HB 894 Stakeholder Meeting
July 26, 2016

Department of Environmental Quality
Jay Frick
Today’s Objectives

Presentation Outline:

• Review the legislation
  What were we instructed to do?

• Review our approach
  What has shaped our direction?

• Introduce the draft rules
  What will be required of water systems?
Review the Legislation

Charleston, W Va
4-MCHM released into Elk River

Eden, NC
Coal Ash released into Dan River
HB 894 - AN ACT TO IMPROVE SOURCE WATER PROTECTION PLANNING

§ 130A-320 (c)
Every supplier of water operating a public water system treating and furnishing water from surface supplies shall create and implement a source water protection plan.
§ 130A-320 (c)

The Commission shall adopt rules that provide:

(1) Standardized SWP planning formats and elements

(2) Schedules for creating, implementing and updating the SWP plans

(3) Reporting requirements to the agency
Legend

Surface Water Sources

WSW Class (Count)
- WS-I (14)
- WS-II (51)
- WS-III (36)
- WS-IV (93)
- WS-V (3)

County Boundaries
Input that helped establish our direction

- Feedback from the NC Source Water Collaborative
- Background research on existing regulations, automated data systems and WV SB 373
- Feedback from the HB 894 stakeholder team
  - Survey of initial preferences
  - Exercise to prioritize PCSs
HB 894: An Act to Improve Source Water Protection Planning

The accidental release of 4-methylcyclohexanemethanol in West Virginia and coal ash spills in NC have raised concerns about potential public health impacts of contaminants entering raw drinking water supplies. In an effort to mitigate these concerns, the legislature introduced HB 894. This bill, which was passed in its final form on August 11, 2014, mandates the development and implementation of source water protection (SWP) plans for "every supplier of water operating a public water system treating and furnishing water from surface supplies" (§ 130A 320 (c)). To date, SWP planning has occurred throughout the state on a voluntary basis and has followed a template recommended by US EPA. The intent on HB 894 is to expand on this template, with particular emphasis on emergency response protocols. The resulting SWP plans will allow local water systems to identify proactive and emergency response strategies best suited to their individual situations and concerns.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Date Added</th>
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</thead>
<tbody>
<tr>
<td>Meeting #2 Summary</td>
<td>Document summarizing the second stakeholder meeting held on May 28, 2015.</td>
<td>June 2015</td>
</tr>
<tr>
<td>Meeting #2 Presentations</td>
<td>Meeting to provide opportunities for updates and discussion regarding PCS prioritization, survey results, and a revised model for SWP planning</td>
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<tr>
<td>Existing SWP Regulatory Programs</td>
<td>Document summarizing existing regulations that impart protection to NC drinking water sources.</td>
<td>May 2015</td>
</tr>
<tr>
<td>List of Regulated Systems</td>
<td>Spreadsheet containing the names and some additional information for public water systems that are regulated under HB 894.</td>
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<tr>
<td>Interim Report</td>
<td>Report to the Environmental Review Commission on progress toward implementing the requirements of HB894.</td>
<td>April 2015</td>
</tr>
<tr>
<td>Meeting #1 Summary</td>
<td>Document summarizing the initial stakeholder meeting held on December 16, 2014.</td>
<td>March 2015</td>
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Intent of HB 894 is to:

“Improve Source Water Protection Planning”

- Mandatory SWP planning with scheduled review and revisions
- Required implementation (vs. voluntary)
- Emphasis on a reactive component (emergency preparedness)
Review our Approach

Utility (or representative) develops SWP plan

Identify and prioritize PCSs and threats

Outline PCS management strategies & SWP activities

Outline emergency preparedness strategies

(Proactive)

(Reactive)

Implement mandatory provisions of the plan

Notify agency to certify plan is complete
Usefulness and relevance of existing tools:

- 97% • On-line GIS mapping tools
- 92% • Drinking water assessment areas
- 87% • Potential contaminant source database
- 86% • Customized SWAP reports
- 74% • Susceptibility analysis
Realities relevant to our rule-making efforts:

1. HB 894 requires action from public water utilities

Therefore…

- We can only write rules for those things a utility can control, and

- We cannot write rules that affect PCS facilities or their owners.
Realities relevant to our rule-making efforts:

II. Regulatory mechanisms to protect DW currently exist

Therefore…

- Don’t duplicate or overlap what already exist!
- We can’t expect utilities to assume, participate in or strengthen existing regulations, and
- HB 894 provides no authority for us to change existing regulations
Review our Approach

- 15A NCAC 18C: Public Water Systems
- 15A NCAC 2B: Surface Water Standards
- 15A NCAC 2E: Water Use Allocation
- 15A NCAC 2H: Procedures for Permits
- 15A NCAC 2T: Non-discharge of Waste
- 15A NCAC 2U: Reclaimed Water
- 15A NCAC 13A: Hazardous Waste Management
- 15A NCAC 13B: Solid Waste Management
- Federal EPCRA: Chemical Emergencies
- 40 CFR 112: Oil Pollution Prevention (EPA)
Review our Approach

Realities relevant to our rule-making efforts:

III. SWP plans may contain sensitive security information

Therefore…

• Avoid conflict with § 132-1.7, Sensitive public security information

“…vulnerability and risk assessments, potential targets, specific tactics, or specific security or emergency procedures, the disclosure of which would jeopardize … the general public.”
Review our Approach

Realities relevant to our rule-making efforts:

IV. No resources allocated to incentivize implementation

Therefore…

- Mandatory implementation requirements should be economically realistic

- Utilities might be reluctant to consider SWP activities where local funding is not immediately available
Our underlying approach was to strive for a balance...
Introducing the Draft Rules

For insertion into:

15A NCAC 18C

Section .1300
Operation of Public Water Supplies

.1305 Source Water Protection Planning
Introducing the Draft Rules

.1305 Sections (a) and (b)
Basically define “who” and “when”

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Deadline for SWPP creation and implementation</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Water systems that have a single source of supply AND any source susceptibility rating of ‘higher’ or ‘moderate’</td>
<td>January 1, 2018</td>
<td>25%</td>
</tr>
<tr>
<td>Water systems that have multiple surface sources of water supply AND any source susceptibility rating of ‘higher’</td>
<td>January 1, 2019</td>
<td>36%</td>
</tr>
<tr>
<td>All other water systems treating and furnishing water from surface supplies</td>
<td>January 1, 2020</td>
<td>39%</td>
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</table>

- 3-year phase in period
- Most vulnerable systems go first
- Review and update every 3 years
Recurring stakeholder themes:

- Realize potential threats
  prioritize PCSs
  acquire detailed tier II information
- Enhance communication
  with emergency response personnel
  with PCS facility owners
  with their consumers
- Realize their vulnerabilities
- Develop contingency strategies
Realizing potential threats, (c) 1 and 2

- Develop prioritized list of PCS within a priority area based on WSW classifications

- Examine Tier II facility details (distributed by the Section)

- Identify foreseeable natural and human caused contamination events

- Develop emergency response strategies for threats identified above
Introducing the Draft Rules

Realizing potential threats, (c) 1 and 2

**WS-I**: entire watershed

**WS-II and III**: critical area and 1,000’ stream buffers

**WS-IV and V**: critical area and 1,000’ stream buffers within the protected area
Introducing the Draft Rules

Realizing potential threats, (c) 1 and 2
Introducing the Draft Rules

Enhancing communications, (c) 2, 4 and 6

- Contact information of utility, local, state and federal emergency response personnel
- Description of public notification procedures
- Outreach efforts to PCS owners that raise awareness and request notification of any release
- Public awareness that includes publication of plan status, reference to this rule, and description of proactive SWP activities
Introducing the Draft Rules

Realizing vulnerabilities, (c) 2 and 4

- Identification of facilities and equipment where failure results in service outage
- Ability to close intakes with determination of amount of time intakes can remain closed
- Ability to isolate or divert contaminated water
- Ability to reduce demand by implementing conservation measures
- Ability to meet demand via alternate sources
Introducing the Draft Rules

Developing contingency strategies, (c) 2 and 3

- Description of the system’s planned response to contamination
- Development of SOPs to close and/or switch intakes, including exercises to practice closure or switching
- Consideration of alternate sources such as interconnects, increased storage, trucking-in, etc.
- Proactive strategies designed to protect the source from contamination
.1305 (d), Submittal requirements

- SWP plan remains onsite – document not transferred to the state

- Utility submits an authorized certification-of-completion of the SWP plan

- Utility submits an authorized certification-of-revision after each review cycle
.1305 (d), Review and compliance

- Plan remains onsite and available to emergency management personnel, operators and PWS Section staff

- Audits/inspections by PWS Section staff will review contents and verify compliance

- PWS Section reserves the right to assess penalties
Conclusion

- Primary intent of the legislation (emergency preparedness) is emphasized

- Common stakeholder themes are addressed

- Utilities can identify their vulnerabilities and evaluate contingencies without excessive burden

“Utilities can’t control risk, but they can better understand and be better prepared to mitigate risk”