Water Issues Affecting Farmers in Massachusetts

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UMASS EXTENSION
Major Water Issues

- Wetlands Protection
- Tailwater recovery
- Manure Management
- E. coli/Food Safety
- Hydro-electric Companies
- Well Placement
Wetlands Protection Act

- Broad exemptions for agriculture, although land has to have been considered “in agricultural use” during the past 5 years
- May be considered “active” even during years of no harvest
- Bringing farmland back into production can be done with the right permits but costly due to environmental assessment. Can take years to complete
  - Farm pond now a ‘wetland’ and add a 100’ buffer
Example criteria for “maintenance” in cranberries

- is directly related to producing or raising cranberries,
- is conducted in a manner that prevents erosion and siltation of nearby water bodies and wetlands
- is not expanded in size (such as creeping production into unfarmed areas or expanding the size of a pond),
- does not result in substantial fill of floodplains (“substantial” meaning an amount that would cause flood waters to flow elsewhere), and
- is conducted in accordance with all federal and state laws
Tailwater recovery

- System designed (NRCS criteria) to collect excess irrigation/runoff for later reuse
  - MA owns all the water in the state
Manure/nutrient management

- Farmers are faced with a surplus of manure due to the selling of land
- As nutrient and water quality requirements get stricter, farmers are finding it increasingly difficult to manage manure (EPA/navigable)
- New nutrient management regulations are being developed (limitations on quantity and timing)
- Compost is also a part of this (P)
- Food safety regulations will affect this further
Water testing results have been reported to be elevated in E. coli counts.

Farms are usually highly suspect in such cases. However, further investigation often reveals other sources – geese, septic systems, etc. The ability to speciate E. coli exists, but it typically isn’t done.

Food safety standards make this issue even more important.
Food Safety Issues

- Water testing recreational/potable
- Uncontrolled Sources
  - What’s happening upstream
- Manure management
- Livestock management
Electric Generation

- Water access issue
- Hydro-electric plants can control what other use
  - Are we making electricity or keeping our food supply alive
Well Placement

- New wells as municipalities grow
- Wellhead protection
  - Zone 1: 50 ft
  - Zone II: recharge area can exceed ½ mile

Impacted activities
  - pesticide use: ‘groundwater protection list’
  - manure use and storage
Conclusions

- Many issues affecting agriculture
- How much regulations is too much
  - Are standards appropriate
  - Do they conflict
- Can a planned expansion in local food supply actually happen with existing regulatory framework