

The Sustainable Water Management Initiative: How It Affects All of Us

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Water Management Act

- The current regulations that the District operates under that allows for the withdrawal of water has been in effect since 1986
- It is under DEP, WRC and DCR jurisdiction under the direction of the EEA
- Water Management Act Registered Volume and Permits
 - Registered volumes have always been dealt with as “grandfathered” and would in perpetuity



Water Management Act Continued

- The Water Management Act (M.G.L. c. 21G) became effective in March 1986. The Act authorizes the Massachusetts Department of Environmental Protection (MassDEP) to regulate the quantity of water withdrawn from both surface and groundwater supplies. The purpose of these regulations (310 CMR 36.00) is to ensure adequate water supplies for current and future water needs. The Water Management Act (WMA) consists of a few key components, including a registration program and a permit program.
- Large water users had the ability to register their existing water withdrawals based on their water use between 1981-1985. The registration program established the renewable right of previously existing water withdrawals over 100,000 gallons per day (gpd) on average, per river basin, between the years of 1981-1985. MassDEP issued registration statements to document these registrations. The last day to register was January 4, 1988.



Sustainable Water Management Initiative (SWMI)

- Started with conversations about safe yield and streamflows roughly 5 years ago
- Original definition by DEP of Safe Yield came out; Watershed Groups resigned from the Water Management Act Advisory Committee and Governor re-assessed the definition
- In February 2012 the SWMI Framework was released by EEA



Water Supply Concerns

- The Framework creates a new regulatory review and control mechanism which will reduce the reliability of supply and increase cost of services
 - Water Mitigation includes increased demand management
 - Habitat improvement
 - Storm and Waste Water Improvements
 - Needs to have reliability and accuracy of predictions of any change in biological category with flow levels in a sub-basin before Water Suppliers and ultimately the rate payers are required to commit resources towards planning and implementation of these mechanisms



Water Supply Concerns Continued

- The underpinning science behind the Framework does not merit the regulatory controls being imposed on Public Water Systems
 - Foundation for the development of the Framework's biological categories and streamflow criteria is based upon a model developed by USGS & Mass Division of Fish and Wildlife
 - Accentuates an association between withdrawals and fish abundance but not a cause-effect relationship
 - Diminishes more significant influences (water quality & geography)
 - Further modeling to quantify this association shows very weak correlation between actual fish sampling data & modeled results



- MWWA hired an independent environmental firm (TRC) to evaluate the USGS report with respect to the Framework. Five case studies were conducted.
 - TRC found no linear relationship between streamflow depletion and fish counts as predicted by the framework's model
 - The model did not hold true when looking at actual fish counts and streamflow data
- The Framework's goal of minimizing existing impacts of water withdrawals on streamflow and/or offsetting & mitigating additional water withdrawals will not result in observable improvements in fish populations

- Overall water use is decreasing; meaning that the impact of water supply on streamflows is much less than thought and that demand management through conservation has shown to have a de minimus impact
 - Chelmsford Water District has met State Water Conservation Standards
 - District Total withdrawal numbers have declined due to these efforts
 - Fish counts and modeling still shows sub-basins will be at risk



- DEP is now using a concept they call “baseline” to benchmark and cap water use and withdrawals
 - Does not accommodate economic growth
 - Any additional usage above “baseline” will need to offset or mitigated
 - Does not accommodate for a communities capital improvements based upon the permitted withdrawal amounts
 - Water Management Act already contains many water conservation standards 65/10 rules and water use restrictions; SWMI does not take these into account and may penalize those systems already performing them

SWMI Affects to Us

- Probable loss of reliable and planned for supply and thereby revenue
 - Water Infrastructure Finance Committee released their report this month, in which it is stated that Statewide there is a **\$10.2 Billion** funding gap which is only for current regulations and mandates for the next 20 years
 - There will be no accounting for the strides the District has already undertaken in the area of water conservation nor any recognition of the resources already committed
 - Communities and Ratepayers will be asked to carry the costs of any mitigation **without proof or assurances** that the measures will bring about the desired and stated goals of SWMI



SWMI Affects to Us

- As Safe Yield is now defined via a settlement between DEP and the river advocates after their resignation, it is now to have environmental protection factors
 - Statutory definitions in MGL 21G makes no allowances for such protection factors
 - MWWA questions the legality these factors
 - Existence of “double jeopardy” for Water Systems in that these protection factors will exist in both Safe Yield and Streamflow Criteria



Conclusion

- In the simplest terms:
 - Loss of potential growth
 - Increase in the daily costs
 - Loss of resources needed for current day issues and mandates
 - No proof that it achieve stated goals
 - Putting “environmental needs” over human needs
 - Creates an unsustainable fiscal framework for water systems and communities



What the District is looking for and trying to do....

- In part, this was to formally advise you of SWMI
 - Bring Public Attention to the Issue, Locally
 - Help with Legislative Support
- Look for the Town's support in any actions against SWMI
- Prepare the Community for the possible effects

