

## First Meeting of the HB 894 Stakeholder Team, December 16, 2014

### Executive Summary

The first stakeholder meeting to address the development and implementation of HB 894, an Act to Improve Source Water Protection Planning, was held in downtown Raleigh on December 16, 2014 in the Ground Floor Hearing Room of the Archdale building. The meeting was primarily designed to provide background and orientation such that participants could approach discussion of the legislation from a common reference point. The meeting was planned and coordinated by the Protection and Enforcement Branch of the Division of Water Resources. The effort was led by Jay Frick (Branch Head) and Rebecca Sadosky (Drinking Water Protection Program Coordinator).

Presentations and activities were prepared to address the following topics:

- Introduction of objectives, roles and information sharing,
- Overview of the language in HB 894,
- Existing source water protection planning process,
- Existing tools and resources relevant to source water protection planning,
- Exercise: Identifying priorities and improvements for potential contaminant sources ,
- Online GIS-based applications relevant to source water protection planning,
- A framework to develop and implement HB 894, and
- Group discussion and feedback: identifying initial stakeholder preferences.

Meeting participants included a diverse group of environmental and industry professionals with representation from the following categories: non-profit organizations, councils of government, state and federal agencies, professional associations, local governments, local utilities, and industry representatives. A complete list of attendees is provided in Appendix A. Currently, 71 people have volunteered to participate directly on the stakeholder team. An additional 25 people have requested ongoing receipt of information to monitor activities associated with HB 894.

Stakeholder feedback was primarily obtained via: (i) a group exercise to examine potential contaminant sources, and (ii) a survey to capture initial preferences. Regarding potential contaminant sources, there is interest in prioritizing risk categorization with respect to spillable and/or treatable criteria. The group also identified several new categories of potential contaminant sources that could be considered for inclusion in the assessment process. Bases on the survey of initial preferences, the majority of participants believe a modified version of the existing source water protection planning template will likely be applicable to HB 894. The group also agreed that existing tools and resources will be useful and relevant to the implementation of HB 894. Additional details associated with stakeholder feedback are provided below in section F.

### Presentation Notes

The following sections reiterate major points and concepts of information presented at the meeting. Associated PowerPoint files can be downloaded from the HB 894 web page at <http://www.ncwater.org/hb894>.

- A. Introduction of objectives, roles and information sharing (Jay Frick)  
After welcoming remarks, the diverse make-up of the stakeholder team was acknowledged. Meeting objectives were stated as: (i) providing orientation and background, which included review of the legislation and discussion of existing tools and resources, (ii) describing the

agency's intended approach to develop HB 894, and (iii) compiling stakeholder feedback. Characteristics of public water supply systems and acronyms were explained. The expected differences in stakeholder roles versus agency roles were explained, with emphasis on the fact that the agency would develop and implement rules relating to any new regulations. A web page designed to maintain information relative to the stakeholder process was demonstrated.

B. Overview of the language in HB 894 (Jay Frick)

Two major spill events were examined as motivations in the passage of HB 894, the 4-MCHM incident in West Virginia and the coal ash spill in North Carolina. It was noted that the West Virginia legislature passed SB 373, which was designed to achieve objectives similar to HB 894. A reactive (versus proactive) model for source water protection planning was discussed as an option for emergency spill response. Next, the language of HB 894 was examined in detail. It was pointed out that early language included the word "unfiltered" as a characteristic of the water supply source. This resulted in confusion within the regulated community, and on August 11, 2014, HB 894 underwent a technical correction that removed "unfiltered" as a descriptor and added treatment as a criterion. In its current form, new regulations will apply to 131 surface water systems serving nearly 8 million consumers. The second part of the bill explains the obligations of the NC Commission for Public Health, which is the designated rule-making authority for HB 894. It was pointed out that the legislature included provisions for flexibility and language to allow existing tools and resources to be considered in the rule-making process.

C. Existing source water protection planning process (Rebecca Sadosky)

This presentation provided an overview of NC's existing source water protection planning process. The current model is voluntary and emphasizes proactive strategies to mitigate potential contamination events. It was recognized that NC is currently experiencing pressures that could elevate risk to public drinking water sources. Some of these pressures include population growth, increased development, agricultural activities, and stormwater management issues. Also discussed was the fact that proactive source water protection planning is promoted by US EPA as a top strategy to safeguard drinking water quality. Additionally, the current planning model includes benefits such as technical data to support local decision making and the availability of economic incentives. Generally speaking, the state's drinking water is recognized as a limited resource and protecting it is deemed politically correct. Currently, there are seven approved source water protection plans that cover nine systems and a population of nearly 230,000.

The process for developing a voluntary source water protection plan was outlined and includes the following steps:

- Form a local source water protection development team,
- Examine your source water assessment data,
- Inventory potential contamination sources,
- Define focus areas and action items,
- Develop a contingency plan,
- Create a schedule for implementing the plan, and
- Submit the plan to the agency for review and approval.

Examples of approved plans were provided to illustrate the unique, case-specific nature of local protection planning and to more fully explore how the existing process has been utilized in various communities.

D. Existing tools and resources relevant to source water protection planning (Jay Frick)

The agency has already made a significant investment in tools and resources conducive to source water protection planning, and it seems reasonable that HB 894 can be built upon this base. For example the agency's Source Water Assessment Program (SWAP) was mandated by EPA and has resulted in technical data useful for defining source water protection priorities. The SWAP data exist for approximately 9,000 public drinking water sources and it was last updated in June 2014. There are several notable resources available from SWAP, which include delineation of priority areas, a statewide inventory of potential contaminant sources, susceptibility analysis to categorize risk, and customized technical reports. The SWAP analysis is GIS-based and utilizes methodologies developed by USGS. All SWAP information is available to the public and can be found online at <http://www.ncwater.org/?page=63>.

E. Exercise: Identifying priorities and improvements for PCSs (Rebecca Sadosky)

A brief presentation provided definitions for potential contaminant sources (PCS). This was followed by a discussion of data categories currently utilized by SWAP, as well as some examples of data types that were initially considered but are not included in the current assessment process. Following the presentation, stakeholders worked together in pairs to review a comprehensive list of existing PCS categories. Participants then ranked each PCS category in terms of perceived risk to a surface drinking water supply. Participants were also instructed to rank each contaminant category as posing a higher, moderate, or lower risk based on whether the expected contaminants are spillable and/or treatable. The general understanding of the exercise was that spillable PCSs demand more attention in source water protection plans that emphasize reactive strategies (e.g., emergency response scenarios). In addition to ranking the PCS data categories, the group was asked to identify, describe, and rank any PCS groups that are not already considered by the SWAP application. It is possible that new sources of interest could be incorporated into the system.

The exercise resulted in ideas to consider that might improve the PCS database. For example, the stakeholders identified five of the sixteen existing PCS categories that could be considered moderate risk (versus higher risk). These five categories included: (i) animal operations facilities, (ii) non-discharge permits, (iii) old landfill sites/pre-regulatory sites, (iv) soil remediation sites, and (v) solid waste facilities. Stakeholders also identified two categories (sewage disposal sites and underground storage tank facilities) where a risk categorization of lower may be applicable. In addition to the existing list of PCSs included in the source water assessments, an additional four categories were identified for potential inclusion into SWAP. The four categories included: (i) chemical/petroleum processing/storage, (ii) chemical/petroleum pipelines, (iii) above ground storage tanks, and (iv) fertilizer, pesticide, and petroleum storage, distribution, handling, mixing, and cleaning areas. The agency intends to look into including these suggestions as potential future improvements to the PCS database.

F. Online GIS-based applications relevant to source water protection planning (Rebecca Sadosky)

This presentation illustrated two online GIS tools offered by the agency that are currently available to assist and support local source water protection planning. The project locator tool (<http://149.168.87.14/pws/>) is used primarily by outside agencies to prioritize funding decisions

for environmental projects. Such projects often include agricultural BMPs, stormwater BMPs, land conservation, etc. The project locator tool provides users with a visual indication of whether or not a potential project is located within a recognized source water protection area. The tool also provides information on susceptibility (relative risk) of each public water supply source. The existing understanding is that environmental projects should be preferentially prioritized in areas that can offer an element of protection to the drinking water, and higher susceptibility areas are likely higher priority than those with a lower susceptibility rating.

The source water assessment mapping tool

(<http://swap.ncwater.org/website/swap/viewer.htm>) provides an extensive amount of information to the user, including layers for public water supply sources, wellhead protection areas, groundwater assessment areas, surface water assessment areas, landmarks, and potential contaminant source locations. The tool is searchable, has a measurement option, and provides additional information on specific attributes of elements appearing on the map. This tool has traditionally been used by stakeholder teams developing local source water protection plans. It provides an excellent starting point to visualize contaminants of interest in relation to public water supply sources.

G. A framework to develop and implement HB 894 (Jay Frick)

The point was made that any new regulations will require balance. Utilities are limited by jurisdictional authority and resources. Therefore, there is only so much they can accomplish with source water protection planning. The preference of the agency is to take the existing planning process and improve it by adding more emphasis on emergency preparedness. This strategy embraces both the proactive and reactive components of source water protection planning, and it appears to satisfy the legislature's intent for HB 894. Mandatory provisions might include analysis of feasibility of a second intake, additional storage or interconnections with another utility. This concept appears reasonable and model language exists within West Virginia's SB 373. Implementation is required by HB 894, and discussion included several options on how "implementation" could be defined. For example, implementation of process versus implementation of discrete action items within a local plan. The stakeholder group will help decide these issues at a future meeting. Various categories of source water protection activities were discussed, as well as activities associated with emergency preparedness. It was emphasized that decisions regarding priorities, implementation schedules and resource allocations should remain at the local level. Finally, the possibility of innovative new tools was discussed. For example, the agency may be in a position to create a smartphone application that could send automated messages to utility directors after a spill event. This could provide more time to prepare an appropriate course of action as contamination approaches a water supply intake.

F. Group discussion and feedback: identifying initial stakeholder preferences

There were a series of questions from attendees that initiated discussion and raised concerns. None of the questions were definitively resolved at this meeting. It was decided to revisit these questions during brainstorming sessions at the next meeting. Example questions included:

- For purposes of HB 894, is it reasonable that a contingency plan may suffice for emergency preparedness, especially for water systems that have already outlined emergency response protocols?

- What is the best approach to mitigate potential threats in areas where the water system has no jurisdictional authority?
- Are protection plans that include provisions to address terrorist activity considered exempt from public records law?

Participants were asked to provide feedback to reflect their preferences on a variety of topics. A five-point scale was used with ratings associated with the following levels of agreement:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral/Not Sure
- 4 = Agree
- 5 = Strongly Agree

Topic: Understanding of HB 894

The vast majority of stakeholders (86.8%) reported that they understand the intent of the bill. Similarly, most stakeholders (76.3%) have a clear understanding of who will be affected by the legislation. However, since a significant minority (23.7%) are either not sure or do not understand who will be affected, the agency will compile a detailed list of the expected regulated community and make this information available to stakeholders.

I have a clear understanding of what HB 894 was written to accomplish.

1 - 0%            2 - 5.3%            3 - 7.9%            4 - 44.7%            5 - 42.1%

I have a clear understanding of who will be affected by HB 894.

1 - 2.6%            2 - 5.3%            3 - 15.8%            4 - 23.7%            5 - 52.6%

Topic: Existing tools and resources

The vast majority of stakeholders evaluated existing tools and resources as useful and relevant to the new source water protection planning requirement. The agency interprets this as confirmation that a solid base exists on which to continue building HB 894. Specifically, the following items were deemed useful and relevant by significant majorities: drinking water assessment areas (92.1%), potential contaminant source database (86.8%), susceptibility analysis (73.7%), SWAP reports (86.5%), and GIS-based mapping tools (97.3%). The most notable example of mixed support was associated with susceptibility analysis, where 26.3% of respondents were neutral on its usefulness.

The following tools and resources will be useful and relevant to HB 894:

Drinking water assessment areas that include the critical protected and stream zone areas

1 - 0%            2 - 2.6%            3 - 5.3%            4 - 26.3%            5 - 65.8%

The agency's potential contaminant source database

1 - 0%            2 - 0%            3 - 13.2%            4 - 21.1%            5 - 65.8%

The agency's susceptibility analysis

1 - 0%            2 - 0%            3 - 26.3%            4 - 44.7%            5 - 28.9%

Customized SWAP reports for individual water systems

1 – 0%            2 – 0%            3 – 13.5%        4 – 35.1%        5 – 54.1%

Online GIS-based mapping tools

1 – 0%            2 – 0%            3 – 2.7%            4 – 35.1%        5 – 62.2%

Topic: Transferability of existing source water protection process

Although a majority agreed that the current voluntary source water protection planning process is readily transferrable to mandated planning (68.4%), there were significant minorities that were either neutral (15.8%) or did not agree (15.8%). The agency believes these results warrant further discussion to gain clarity on what elements of the current process are not readily transferable. The agency will solicit stakeholder suggestions that could better adapt the current process to the new regulations.

Elements of NC’s existing voluntary planning process are readily transferable to mandated source water protection planning.

1 – 2.6%            2 – 13.2%        3 – 15.8%        4 – 42.1%        5 – 26.3%

Topic: Agencies proposal to implement HB 894

While there were significant majorities of stakeholders agreeing with the individual concepts, results were not overwhelmingly conclusive. The agency believes further discussion is necessary to identify potential improvement or to at least gain clarity on why the neutral responses were relatively high. Overall, there was wide agreement (75%) that the agency’s overall approach to develop HB 894 is reasonable and appropriate. This result is interpreted as an indicator that the agency is on the right track.

The modified source water protection planning model is adequate to address the intent of HB 894.

1 – 0%            2 – 2.7%            3 – 37.8%        4 – 40.5%        5 – 18.9%

Major planning decisions regarding preferences, priorities, implementation, etc. should reside at the local level.

1 – 2.6%            2 – 2.6%            3 – 15.8%        4 – 23.7%        5 – 55.3%

Overall, the agency’s approach to develop HB 894 seems reasonable and appropriate.

1 – 0%            2 – 0%            3 – 25.0%        4 – 50.0%        5 – 25.0%

Appendix A. Attendees of Stakeholder Meeting on December 16, 2014.

Name	Affiliation
Bill Gilmore	American Council of Engineering Companies of NC
Peter Raabe	American Rivers
Tyler Newman	BASE
Mike Richardson	Cape Fear Public Utilities
Pam Ellis	Cape Fear Public Utilities
Beth Eckert	Cape Fear Public Utilities
David Czerr	Charlotte Mecklenburg Utility Department
Michael Layne	City of Burlington
Ali Kaan	City of Greensboro
Virginia Spillman	City of Greensboro
Ron Reid	City of Hendersonville
Leigh Ann Hammerbacher	City of Raleigh
Ervin Lane	Division of Waste Management, Solid Waste Section
Paul Clark	Division of Water Resources
Linwood Peele	Division of Water Resources - WSPB
Kari Cahoon	Domtar Paper Co.
Susan Pope	DWR - Public Water Supply Section
Rebecca Sadosky	DWR - Public Water Supply Section
Jay Frick	DWR-Public Water Supply Section
Jessica Godreau	DWR-Public Water Supply Section
Bob Midgette	DWR-Public Water Supply Section
Chris Smith	Fayetteville PWC
Anthony Whitehead	Greenville Utilities Commission
Mark Bishop	Hazen and Sawyer - Raleigh
Phil Trew	High Country COG
Dan McLawhorn	Lower Neuse River Basin Assoc
Haywood Phthisic	Lower Neuse River Basin association
Forrest Westall, Sr.	McGill Associates & Director of the Upper Neuse River Basin Assoc.
Ken Hudnell	Medora Corp (SolarBee/GridBee)
April Graham	Mills River Partnership
Jason Doll	Moffatt and Nichol
John Fear	N.C. Sea Grant - NC WRI
Sarah Meacham	NC Attorney General's Office
Grady McCallie	NC Conservation Network
Julie Ventaloro	NC DEMLR - Water Supply Watershed Program Coordinator
Keith Larick	NC Dept of Agriculture
Joey Hester	NC Division of Soil and Water Conservation

Gail Bledsoe	NC Forest Service
Lisa Martin	NC Home Builders Assoc.
Steven Webb	NC Home Builders Assoc.
Sarah Collins	NC League of Municipalities
Debbie Maner	NC Rural Water Association
Keith Starner	NC Rural Water Association
Daniel Wilson	NC Rural Water Association
Chad Ham	NC Water Quality Assoc
Harold Herring	Neuse WASA (Alternate is Charlie Colie)
Cy Stober	Piedmont Triad Regional Council
Julie Youngman	SEIC
Sydney Miller (Syd)	Town of Cary Water Resources Dept
Mike Schlegel	Triangle J COG
Katherine Baer	Triangle Land Conservancy
Mike Orbon	Wake County