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Governor

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Environmental Quality Commission
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Scott Smith, Chair, *Lexington*
Jason DeLambre, Co-Chair, *Lexington*
Dr. Kimberly Holmes, *Lexington*
Tom Herman, *Louisville*
Laura Knoth, *Grand Rivers*
Martha Tarrant, *Lexington*
Mark Grisham, *Paducah*

EQC Annual Meeting
Capital Plaza Hotel, Frankfort, KY
June 28-29, 2012
Meeting Minutes

Thursday, June 28, 2012

EQC Commissioners Present:

Scott Smith
Jason DeLambre
Martha Tarrant
Mark Grisham
Laura Knoth
Tom Herman

Staff Present:

Arnita Gadson, Executive Director
Janet Pinkston, Temp

Meeting called to order at 10:10 a.m. by Chairman Scott Smith.

Opening discussion referencing EQC recommendation on flooding in Eastern Kentucky.

Issues:

A Drought Task Force
Amounts of uncontrolled rainfall
Need for Corps of Engineers modeling – Sec. Peters
Need for further study

Motion for follow-up on recommendations was given by Tarrant, 2nd by Knoth. Unanimous vote for approval.

Purpose of the meeting

Informal work session to discuss upcoming agendas
Prioritization of concerns
Maintain flexibility to address issues as they arise

The State of the Kentucky's Environment, publication:

- Environmental Law Section being added
- Basis provided by University of Louisville law students under the leadership of Professor Tony Arnold, an endowed chair and land use law professor and specialist. Law students must have a pro bono project as part of their curriculum assignment. This was used as their public service project
- Jim Dickinson from the Department of Natural Resources, an environmental attorney provided comments.
- Tom Fitzgerald, environmental attorney and executive director of the Kentucky Resource Council will provide comments

(Referencing Open Meetings and Open Records booklet from LRC):
This year, EQC will be added to the list of commissions required to submit conflict of interest forms.

Purpose of meeting

To provide an opportunities to review past efforts
To decide on future issues, agenda items and meeting dates.

Minutes from May 17, 2012 meeting

Tarrant corrected the name of "Pikeville College" to "University of Pikeville."

Smith added last name of Lindell Ormsbee of KWRRI.

Minutes - final vote on Friday

TMDL's - concern due to lack of access, community involvement and understanding.

Speakers:

Clark Dorman and Peter Goodman from Division of Water

Developing water quality standards.

Water regulations were brought to the meeting and discussed. A description of the process of monitoring and assessing data with timeline rotations was given.

Both analytical and biological assessments were discussed.

Creeks and water bodies throughout the state are identified that are the healthiest and that most accurately depict what should be there and in what format.

In Eastern Kentucky, unless in a mining area, we find reference reaches often, but in the Bluegrass and extreme western part of the state, it's difficult. Our quality standards are not straightforward due to the evolution of the Clean Water Act over the years. DOW is making strides to reconcile this.

The state has various water quality standards, numeric and narrative along with a number of different water quality programs.

Every five years bi-monthly sampling is done.

In the reference reach network, streams are monitored that are known to have reference reach conditions. Many are Outstanding State Resource Waters. Due to work with EPA out of Oregon to develop sampling sites, taking random sites to develop accurate conclusions, these can be projected elsewhere in the watershed.

We do bacteria i.e. pathogens, predominantly e-coli; also, fish tissue and special projects—wetlands assessment, major rivers, determining the health of big water and moving water, SOCs and VOCs.

Once in a large river mostly what is found are quasi-invertebrates off the bottom. Big river protocols are still being developed. Perimeters include bacteria water chemistry, fish habitat, algae and others.

How far off from a reference reach does a stream have to be when declared impaired?

Rankings of excellent, good, fair and poor are the indices to score biology of streams based on their content and what should be there. When scored below good, the stream is considered impaired

There are different indices for bugs and macro-invertebrates.

To involve the public in the impairment process there is a 305b biennial report. The electronic version is an annual report. A full-blown public notice process on 303d list, which is a sub-list of the 305b report, is for public comment. The Watershed Management Branch outlines the cycle on a 5-year approach.

The specific watershed information is located on the water management branch website. DOW's branch outlines the cycle.

Community, cities and industries should be engaged to solve water quality problems prior to the final TMDL report.

DOW is obligated under the Clean Water Act as a designated agency for certain monitoring. Funding and grants are received for TMDLs themselves.

For the watershed-based plan, people are engaged at different levels. Most watershed plans are done to restore impaired waters. It is easier and cheaper to preserve healthy watersheds than fix impaired watersheds. A 305b data report is done, and from that, a 319d list, which says the stream is impaired for X, Y and Z pollutants.

The power of the TMDL lies in the sources of pollution that are identified. For non-regulated sources of pollution, it is a voluntary measure.

More resources and flexibility is needed. TMDLs on bacteria are very simple, they have a standard.

The largest impairments are 1) pathogens 2) sediment and 3) nutrients. Coliform bacteria are used as measurement. Mammalian waste is a surrogate for other pathogenic organisms. E-coli is the standard test used because it is cheap and easy. It gives opportunity to do more detailed analysis but it is more costly. Nutrients are almost exclusively nitrogen and phosphorous.

Excess nitrogen and phosphorous in freshwater systems creates problems with variations in dissolved oxygen, as there is excessive algae growth. Nutrients are highly dependent on slope, riparian habitat, substrate, and flow.

DO, pH fluctuations and excess nuisance algae growth etc. -- are symptoms of eutrophication, it's a concept of when a stream has too much fertilizer in it. There are many small sewer plants that historically don't remove organic carbon and nutrients. Streams are impaired by OEDO, (organic enrichment dissolved oxygen), that can be attributed to sewer plants that treat waste improperly, along with natural run-off.

In Pennyryle and Bluegrass, there is excess natural phosphorous. The newer fertilizer applications give soils more phosphorous and nitrogen than they can handle or store.

There are legacy sediment issues, excess phosphorous in the soil will continue to exude out over long periods. Good practices can be used over a long period of time, but when the soil is saturated with more phosphorous than is needed, it will continue to exude. Excess phosphorous changes as generational changes needs to be viewed. Sediment in streams has much nitrogen and phosphorous in it. Nitrogen cycles are volatile, phosphorous not so much. How it moves in and out is not well understood.

Every stream in Kentucky almost had a mill dam because of our practices in logging and farming for centuries. It took a large amount of soil in the treed and vegetated uplands to disrupt it. It ended up in the stream valley. It then forms streams with a big mud bank that are unnatural. The natural stream is difficult to locate. All streams should not look disconnected from their flood plain. The habitat will re-establish itself, but when it rains, when water is introduced through a storm system, it is mobilized.

When stream velocity exceeds sheer stress of sediment and starts stripping sediment out of the banks, bacteria, nutrients and phosphorous are remobilized and habitat problems are created.

Refer to KYR10, general storm water construction permit, if someone is on a construction site. Look at the water coming off of vegetation, turbidity is OK.

DOW has dealt with pathogen TMDLs for better or worse, and there are challenges with MS4 communities. DOW is starting to grasp nutrient TMDLs. There is continuing research on how to approach sediment.

For habitat, and clean air, and providing green corridors and beautification, it's much bigger than just water quality.

The comment period is open for 30 days, however more can be requested.

The Clean Water Act says the impaired waterways must be returned to its designated use.

Requirements will be on stormwater permits. There is substantial impact if:

- you're on an impaired water, or
- if discharging into an impaired water, or
- if you want to develop something on an impaired water

Things that need to happen:

- Let people know what primary watersheds are being worked on in that year, i.e., display "We're in this area now" on the website making the Kentucky Association of Manufacturers, the League of Cities and the Ag people aware when data is being gathered, long before an assessment is made.
- More advertisement.
- Heighten awareness with associations around the state. .
- Better job of maintaining the website. Make it more user friendly. Challenge: It is restricted by Americans with Disabilities Act.
- Reports should be easier to understand.
- Public should be aware of the modeling process. It has a tremendous financial impact.

When regulations and statutes on major issues are developed, it involves stakeholders. This has not been done with TMDLs

The impact of the South Elkhorn TMDL in Lexington and others in the area are somewhat different, they're under a consent decree. Those who write them are technical writers who may not be accessible. It is all done in house.

Under the Clean Water Act Section 106, monies were distributed to states, part of which gave weight to the number of impaired streams in each state. It appeared to be a reward for having bad water quality. North Carolina and Mississippi listed huge areas, so the number of impaired stream miles increased; therefore more 106 money was awarded.

Discussion on Floyds Fork

The Floyds Fork process is flawed. No one knows their area better than the people who live there. The conversation should be opened early in the process to provide comfort for those affected.

The Facilitation could have been better managed.

History of the project: DOW has been in that watershed since 1980. Money was designated for a Floyds Fork watershed plan. It was presumptive, more discussion is needed. There is potential for success.

Disproportionately, it will fall on Lagrange, MSD and Oldham County. These are DOW regulated. Conservationists and subdivision homebuilders are proposing to build in corridors; they are ahead of the TMDL curve. Some do not want development.

Concern:

First TMDL in the state for nutrients was spearheaded by EPA and was not done in a cooperative matter.

The Commonwealth takes over in November when this contract becomes effective. It does not mean the TMDL is completed. If the model comes to DOW flawed, the public will be re-engaged. It will be a continuous process. No copy of the model has been received.

Concerns on public presentation:

- Presentation was not presented well

- Requested questions on a 3x5 card
- Needed to ask public to list their concerns
- Needed to ask participants for input on the model at the event
- Notification to cities regarding their impaired waterways
- Explanation of “What is a model”.
- There is a disconnect when advising communities on moving forward

MS4s are like farms. Different parts do different things; advice to landowners will be different. Menus, choices and metrics on how to measure their water quality goals must be distributed. It will be an expensive demonstration.

In an MS4 community, the challenge is to slow the water to slow down pollutants. Sheer strength remobilizes sediment; slowing water down slows down pollution settling into the stream.

Affordability?

In the CSO policy it’s clearly spelled out in the federal regulations. Secondary waste water treatment standards are technology based permits based on cost of technology and available maximum contaminant levels.

There is difficulty in trying get to what is affordable versus what is needed at the community level. To provide assistance, it must be decided what is practical for that community.

Narrative standards – advantages vs. disadvantages

Protective measures can be developed based on the personality of a specific watershed. If narrative standards continue to be used, the challenge will be implementing them in a numeric or action format. For example, DOW has been creative in matching BMPs with biological and water quality monitoring, stating how the narrative will be implemented.

Another way is to know what nutrients a stream can take, and end up with numeric interpretation, but numeric interpretation should be designed for that specific watershed and segment of it. Numerics are easier to manage legalistically.

The standard set for runoff is in the permit. It must meet the standards at the discharge point, like dissolved solids unless otherwise stated. DOW does not ask for runoff to be measured. It is best to put in alternating practices.

EQC can help support efforts. EPA will change the water quality standards which means more impaired waters, more TMDLs and more conversations.

At EPA, volume is not important. Because of budget changes, the 17 percent cuts will be passed on to the states.

The economic implications of that for activities other than coal mining will be astounding. There will be a push toward numeric criteria and there is no agreement within state government on that. There is tremendous uncertainty- no bright line on where that number should be. Kentucky has a fair amount of research and data compared to other states. The TMDL will give us opportunity there, but it will be a slow process.

We need to listen more to other states, i.e., Chesapeake Bay and Florida, incorporating what's good in our programs. We all can benefit. They have learned the other sources of nutrients.

The link to 303d list is on the DOW website. It is a powerful tool that needs to be maximized.

Courier-Journal inquiry – Jim Bruggers reporter
Concerns

- EQC commission is too industry heavy
- Will do an open records request
- Wants to see recommendations
- Questions lack of strength as in the past
- Lack of Staff
- Was impressed with our updating the EQC publication

Discussed:

Impacts on Historic sites in regards to construction permits

Lunch

The afternoon session was dedicated to discussion of the Environmental Law section of the EQC publication, Environmental Law Section

State of the Kentucky's Environment discussion

- Environmental Law Section added
- Basis provided by University of Law Students under the leadership of Professor Tony Arnold, and endowed chair and land use law professor and specialist. Law students must have pro bono project, money is attached. This project was used for their public service project.
- Jim Dickinson , Department of Natural Resources, an environmental attorney provided comments,
- Tom Fitzgerald, environmental attorney and executive director of the Kentucky Resource Council will provide comments.

Meeting ends at 4:40 p.m.

Friday, June 29

Meeting called to order at 8:35 a.m. by Chairman Scott Smith.

EQC Commissioners Present:

Scott Smith
Martha Tarrant
Mark Grisham
Laura Knoth
Tom Herman

Staff Present:

Arnita Gadson, Executive Director
Janet Pinkston, Exec. Assistant

Continued discussion on Environmental Law section of the State of the Environment publication in development.

Recapped water discussion of day before.

Meeting dates for 2012 and 2013 with possible topics.

2012 meeting dates:

Aug. 30th
Oct. 25th

2013 meeting dates:

Jan. 31
March 14

April 12 - Earth Day Awards ceremony

June 5 and 6, 2013 - Annual meeting

Possible topics mentioned:

- Fracking with presentation by Brandon Nuttal
- Energy efficiency with presentation by John Davies, Lee Colton and Greg Guess
- Census data—Ron Crouch
- State's energy efficiency initiatives.
- January for Division reports
- Update on water and TMDLs
- No formal response to GIS and Pikeville recommendations

Follow-up - Motion for response request made by Grisham, 2nd by Knoth
Voted unanimously

May 17, 2012 minutes: Knoth suggested less detail, not recreating conversations. Recommend to include Power Points references.

Grisham made motion to approve minutes, Herman 2nd, Minutes were approved with corrections.

Status of Office

Concerns:

- Temp cannot train on specific software
- Need for permanent position
- Requested written recommendation from Commission

Return to topic of assessment of state waters:

Concerns:

- Not pleased with water quality standards and TMDLs
- No transparency
- Only 30 days for public comment period, 2 years for federal government
- Need community friendly language
- Inform public regarding assessments, where, when, how, etc.

Concerns:

- Law suits
- Floyd's Fork as a test run
- Technical Document for engineers
- Boiler plate document that is easy to follow
- Public meetings
- Farmers input
- Inclusions of impaired waters
- OSRW list
- Maps of impaired waters

Smith: Will write letter on assessment of state waters and development of TMDLs.

Grisham made the motion for same and Knoth seconded. Vote was unanimous.

Final Recommendations:

- To develop water information - TMDLs on impaired waterbodies prior to being specified as "impaired".
- Communities need to understand what assumptions were made that labeled water bodies "impaired".
- Letter to Secretary – process should be transparent to the public on TMDL's, i.e., Floyd Forks.

Motion to adjourn made by Herman, 2nd by Tarrant
Meeting ended at 10:40 a.m.

THESE ACTIONS, ALONG WITH THE AGENDA ITEMS, MAKE UP THE OFFICIAL MINUTES, WHICH ARE ON FILE IN THE OFFICE OF THE SECRETARY

Signed by:

Scott Smith, Chairman

Date: _____