

**Sustainable Water Management Initiative
Advisory Committee Meeting Summary
October 26, 2010
DRAFT**

Attendees

Committee Chairs: Laurie Burt, MADEP; David Cash, EOEEA; Mary Griffin, MADFG; Jonathan Yeo, MADCR

Committee Members: Ralph Abele for Ken Moraff, USEPA; Kathy Baskin, EOEEA; Lee Breckenridge, Northeastern Univ.; Jack Buckley, MADFG; Anne Carroll, MADCR; Alan Cathcart, Mass Water Works Assoc.; Steve Estes-Smargiassi, MWRA; Phil Guerin, Worcester DPW; Scott Horsley, Horsley & Whitten; Jeff Lafleur, Cape Cod Cranberry Growers Assoc.; Jennifer Pederson, Mass Water Works Assoc.; Sarah Slaughter, MIT; Mark Smith, Nature Conservancy; Peter Shelley, Conservation Law Foundation; Martin Suuberg, MADEP; Margaret Van Deusen, Charles River Watershed Assoc.; Tom Walsh, Upper Blackstone WPAD; Peter Weiskel, US Geological Survey

Other Attendees: Sue Beede, Mass Rivers Alliance; Julia Blatt, Mass Rivers Alliance; John Clarkeson, EOEEA; Karen Crocker, MADEP; Rebecca Cutting, MADEP; Jeff Davis, Donahue Center; Jen D'Urso, MADEP; Richard Friend, MADEP; Bruce Hanson, MADCR; David Kaplan, Cambridge DPW; Tom Lamonte, MADEP; Duane LeVangie, MADEP; Steve Long, Nature Conservancy; Kerry Mackin, Ipswich River Watershed Assoc.; Elizabeth McCann, MADEP; Steve Pearlman, Watershed Action Alliance; Tom Philben, MMA; Tim Purinton, MADFG; Vandana Rao, EOEEA; Peg Stolfa, MADEP; Eli Terrace, Intern

Meeting Objectives:

Receive updates from Technical and Implementation Tools Subcommittees
Begin to narrow in on viable options for safe yield, streamflow criteria, and sustainable allocation

Action Items resulting from today's meeting:

Meeting Notes:

NOTE: All presentations and handouts referred to in the notes may be found on the Advisory Committee Resources web page at http://www.mass.gov/?pageID=eoceterminal&L=5&L0=Home&L1=Air%2c+Water+%26+Climate+Change&L2=Preserving+Water+Resources&L3=Sustainable+Water+Management&L4=Sustainable+Water+Management+Advisory+Committee&sid=Eoeoa&b=terminalcontent&f=eea_swm_adv_comm_resources&csid=Eoeoa

Welcome & Introductions

David Cash (Chair) thanked everyone for their patience and dedication to the process to date. He reminded everyone that the presentations offered are not formal proposals, but remain ideas for discussion

Jeff Davis, our facilitator reminded us all that as the Committee moves toward drafting a proposal, people are getting more positional

- We understand frustration of a timeline driven by a court case, permitting deadlines, etc. but
- Please refrain from positional statements
- If using the term “we” (as in “we believe”), then identify who you are speaking for – identify the “we”

Scheduling

The Chairman outlines steps going forward to draft a proposal, take it to the Water Resources Commission and briefing other Agencies, drafting regulations and implementation

- Suppliers expressed some concern about their representation on the WRC – seats remain to be filled as of the date of this meeting.
- DEP will work to have a complete regulations package as soon as possible, but will need plan for moving forward in the interim

- Currently, DEP is seeking guidance
 - on whether permit extensions can be issued in the interim
 - on whether goals of the SWMI initiative could be incorporated into permits at regulation promulgation, or at the first five-year review if permits are issued prior to regulation promulgation

Streamflow Criteria

See presentation "Streamflow Criteria: Approaches and Possible Applications" offered by Duane Levangie (DEP).

Stream Categorization Option

Based on Fluvial Fish Abundance

- Basin characteristics (at 1,429 nested subbasin scale)
- Percent Alteration of August Median Flow
- Percent Impervious Cover

Categories

1. 0 – 5% Near Natural (relatively unimpacted)
2. 6 – 13% Minor Alteration (intact communities of good quality)
3. 14 – 32% Moderate to considerable changes in structure (Species diversity altered by loss of sensitive species)
4. 33 – 60% Major Alteration in structure and function
5. 60% Severe Alteration in structure and function

Potential Approach to Goal Classes

- Basin characteristics (1,429 subbasins scale)
- Uses DFG Classification as overall framework (fluvial fish abundance, indicator species)
- August flow alteration – addressed through Water Management Act
- Impervious cover – addressed through NPDES, wetlands regs, SW regs

Goal Class Hydrologic Alteration

1. Very high value waters (ex., stream Categories 1 and 2)
 Possible certain coldwater fishery resources
2. High value waters (ex., streams not in Goal Class 1 or 3)
3. Multiple use waters (ex., waters below large water withdrawals and impoundments, potential productive aquifers [PPA] underlying rivers and streams)

Discussion:

- Comments received to date indicate that peoples are unsure how to react to SWMI efforts until they know how the modeling will be used and implemented/how change will be measured going forward and incorporated
- There is concern that
 - Cold water fisheries must be preserved
 - Resource exist now but may not in 10 years time due to climate change, development and IC
 - WMA permit should protect resources from future stresses
- There is concern that
 - impervious cover (IC) has turned out to be a much larger factor in fisheries degradation than anticipated, but WMA withdrawal permits are the only lever/tool available to address problems
 - In many areas with degraded fisheries there are no permitted water withdrawals
 - In many areas it appears that cutting back on water withdrawals might be difficult, expensive and limit economic growth without measurable improvements to fisheries
 - the model does not give enough information on the inputs that are causing degradation which would guide criteria development and goals implementation

- USGS pointed out that the inputs are in the background of the modeling/IC is a surrogate for many inputs in highly developed areas
- Criteria needs to be developed to drive smart decisions
- If Smart Growth is to be considered, is there to be a factor of including where the water is in Smart Growth considerations? Smart Growth usually promotes promoting development where the infrastructure is. Could this lead us to the notion that development would be promoted where the water is? This may become counter-productive in terms of ecological protection
- There is concern that
 - Coldwater fisheries cover a lot of the state (particularly the western part) and emphasis on coldwater fisheries without an “off-ramp” could decrease the reliability of public water supplies
 - Emphasis on restoration of Category 4 and 5 basins could drive development to less-impacted areas, undermining Smart Growth concepts of sending development to existing infrastructure
- WMA will need “off-ramps” to allow permits in Category 1 basins (particularly in western MA), and avoid “writing off” category 3 areas
- Sub-Committee is working to develop a water supply metric that will allow identification of prime water-supply areas, then SWMI will have tools to compare water supply needs vs. fisheries needs in areas that have potential for both
- There are pros and cons to supply reservoirs, upstream protected watersheds provide excellent fishery habitat while downstream there are clear flow impacts

Committee Chair’s Observations:

- Chair is seeking input from committee members on how to maintain multiple uses per the WMA as part of the SWMI process
 - Do we want a holistic outcome showing suppliers where to go
 - Should we develop a system to direct future growth to less stressed basins?
- Has not heard wide-spread agreement among members that Category 4 & 5 basins should be improved to Category 3 as a matter of state policy
 - Site specific goals will need to be set around the state
 - We need a fine-tuned understanding of an area in order to set goals
 - They will be site specific

Safe Yield

See presentation “Safe Yield Update: Possible Components; Moving Forward” offered by Anne Carroll (DCR).

Safe Yield: Option 1: Monthly Q90, annualized
 Option 2: Minimum Year in period of record (recurrence range <Q75 to Q90)
 Option 3: Monthly Q80, annualized

Env. Protection Factor: Option: Use 25% of August Median Flow (AMF) as target for Safe Yield, therefore 75% August Median flow for EPF

- Translates to 30% loss of fluvial density

Option: Determine portion of August Basin Yield equal to fraction that represents 25% of August Median (for Ipswich and Charles, ~50%)

- Apply percentage to other months
- Consider using lower percentages in non-summer months

Clarifying Questions:

Committee members ask:

- That an additional 10% EPF set-aside be added to provide additional protection for fisheries will be incorporated
- That SY set a cap in depleted subbasins
- SY is a screening level tool
- Failures at the subbasin level will be addressed in streamflow criteria and through the allocation process

Further Discussion

- Offsets should be considered within the allocation methodology
- Where do we bring in economic development and other secretariats in the discussions which may impact their agendas as well
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Basins with Withdrawals Exceeding Safe Yield

What is the path forward if/when Safe Yield is exceeded?

Discussion:

There should be distinction between existing vs. new withdrawals

- Existing Withdrawals – Permits are long (20 years) and include tools (permit conditions on conservation, outdoor water use, offsets, etc) for moving existing permittees back below SY
- New Withdrawals - Could an applicant come in with a packet of options for offsetting 100% of withdrawal and get a permit

For existing permittees who exceed SY

- Could they be given better opportunities to tap into a larger existing source when one is available

What happens if a permittee cannot go elsewhere and cannot get below SY?

- Is there a level at which it is too hard to push? If meeting SY means 35 rgpcd and it cannot be achieved, then what? Do we expect people to move?
- Will there be state help to address a problem the towns cannot fix on their own
- The higher the EPF, the more community water supplies will be put at risk
- SY and EPF as presented could present health and safety risks in “watershort” communities.
- Will this create water short communities vs. water rich communities

There should be NO distinction between existing vs. new withdrawals

- SY must be set for the most constrained period
- SY and EPF should be strongly focused on keeping species in place
- SY needs to address depleted subbasins and cap withdrawals
- How will this restore my river?
- Criteria cannot be tailored goals (fisheries, water supply) for subbasins, all Category 4 & 5 subbasins must be restored for fisheries

Ideas put forward for reducing water use

Zero lawn watering (already happens in many communities) - Mandatory roof run-off and recharge - IC remediation - Regional stormwater capture/treat/reuse systems - Buy-out of water users - Raise the price of water

Wrap-Up & Next Steps

The schedule of upcoming meetings will be updated on the SWM website (see above).

As of the posting of these notes, the December meeting schedule is:

Wednesday December 8 1:00 PM to 3:30 PM
SWM Technical Subcommittee
100 Cambridge St, 2nd floor
Boston, MA

Tuesday December 14 10:00 AM to 12:30 PM
Advisory Committee
100 Cambridge St, 2nd Floor
Boston, MA

A follow up note from Jeff Davis, our facilitator, sent via email 29 November 2010.

Hello SWMI Committee Members and Stakeholders;

We welcome your input on the Sustainable Water Management Initiative. As a reminder, our guidelines are to send input to Kathy Baskin (Kathleen.Baskin@state.ma.us) who submits it to the appropriate entity for consideration: the Advisory Committee, the Technical Sub-Committee, the Steering Committee, or David Cash, EOEEA's Assistant Secretary for Policy.

Thank you for your continued cooperation regarding the submittal of comments. We look forward to keeping our momentum going in a positive direction, using direct communication in our committee and sub-group meetings.

Jeff Davis
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