designated now? Should not this designation have been done years ago when the Tunkhannock Creek was classified as HQ-CWF years ago? What has changed?

As a direct result of the EV and HQ designations, our growth potential is severely limited to begin with in the Pocono Region. Protection, promoting and preserving the region's natural assets is important to all of us. But this must be done in a thoughtful manner respectful to all interested parties and not simply because a few non-local interest groups circulated a petition over a decade ago.

Tobyhanna Township stands firm with our neighbors in Tunkhannock Township in strongly opposing this request from outside interest groups lobbying the Commonwealth for their own selfish benefit while completely disregarding the best interests of the residents, taxpayers and property owners of this region.

I ask that you respond to me at your earliest on this most important matter so that I may report back to the Board of Supervisors and our community regarding the status of this issue.

Sincerely,



John J. Jablowski, Jr. MPA
Township Manager

Cc: Senator Mario Scavella
Representative Jack Rader
Patrick McDonnell, PA DEP Acting Secretary
Mark Brickner, PA DEP Water Quality Division
Monroe County Conservation District
Tunkhannock Township Supervisors
Charles Leonard, Monroe CARE
Michael Baxter, Monroe CARE

BLUE RIDGE REAL ESTATE COMPANY

5 Blue Ridge Court
P.O. Box 707
Blakeslee, Pennsylvania 18610

Bruce Beaty
President and Chief Executive Officer
bbeaty@brreco.com

April 7, 2017

Kidder Township Board of Supervisors
P O Box 576
Lake Harmony, PA 18624

Re: Proposed Re-designation of Tunkhannock Creek Basin

Dear Supervisors:

Blue Ridge strongly opposes the petition from the Tobyhanna Creek/Tunkhannock Creek Watershed Association and Tunkhanna Fishing Association to re-designate the Tunkhannock Creek Basin.

We do not agree with DEP's recommendation for re-designation for the following reasons:

- The Tunkhannock Creek basin is currently designated High Quality- Cold Water Fishes, Migratory Fishes (HQ-CWF, MF).
- The Feb 24 2017 letter from DEP includes the "WATER QUALITY STANDARDS REVIEW STREAM REDESIGNATION EVALUATION REPORT". The following excerpts (from pages 6-7) should be considered:
 - o "Coordinated water quality protective measures" adopted by local governments along the Tunkhannock Creek watershed corridor. Tunkhannock and Tobyhanna Townships in Monroe County and Kidder Township in Carbon County have adopted water quality protective measures through ordinances that aim to conserve natural features, including land or water resource areas (e.g. wetlands, floodplain, vernal pools, springs, and steep slopes). The purpose of the regulations is to ensure that land uses minimize disturbances to natural features and that reasonable measures are taken to mitigate any adverse impacts from such uses).
 - o Although the protective measures provided by these townships could enhance water quality protection, the regulations require that such measures be "coupled with" an interest in real estate, as described at § 93.1. Definitions - "*Coordinated water quality protective measures*". Such requisite real estate interests have not been identified along Tunkhannock Creek basin.
 - o The Bethlehem Authority properties encompass approximately 40% of the Tunkhannock Creek Basin, primarily the upper portions of the basin. The Plan indicates that the Bethlehem Authority has entered into a conservation easement with The Nature Conservancy that establishes a primary goal of producing high quality potable drinking water.

- There are other regulations that have come into play since the petition to re-designate the Tunkhannock was submitted and accepted (2005), including the provisions of Act 162 of 2014. (Pennsylvania Clean Streams Law, 35 P.S. §§ 691.1 et seq. (Act of 1937, P.L. 1987, No. 394) was amended by the General Assembly as HB 1565 on October 16, 2014, and was signed into law on October 22, 2014, as Act 162 of 2014. As developers, we are subject to numerous restrictions imposed by NPDES permitting requirements - as it relates to the riparian buffer or riparian forest buffer offsetting requirements.
- Act 162 and "existing water quality protective measures" largely accomplish what a re-designation would appear to target.
- This re-designation may cause irreparable harm to Blue Ridge as this could be considered a "taking" of future development potential which could impact over 1,000 acres of land owned by Blue Ridge in Tobyhanna, Tunkhannock and Kidder Townships.
- Local municipalities have the ability, and have put in place measures that can address specific issues. Re-designation may eliminate the flexibility of development that would bring jobs and revenues into our townships.
- The incremental benefits to our community of the re-designation from high quality to exceptional value appear to be questionable, unnecessary and unjustified.

We request that Kidder Township supervisors join Tobyhanna and Tunkhannock Townships in opposing re-designation.

Sincerely



Bruce Beaty
President and CEO

cc: Tom Bradley, Kidder Township Supervisor, Chairman
Barbara Franzosa, Kidder Township Supervisor
Bing LaFond, Kidder Township Supervisor
Bruce Berger, Kidder Township Supervisor
Frank Pieri, Kidder Township Supervisor
Suzanne Brooks, Kidder Township Secretary
Lisa Klem, Kidder Township Manager
PA State Representative Doyle Heffley
Tim Berger, Assistant to Representative Heffley
PA Senator John Yudichak
Brad Hurley, Assistant to Senator Yudichak
PA Senator Mario Scavello
PA State Representative Jack Rader
Mark Brickner, Water Quality Division, PA DEP (Harrisburg)
Rodney Kime, Chief, Water Quality Division, PA DEP (Harrisburg)
Michael D. Bedrin, Northeast Regional Director, PA DEP (Wilkes-Barre)
John Jablowski, Tobyhanna Township
David Bodnar, Carbon County
George Ewald, Tunkhannock Township
Ellen Lott, The Nature Conservancy
Jim Davenport, Tunkhanna Fishing Association

Matergia and Dunn

*Attorneys at Law
919 Main Street
Stroudsburg, PA 18360*

*Ralph Anthony Matergia
John B. Dunn*

*Telephone (570) 421-7720
Fax (570) 421-8945
email: lawyers@matergiadunn.com*

April 11, 2017

Board of Supervisors
Tunkhannock Township
1557 Long Pond Road
P.O. Box 203
Long Pond, PA 18334

Re: Tunkhannock Creek Watershed Association and Tunkhanna Fishing Association
Petition for Re-designation of Tunkhannock Creek

Dear Supervisors:

I am writing this letter to you in my capacity as a director and counsel to Pocono International Raceway, Inc. ("Pocono Raceway"). Pocono Raceway opposes the Petition of the Tunkhannock Creek Watershed Association and Tunkhanna Fishing Association for a re-designation of Tunkhannock Creek from its present designation, High Quality, to Exceptional Value for the following reasons:

1. Under the current HQ designation, Pocono Raceway is permitted to reasonably use its property and to grow its business, while at the same time ensuring that its land uses minimize disturbance to Tunkhannock Creek and other natural features. Re-designation of the Creek to Exceptional Value will seriously impact and restrict future use and development of Pocono Raceway's property. There already exists a broad body of land use regulations, which taken together impose significant restriction to the development of Pocono Raceway's property and which, moreover, provide a sufficient layer of protective measures to adverse impact to the Tunkhannock Creek. Re-designation of the Tunkhannock Creek to Exceptional Value is simply unnecessary if the goal is to achieve high quality potable drinking water.
2. The petition for re-designation seeks to classify the entire Tunkhannock Creek Basin as Exceptional Value which, in and of itself, is unnecessarily overreaching, and will virtually eliminate commercial development in Tunkhannock Township. Pocono Raceway is not the only commercial property that will be adversely impacted by re-

designation of Tunkhannock Creek. Restricting commercial development will have adverse fiscal impact to Tunkhannock Township and to the region.

3. Pocono Raceway is the largest taxpayer in Tunkhannock Township and the largest employer. It is fair and appropriate to balance the impact of restricting the use of Pocono Raceway's property against the benefits to be derived by the privileged few out of area sportsman that enjoy private fish club membership.

For these reasons, Pocono Raceway requests that the Board of Supervisors express its opposition to the petition to re-designate Tunkhannock Creek Exceptional Value.

Very truly yours,

MATERGIA & DUNN

Ralph A. Matergia

RAM:mr

BETHLEHEM AUTHORITY

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Fax 610-865-7042

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DANIEL L. MEIXELL
POLICE - SPECIAL OFFICER

April 7, 2017

Mr. Mark Brickner
WQ Division, Bureau of Clean Water
11th Floor, Rachel Carson State Office Building
P.O. Box 8774
Harrisburg, PA 17105-8774

Subject: Tunkhannock Creek Re-Designation

Dear Mr. Brickner,

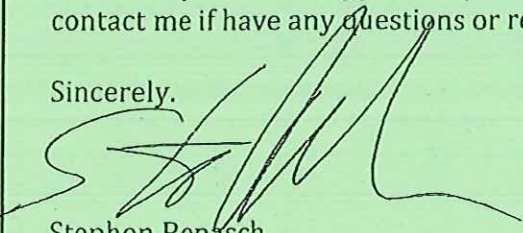
As the largest property owner in the Tunkhannock Creek watershed in Monroe County, PA, the Bethlehem Authority, after reviewing the draft Tunkhannock Creek evaluation report, fully supports the findings of the report and the re-designation of the Tunkhannock Creek to Exceptional Value (EV) from its current High Quality-Cold Water Fishes, Migratory Fishes (HQ-CWF-MF) category.

As you probably know, the Tunkhannock Creek is an important part of the City of Bethlehem's drinking water supply for over 116,000 people in the City of Bethlehem and 11 surrounding municipalities in the Lehigh Valley. In fact, the Tunkhannock Creek over the last six months accounted for over 12 % of the entire water supply of approximately 2.436 billion gallons of high quality drinking water to the city and its surrounding municipalities.

The elevation of the Tunkhannock Creek to EV status is not only a win for the watershed region, it is also a win for all of the customers of the City of Bethlehem water system as it insures a continued supply of "exceptional" quality drinking water well into the future.

We thank you for the opportunity to comment on this important issue and feel free to contact me if have any questions or require additional information.

Sincerely,



Stephen Repasch
Executive Director

Samuel W. Newman
7257 Hickory Lane
Stroudsburg, PA 18360

RECEIVED
APR 10 2017

(570) 421-8243
(570) 977-3690 (cell)
snewman@skicamelback.com

BY:.....

April 8, 2017

Tobyhanna Board of Supervisors
Tobyhanna Township
105 Government Center Way
Pocono Pines, PA 18350

Tunkhannock Creek

Anne Lamberton, Chair

Dear Ms. Lamberton,

I am a member, past president, and a Board member of the Tunkhanna Fishing Association. We support the designation by the DEP of the Tunkhannock Creek from High Quality to Exceptional Value.

I know that you have previously received the Report of the DEP and related correspondence. The designation as EV will be beneficial to preserve the stream and the surrounding properties. The only commercial property, Pocono Raceway, will not be harmed by this change, which meshes nicely with the Raceway's green initiatives.

The only significant difference of an EV designation, other than to further protect against the pollution of the stream, is that the discharge of effluent from a sewage treatment plant would have to meet higher standards. There is no sewage treatment plant proposed to discharge into the Tunkhannock Creek. Indeed, I spoke recently with Brandon Igdalsky, President and C.E.O. of Pocono Raceway, who explained to me that the Raceway's sewage disposal needs are met by its spray irrigation system, making a sewage treatment plant unnecessary.

I urge you to support the EV designation for the protection of this pristine stream.

Very truly yours,

Samuel W. Newman

Via email

Ashwal
PO Box 67
Long Pond, PA 18334

Marilouise McNally

Telephone (570) 657-6203
email: looiemc@earthlink.net

April 11, 2017

Board of Supervisors
Tunkhannock Township
1557 Long Pond Road
P.O. Box 203
Long Pond, PA 18334

Re: Tunkhannock Creek Watershed Association and Tunkhanna Fishing Association
Petition for Re-designation of Tunkhannock Creek

Dear Supervisors:

This letter is in opposition to the Petition of the Tunkhannock Creek Watershed Association and Tunkhanna Fishing Association for a re-designation of Tunkhannock Creek from its present designation, High Quality, to Exceptional Value. As the owner of Ashwal, which I purchased for development purposes, this is out of bounds.

You have very few businesspeople who see the potential in this area and yet you choose to stifle job growth and add to the tax base for this community to serve its citizens appropriately! Why not see the opportunity for job creation and tourism. Why punish the community? It is obvious given the budget that you are squeaking by. Then what - raise taxes on the same people again and again.

There are already burdensome regulations to do anything in this township. Enough is enough! All because of a private fishing club whose members are not even from the area?

For these reasons and a myriad of others, Ashwal requests that the Board of Supervisors express its opposition to the petition to re-designate Tunkhannock Creek Exceptional Value.


Marilouise McNally

Jo-Ker, Inc. 2901 Locust Ridge Rd., Pocono Lake, PA. 18347

April 11, 2017

Good Evening, Tunkhannock Board of Supervisors:

I appreciate you taking the time to read and have a public meeting about the EV petition filed on behalf of the Tunkhanna Fishing Association. I, having 100 acres in Tunkhannock Township, oppose the EV petition. High Quality is and has sufficient enough restrictions in protecting our waterways. Actually, the stream association has to treat the stream so the stocked trout will survive. Please do not support this petition; it is another tool to stop commercial growth in Tunkhannock and Tobyhanna Townships and Carbon County. EV will hamper any and all development within the township.

Sincerely,

John E. Kerrick
Jo-Ker, Inc.

KEVIN JOHN HARRISON, P.E.
1755 Susquehanna Trail
Northumberland, PA 17857
570-620-7950 zena21@gmail.com

March 21, 2017

Tina Kernan
Tunkhannock Township Secretary
1557 Long Pond Road
PO Box 203
Long Pond, PA 18334

Re: EV *Stream/Basin* Designation

Dear Tina:

On March 15, 2017 I was in receipt of your email with respect to the above-referenced Stream/Basin Designation. The email contained a PDF file that included a request by a local fish club and others to declare the *entire basin* EV in lieu of the present HQ designation for streams only. Your email also contained a resolution by the Board of Supervisors from 2005 which supported the designation of *streams* to EV, which was subsequently not approved. I am also enclosing a document prepared by Lawrence C. Tropea, Jr., P.E., DEE, Deputy Secretary for Water Management, DEP, dated August 25, 2000 and titled Protecting the Commonwealth's Best Waters. My review and comments are based on these documents.

Overview

The Environmental Quality Board (EQB) is considering (or might that be imposing) changing the designation of the entire Tunkhannock Creek watershed from HQ to EV. As you may know HQ is a designation that restricts development to conform to a strict standard before any development can take place. These regulations were originally adopted in 1968. The request to designate the entire watershed to EV is a rather dramatic change that may result in significant changes to activities of local businesses as well as property owners.

Comments

1. The proposed change is, in my opinion, completely unwarranted. HQ is a designation that imposes many strict standards that must be adhered to. Under HQ, economic considerations may be evaluated and used in determining the final outcome or determination. That doesn't mean that the final results will be based on economics, but they can be considered. With an EV designation, there are no exceptions or other considerations. As of 2000, approximately 23% of the Commonwealth's streams were classified as HQ, and 2% of the streams were classified as EV.
2. To classify an entire basin as EV is, in my opinion, totally absurd. There is precious little commercial property in the Township (just look at the zoning map), and to change the entire basin to EV would severely impact the small amount of businesses (or

potential businesses) and would be detrimental to an important aspect of the Township.

3. It appears to me that 'special interest' groups are pursuing this change without any regard to other contributors and members of the Township. Even a cursory look at the zoning map will demonstrate that development options are very limited. This isn't due only to my observations, it's an obvious fact.
4. In conclusion, it is my opinion that the current designation is suitable and adequate to insure that clean water is a protected asset in the Township.

Please let me know if you have any questions or comments concerning this review.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin John Harrison". The signature is fluid and cursive, with the first name "Kevin" being the most prominent.

Kevin, John Harrison, P.E.

Cc: Kate Lambert, Zoning Officer (via email)

TUNKHANNOCK CREEK EXCEPTION VALUE WATERSHED ANALYSIS BASE MAP

TUNKHANNOCK TWP
MONROE COUNTY, PENNSYLVANIA



1:50,000



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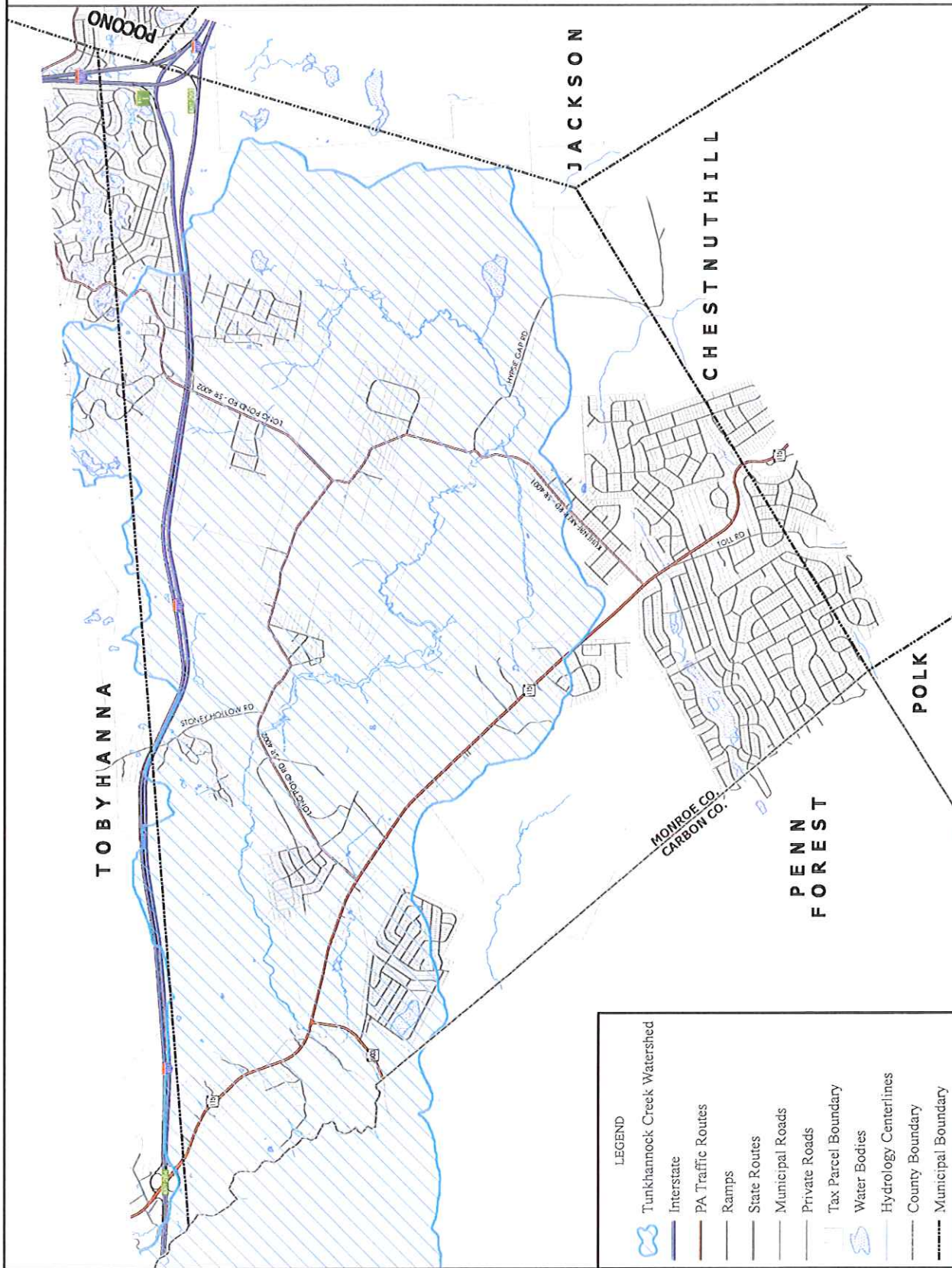


www.monroecounty.pa.gov

PREPARED BY
Monroe County
Planning Commission
1 Quaker Plaza, Room 106
Stroudsburg, PA 18360
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mcpe@monroecounty.pa.gov

April 2017

17-043



LEGEND

- Tunkhannock Creek Watershed
- Interstate
- PA Traffic Routes
- Ramps
- State Routes
- Municipal Roads
- Private Roads
- Tax Parcel Boundary
- Water Bodies
- Hydrology Centerlines
- County Boundary
- Municipal Boundary

TUNKHANNOCK CREEK EXCEPTION VALUE WATERSHED ANALYSIS

CONSERVED LANDS TUNKHANNOCK TWP MONROE COUNTY, PENNSYLVANIA



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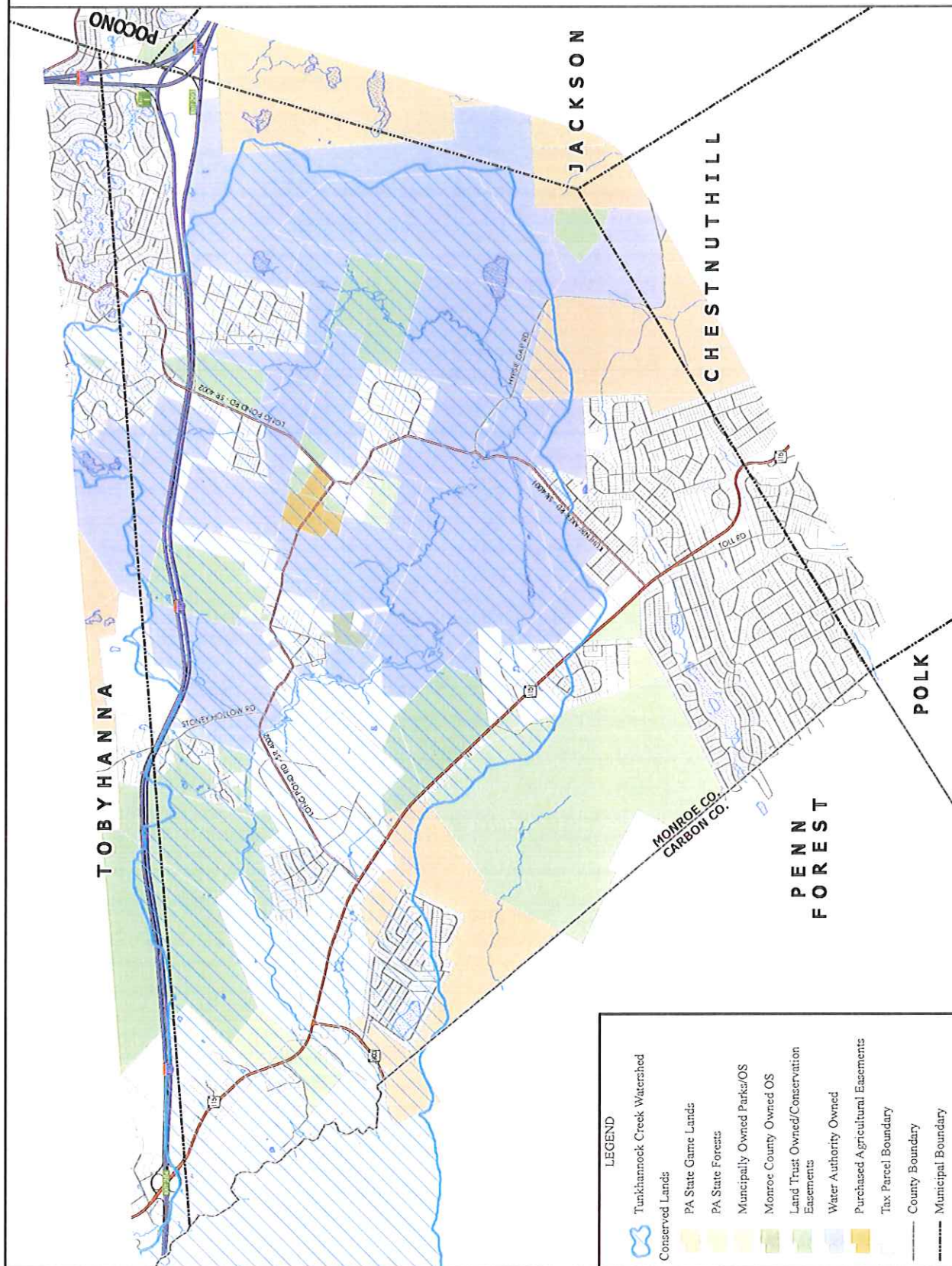


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April 2017

17-043



**TUNKHANNOCK CREEK
EXCEPTION VALUE
WATERSHED
ANALYSIS**

**TAX PARCEL STATUS
TUNKHANNOCK TWP
MONROE COUNTY, PENNSYLVANIA**



1:50,000



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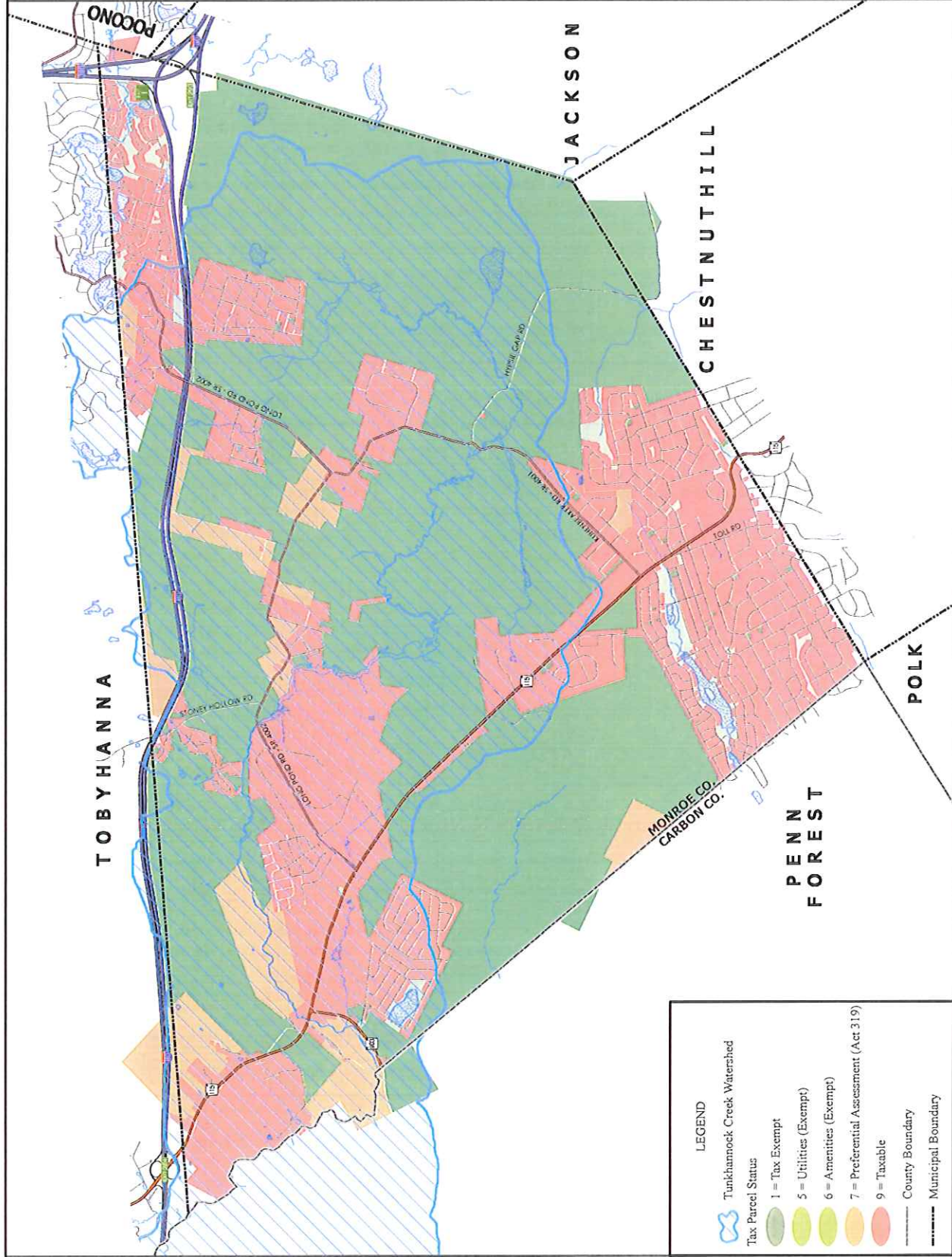


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April 2017

17-046



LEGEND

Tunkhannock Creek Watershed

Tax Parcel Status

1 = Tax Exempt

5 = Utilities (Exempt)

6 = Amenities (Exempt)

7 = Preferential Assessment (Act 319)

9 = Taxable

County Boundary

Municipal Boundary

TUNKHANNOCK CREEK
EXCEPTION VALUE
WATERSHED
ANALYSIS

ZONING DISTRICTS

TUNKHANNOCK TWP
MONROE COUNTY, PENNSYLVANIA



1:50,000



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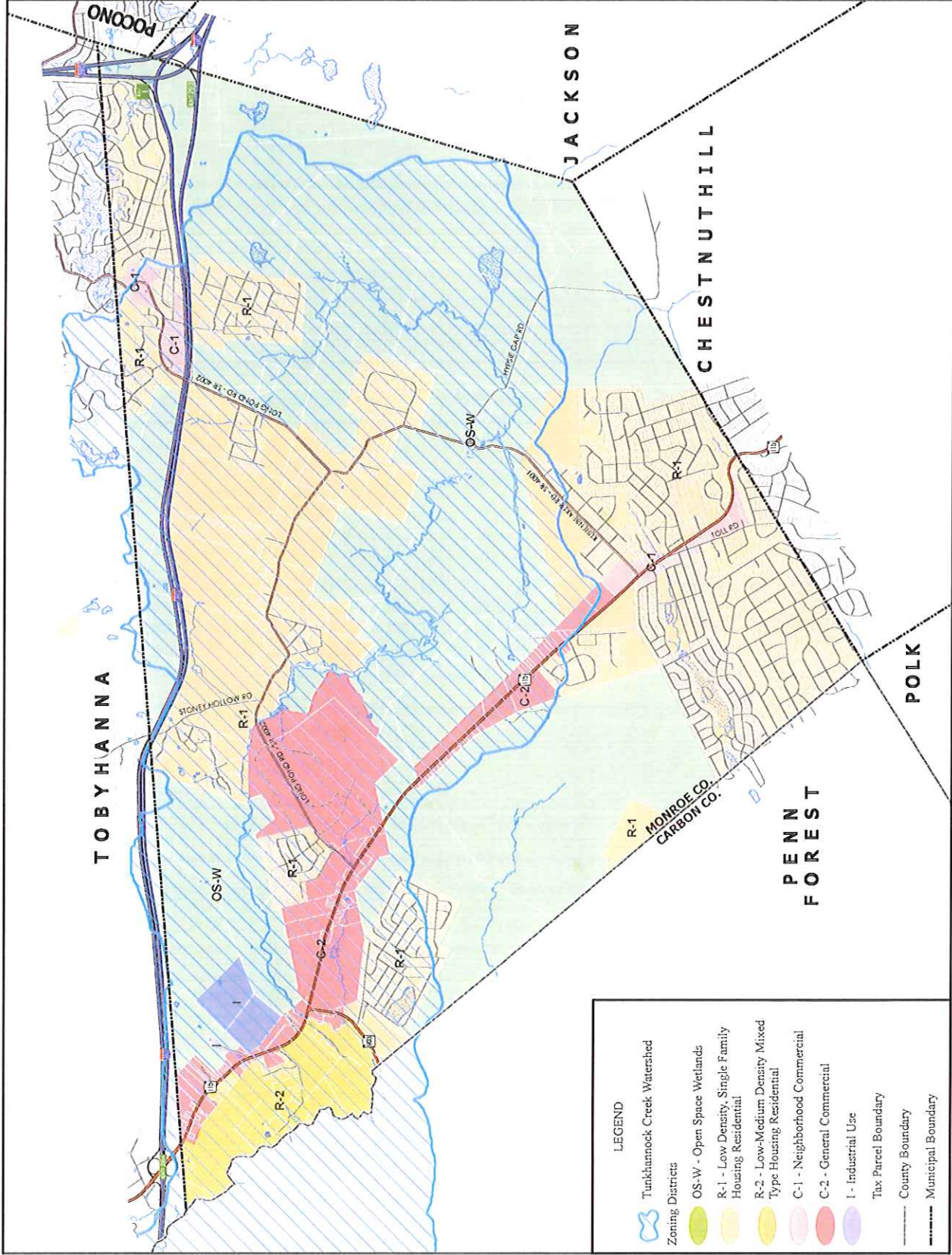


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Monroe County
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April 2017

17-044



LEGEND

Tunkhannock Creek Watershed

Zoning Districts

- OS-W - Open Space Wetlands
- R-1 - Low Density, Single Family Housing Residential
- R-2 - Low-Medium Density Mixed Type Housing Residential
- C-1 - Neighborhood Commercial
- C-2 - General Commercial
- I-1 - Industrial Use

Tax Parcel Boundary

County Boundary

Municipal Boundary