



Maryland
Department of
the Environment

Cold/Cool Water Advisory Committee Meeting #2

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Maryland Department of the Environment

Environmental Assessment and Standards Program

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I. Cold/Coolwater Advisory Committee Meeting #2

- Webinar Audio Visual Check
- Welcome and Introductions
- Sign-in Sheet
- Housekeeping Items
- Agenda overview



Quick Review of Participation Needs

- Monthly meetings with limited attendees (by invite only) to keep group manageable
- Webinar accessible but prefer face-to-face if possible
- What we ask of Committee Members
 - Between meetings, discuss information amongst the group/organization you are representing, gathering perspectives to bring back
 - Come to meetings prepared and ready to engage
 - Have an alternate up-to-speed in case you cannot attend a given meeting



Major Goals for this advisory committee (handout)

1. **Develop Policy for protecting cold/coolwater existing uses in advance of changing the use classification**
2. Explore the development of a new Designated Use Classification
3. Re-evaluate Class IV Recreational Trout Waters designation
4. Develop a process for conducting a Use Attainability Analysis (UAA)



Task 1

Develop MDE policy for protecting streams with cold or coolwater species in advance of changing the use classification.

- Will provide more timely communication of important information with various authorities and stakeholders
- Clarify the process for all parties involved



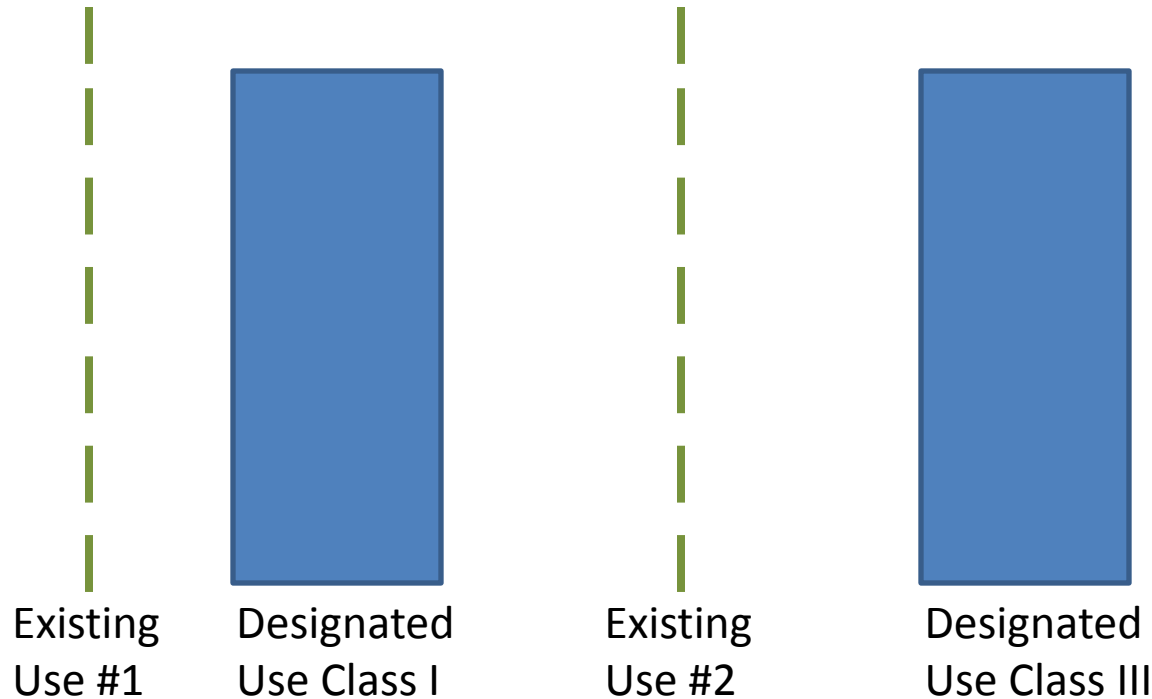
The Existing Uses (Review from Meeting #1)

- CWA (40 CFR 131.3) defines existing uses as “...*those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards*”
- Made on a site-specific basis and can be expressed in very specific terms
- Existing uses serve as baseline or “floor” of water quality
- According to EPA, existing uses are not generally adopted into state/tribal law.
- They can be the same as the designated use for a water body or they can be lower or better than the designated use for a water body

USEPA (2008)



Existing Uses – An Illustration



Stream Characteristics

Existing Use #1: Represents an impaired warmwater stream

Existing Use #2: Represents a stream with naturally reproducing coldwater species but which exceeds Class III temperature criteria



Are Existing Uses Protected?

- CWA (40 CFR 131.12(a)) states “*at a minimum... (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.*”
- Maryland’s water quality standards (COMAR 26.08.02.04) echo the CWA stating “*Waters of this State shall be protected and maintained for existing uses and the basic uses of water ...*”



Differences between Designated and Existing Uses

Designated Uses	Existing Uses
<ul style="list-style-type: none">- adopted into State law- expressed in a more standardized fashion to reflect water quality goal- focuses on the attainable condition	<ul style="list-style-type: none">- not generally adopted into State law- can be expressed more specifically than a designated use to reflect the degree of use attained- focuses on the highest condition attained since 1975



Outline of Existing Use Policy

- Describe and discuss data requirements for identifying Existing Uses
- Discussion of options for determining the geographic extent (scale) of an existing use
- Describe the proposed notification/coordination process that MDE will follow for identifying an existing use and disseminating information



II. Data Requirements for Verifying Existing Use

What kinds and quality of data are needed to formally recognize and identify an existing use?

- Need to be sufficiently rigorous b/c of impacts to permittees
- Spatial scale is very important



Data Requirements for Verifying Existing Use

- Require data collection protocol to be consistent with “Tier I” data
 - Data evaluation similar to Integrated Report process
 - Quality Assurance Project Plan (QAPP)
 - Basic Elements
 - Trout ID and lengths,
 - Coordinates for stations and/or start and end pts of sampling,
 - Dates of sampling,
 - Staff names and contact info,
 - Benthic macroinvertebrate IDs and counts,
 - Basic water quality parameters, and
 - Continuous temperature preferred.
 - Confirm with DNR instances of stocking
- Data requirements for identifying/establishing an Existing Use would be similar to the data requirements for Use-Class Redesignation
- Thoughts?



III. Determining the Spatial Scale of an Existing Use

Scale of Protection: How will the geographic scale of an existing use (and therefore coldwater protection) be determined? More specifically: What proportion of the watershed should be shown on a map as having an existing use different than the designated use?



Determining Scale of Existing Use

- We have two potential approaches
 - 1. Develop guidance that will apply to all situations**
 - Scale would be determined based on a combination of several enumerated factors such as stream order, number of samples etc.
 - Spatial scale would be determined based on written procedure only
 - This option will provide some certainty to question of scale
 - However, the policy may extend scale too far in some situations or not far enough in others
 - 2. Form decision making/advisory body/committee that would examine every Existing Use situation individually in a timely fashion**



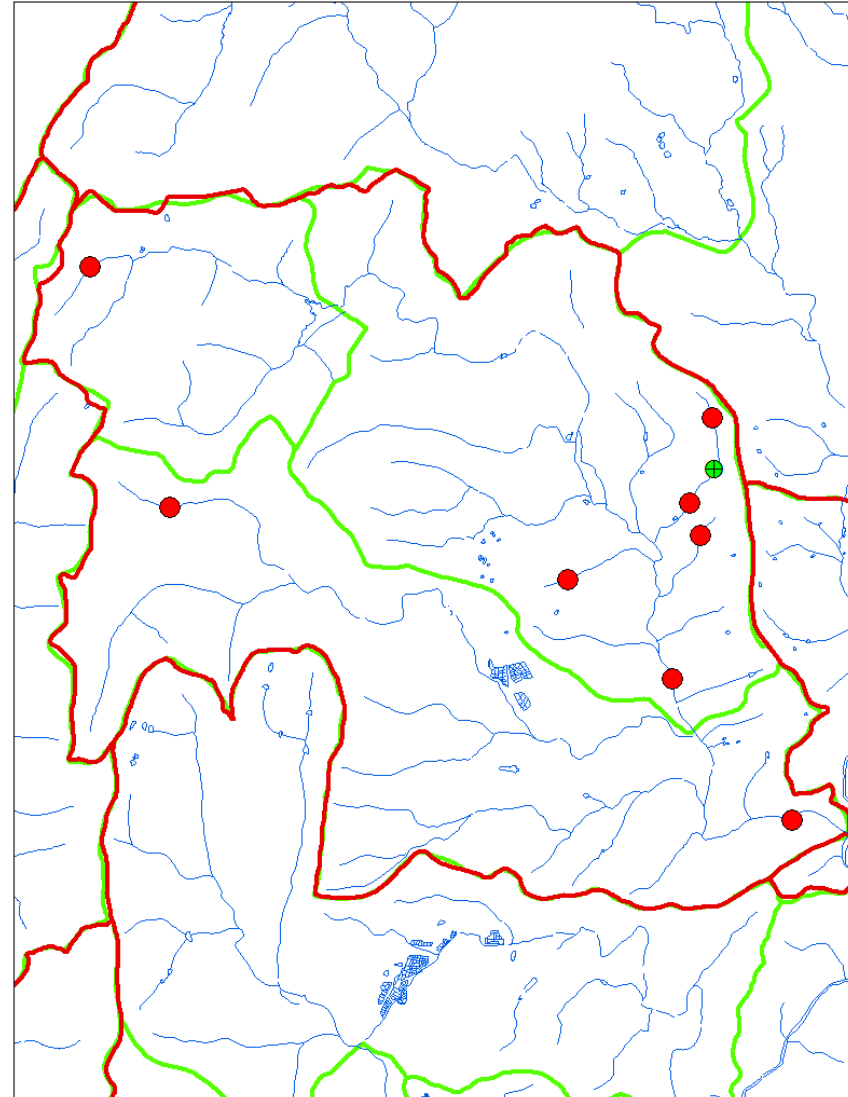
Approach 1: Developing Guidance/Policy

- Guidance document would enumerate factors that would apply to scale of protection
- Attempt to cover as many scenarios as possible (for example)
 - Brown Trout or Brook Trout
 - Presence of temperature data in stream and watershed
 - Stream order
 - Distribution of verified trout population
 - Presence of cold water obligate benthos
 - Number of samples taken in watershed that indicate absence of trout
 - Temperature statistics in other parts of 12-digit or 8-digit watershed



Approach 1: Developing Guidance/Policy

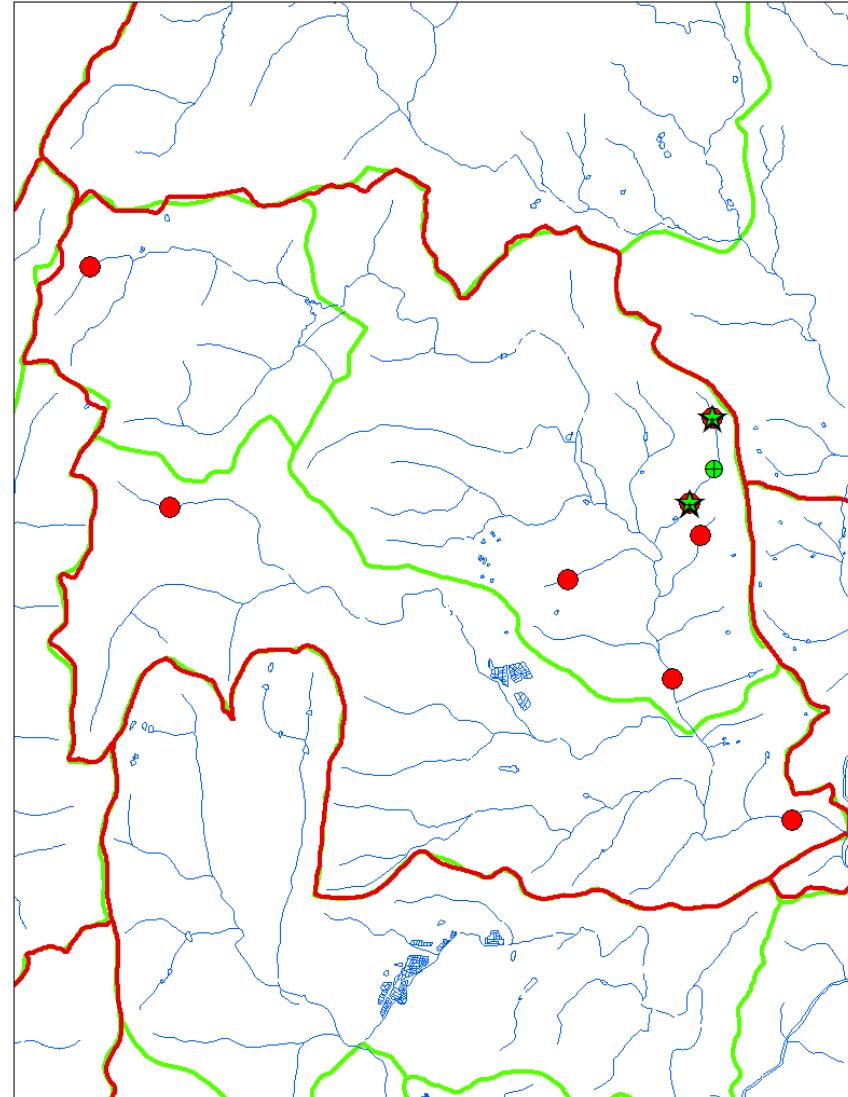
- Example guidance scenario A:
 - A reproducing trout population is verified in a first order stream





Approach 1: Developing Guidance/Policy

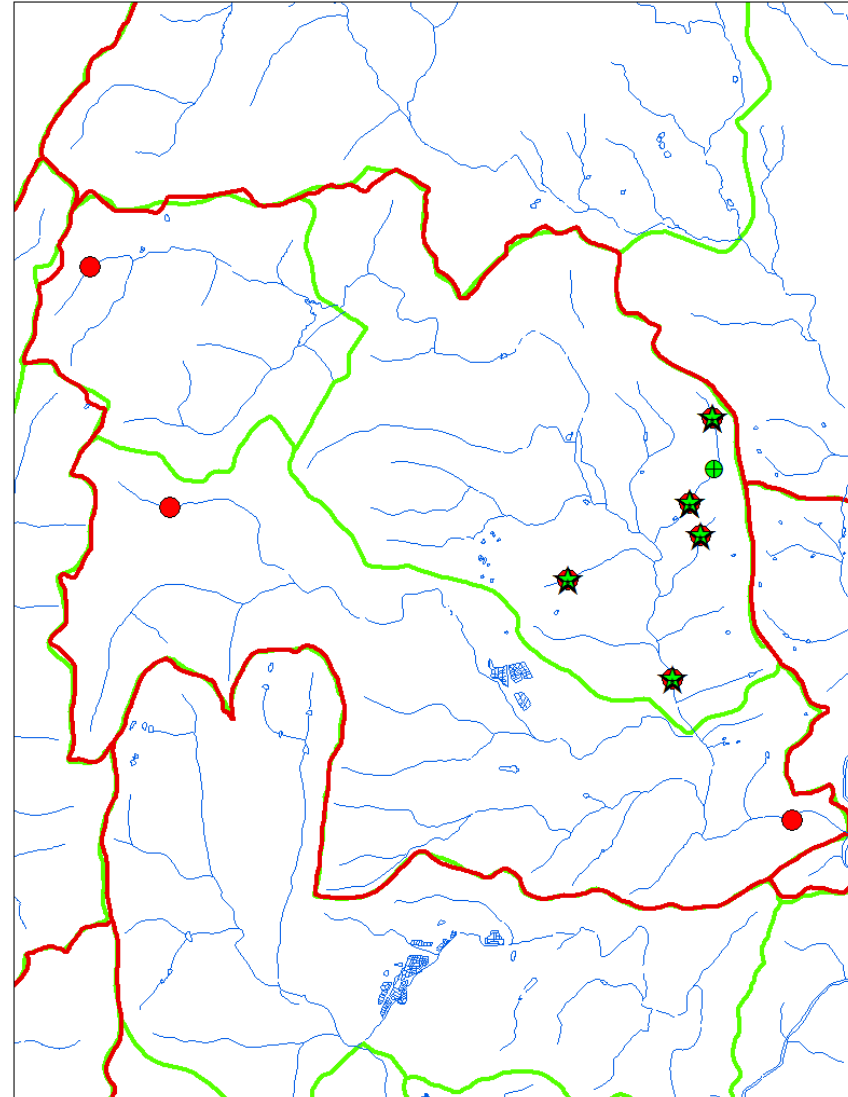
- Example guidance scenario A:
 - A reproducing trout population is verified in a first order stream
 - No other reproducing trout populations have been found in the 8-digit watershed and no temperature data exists
 - Draft guidance might dictate that only the stream segment is protected and the two dischargers are screened.





Approach 1: Developing Guidance/Policy

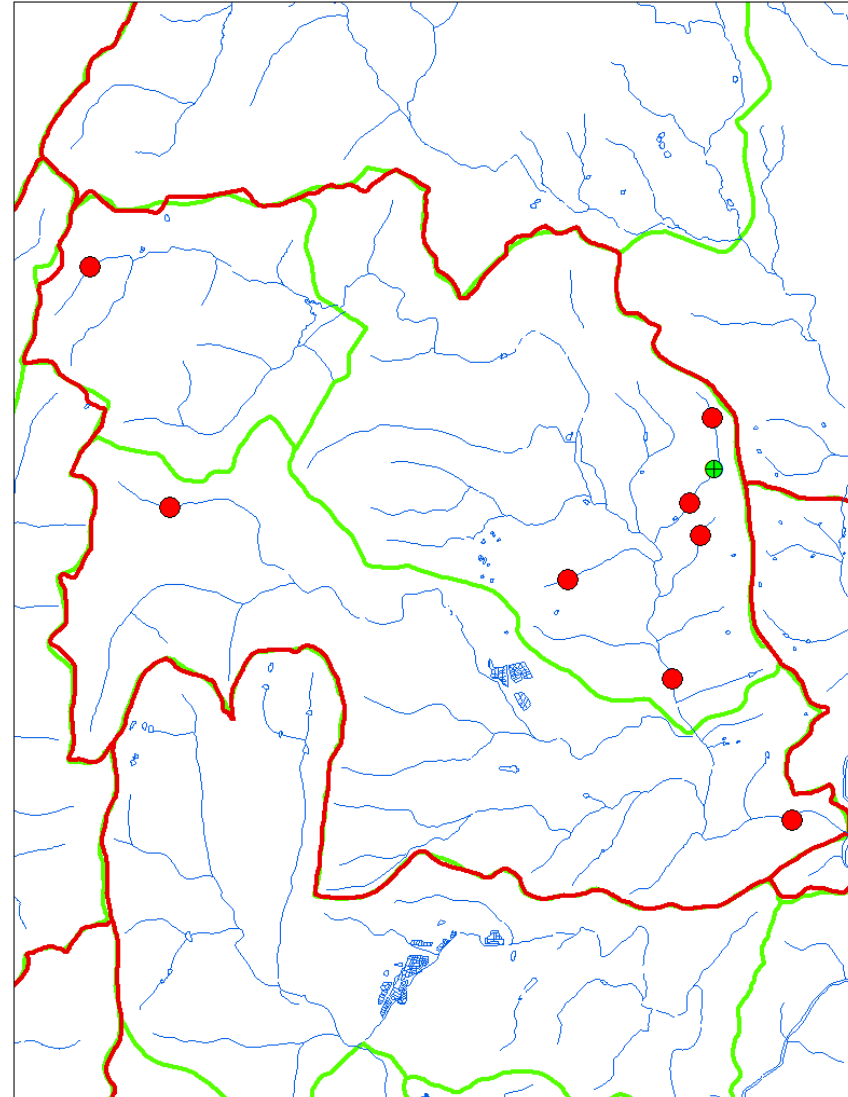
- Example guidance scenario B:
 - A reproducing trout population is verified in a first order stream
 - No other reproducing trout populations have been found in the 8-digit watershed but temperature data **does show other areas are meeting temperature criteria**
 - Draft guidance might dictate that the 12-digit watershed is the scale





Approach 1: Developing Guidance/Policy

- Challenges
 - Scenarios are not exhaustive
 - Scenarios may arise that aren't addressed by guidance/policy
 - May apply inappropriate scale of protection despite best efforts





Approach 2: Address Scale Issue on a case-by-case basis

- Options
 - a) MDE would consider each situation separately and make scale decision without input
 - b) MDE and DNR would collaborate on each decision
 - c) MDE convenes a Scientific Advisory Committee to consider scale issue
 - Experts from DNR fisheries and academia
 - d) MDE convenes an ad hoc stakeholder advisory committee
 - Committee made up of much the same representatives as are attending this meeting (e.g. DNR, County, TU, MAMWA, Academia, SHA, Riverkeeper, MDE Standards and Permitting Staff, etc)



Approach 2: Address Scale Issue on a case-by-case basis

- Advantages of creating an ad hoc advisory committee
 - Ensure that scale of existing use identification is reasonable and affected parties are a part of the decision-making process
 - Existing Use scenarios generally do not arise very frequently so work load should be minimal
 - Quick Turnaround – Convening committee would happen soon after data (~14 days) was submitted to MDE



Approach 2: Address Scale Issue on a case-by-case basis

- Caveats of creating advisory committee
 - When Existing Use decisions arise, committee would be responsible for convening on short notice
 - Committee would have to work under a deadline to provide input on the scale
 - MDE will still be responsible for the final Existing Use scale decisions but will be based on committee input



Other Potential functions of Proposed Advisory Committee

- Provide updates on planned monitoring activities that may result in Existing Use changes
- Discuss need for sampling additional areas



Scale Issue

- Thoughts on the 2 general methods?
 - 1. Develop guidance to fit as many scenarios as possible
 - 2. Rapidly convene ad hoc Advisory Committee



IV. MDE Process for Identifying and Documenting Existing Uses

**What is the process for identifying an existing use?
How should the information be disseminated?**

- Depends on our approach to establishing spatial scale
- Timely information dissemination is the key!



Draft MDE Process for Identifying and Documenting Existing Uses (using Scale Approach 1)

1. Coordinate stream monitoring activities for the purpose of use class evaluation or when use class change anticipated
2. Data documenting presence of cold/coolwater species are submitted to MDE's Water Quality Standards Section (WQS);
3. As soon as possible, data and required information are vetted and evaluated by the WQS using the guidance/policy, Scale is determined by guidance rules;
4. WQS finalizes informational materials for web posting and sends notifications to interested parties;
5. WQS works with Committee members to identify data gaps and share monitoring burden.



Draft MDE Process for Identifying and Documenting Existing Uses (using Scale Approach 2)

1. Coordinate stream monitoring activities for the purpose of use class evaluation or when use class change anticipated
2. Data documenting presence of cold/coolwater species are submitted to MDE's Water Quality Standards Section (WQS);
3. As soon as possible, data and required information are vetted and evaluated by the WQS;
4. WQS notifies appropriate advisory committee participants and schedules face-to-face meeting;
5. WQS creates data summary materials for posting to web and for Advisory Committee members, drafts scale recommendations for discussion;
6. Advisory Committee meets and reaches consensus on determining geographic extent of existing use (scale);
7. WQS finalizes informational materials for web posting and sends notifications to interested parties;
8. WQS works with Committee members to identify data gaps and share monitoring burden.



MDE's for Identifying and Documenting Existing Uses

- Thoughts?



V. Wetlands & Waterways Permitting Synopsis

- A brief synopsis of this permitting program
- Summary of where it intersects with existing uses



Waterway Construction Regulations

- Annotated Code of Maryland, Environment Article, Title 26, Subtitle 17, Chapter 04 : Construction on Nontidal Waters and Floodplains
- Any activity which changes the course, current or cross-section of waters of the State requires a permit.



Functions of the Division

- Review applications for activities that change the course, current or cross-section of waters of the State, and we issue permits and authorizations to proceed (ATP) allowing these activities if they comply with the regulations. This is done in close coordination with the Nontidal Wetlands Division as projects frequently have both waterway and nontidal wetlands impacts.
- Interpret the regulations when questions are asked
- Coordinate with compliance and enforcement as needed
- Assist potential applicants and other interested persons in understanding what is regulated and what the process is for obtaining approval



Typical Applications

- Dams and reservoirs
- Bridges and culverts
- Excavation, filling or construction
- Temporary construction (e.g. utility lines)
- Repair and maintenance
- Stream restoration



Application Review Process

- Purpose and Need
- Alternatives Analysis
- Avoidance & Minimization



Regulatory Requirements

- Ability of all on-site construction to withstand the impacts of the 100-year flood event;
- Flooding on adjacent properties;
- Erosion of the construction site or stream bank;
and
- Environmental effects, such as the project's impacts on existing in-stream fisheries; wildlife habitat; or rare, threatened or endangered species.



Waterway Closure Period

- Every waterway in Maryland has an in-stream closure period during which work in the stream channel should not be done - COMAR 26.17.04.11 B (5) - "(5) Proposed projects that eliminate or significantly and adversely affect aquatic or terrestrial habitat and their related flora and fauna are not in the public interest. At a minimum, all in-stream construction shall be prohibited from October through April, inclusive, for natural trout waters and from March through May, inclusive, for recreational trout waters. In addition, the construction of proposed projects, which may adversely affect anadromous fish spawning areas, shall be prohibited from March 15 through June 15, inclusive."
- Since the closure period is there to protect aquatic life, we coordinate with DNR regarding any requested waivers to this requirement.



Coordination with Federal and State Agencies

- During the Application Review Process the Division Coordinates with the Following Agencies on an As-Needed Basis:
 - U.S. Army Corps of Engineers
 - U.S. Fish and Wildlife Service
 - Maryland Department of the Environment Programs (e.g., Dam Safety, Mining, Water Appropriations)
 - Maryland Department of Natural Resources (i.e., Critical Area, Environmental Review, Forestry, Wildlife and Heritage)
 - Maryland Historical Trust



Wetlands & Waterways Permitting Process

- What options do permit writers have when modifying permits when an Existing Use has changed?
 - MDE has published standard turnaround times- 8 months for minor projects, 12 months for major projects , 90 days for stream restoration projects when no public hearing is requested
 - The earlier in the process the better, pre-application meeting is optimal, but by Day 45 after an application is received may be best case for MDE and the Applicant. MDE can add Special Conditions into a permit for protections as necessary, but scientific data is needed for the justification, if the Existing Use has changed.



Wastewater Permitting Approach

Approach for Effluent Compliance with Thermal Requirements (For Existing Municipal Facility)

Phase I

Determine Reasonable Potential (RP)

Monitoring Requirements (Effluent & Receiving Stream)

Will be required in the discharge permit

Phase II

Evaluate Path Forward (If RP is confirmed)

A schedule for Submission of Studies & Plans will be required

Phase III

Implement Selected Option

Ex :

1. Set Site specific mixing zone
2. Implement "Temperature Management Plan" on the treatment works to reduce thermal load discharged.
3. Implement riparian or in-stream thermal mitigation practices.
4. Set Alternate Effluent Thermal Limits

* A compliance schedule will be placed in the permit



Sediment, Stormwater, and Dam Safety Permitting

- NPDES – MS4 Permits
- Federal and State Projects
- Dam Safety



VI. Conclusion

- Review of Action Items
- Next Meeting