

Report to the Joint Committee on
Government and Finance
of the
West Virginia Legislature
by the
Public Water System Supply
Study Commission



Rahul Gupta, MD, MPH, FACP
Chairman

December 15, 2016

TABLE OF CONTENTS

Introduction	3
Members of the Commission	4
Acronyms	5
Commission Recommendations	6
Work Group 1	6
Work Group 2	7
Work Group 3	8
Work Group 4	10
Work Group 5	10
Appendix A: Public Water System Supply Study Commission Meeting Minutes	12
Appendix B: Public Water Systems as Defined by SB423	51
Appendix C: Public Water Systems' Evaluation of Alternative Sources of Water	55
Appendix D: Public Water System Supply Study Work Group Membership	62
Appendix E: Department of Environmental Protection Aboveground Storage Tank Program Status Report	64

INTRODUCTION

This report represents the third report of the West Virginia Public Water System Supply Study Commission since its establishment pursuant to the passage of Senate Bill No. 373 (SB373) in 2014. The first meeting of the Commission commenced on September 22, 2014. The Commission filed its initial report to the West Virginia Legislature's Joint Committee on Government and Finance on December 15, 2014 followed by the second report filed on December 15, 2015.

In 2015, following the passage of SB373 (2014), the West Virginia Legislature passed Senate Bill No. 423 (SB423) which amended the Aboveground Storage Tank Act to address and correct certain unintended consequences of the original enactment. Much of W.Va. Code §22-31 has been deleted although key provisions have been moved into W.Va. Code §22-30.

Additionally, SB423 modified the original membership of the Commission to add two representatives designated by the West Virginia Business Industry Council; and one representative designated by the West Virginia Rivers Coalition in addition to the previous members appointed by the Governor, one of whom to be a professional engineer experienced in the design and construction of public water systems; one a professional hydrologist and one an environmental toxicologist or other public health expert familiar with the impact of contaminants on the human body and one citizen representative. No longer included in the Commission are the appointees from the West Virginia House and Senate. The state agencies and other organizations that served previously under SB373 remain on the Commission. However, the position of Commission Chair transferred from the Director of the Division of Homeland Security and Emergency Management to the Commissioner of the Bureau for Public Health.

No further changes have been made to any portions of the statute related to aboveground storage tanks or the composition of the Commission. The purpose of the Commission has remained unchanged from its original charge to study source water protection plans; evaluate the effectiveness of the legislation as well as financing and funding alternatives available to public water systems; review of the recommendations of the U.S. Chemical Safety Board regarding the Bayer Crop Science incident in 2008; and provide recommendations or suggestions regarding public water system infrastructure. The following is a list of the current members of the Commission.

MEMBERS OF THE COMMISSION

Rahul Gupta, MD, MPH, FACP, Chair
Representing Bureau for Public Health

Jimmy Gianato
Representing West Virginia Division of Homeland Security and Emergency Management

Tim Ball - Morgantown Utility Board
Representing the West Virginia Municipal League

David Acord (Designee)
Representing West Virginia Public Service Commission

Michael McCawley, PhD - West Virginia University School of Public Health
Representing an environmental toxicologist or other public health expert who is familiar with the impact of contaminants on the human body

Pam Nixon
Citizen Representative

Terry Polen, PhD (Designee)
Representing the West Virginia Department of Environmental Protection

Rick Roberts - E.L. Robinson Engineering
Representing a professional engineer experienced in the design and construction of public water systems

Amy Swann
Representing the West Virginia Rural Water Association

Evan Hansen - Downstream Strategies
Representing West Virginia Rivers Coalition

Ed Watson, Canaan Valley Institute
Representing a hydrologist or other expert experienced in determining the flow characteristics of rivers and streams

Jeffrey McIntyre, President - West Virginia American Water Company
Representing West Virginia Business Industry Council

Rebecca McPhail, President - West Virginia Manufacturers Association
Representing West Virginia Business Industry Council

ACRONYMS

BPH	Bureau for Public Health
CSB	United States Chemical Safety Board
DEP	West Virginia Department of Environmental Protection
DHHR	West Virginia Department of Health and Human Resources
DHSEM	West Virginia Division of Homeland Security and Emergency Management
GIS	Geographic Information System
GPS	Global Positioning System
IJDC	West Virginia Infrastructure and Jobs Development Council
LEPC	Local Emergency Planning Committee
PSC	Public Service Commission
PWS	Public Water System
PWSSSC	Public Water System Supply Study Commission
SB373	Senate Bill 373
SB423	Senate Bill 423
SDS	Safety Data Sheet(s)
SWPP	Source Water Protection Plan(s)
RAIN	River Alert Information Network

COMMISSION RECOMMENDATIONS

The Commission has been charged by SB423 with making recommendations related to five specific tasks. Recommendations were submitted to the Legislature in 2014 and 2015 in order to achieve the tasks set out through passage of SB373 in 2014. SB423 updated provisions of the previous bill.

Since its original appointment in 2014, the Commission has met on 17 occasions, five times in 2014, five times in 2015 and seven times in 2016. The Work Groups which were created in 2014 continued in both 2015 and 2016 to take on the tasks as outlined in SB423. The Commission will continue its work in 2017.

The following is a compilation of the recommendations organized by the respective Work Groups and their assigned task. The recommendations have been approved by the full Commission and are being advanced as recommendations of the full Commission.

The minutes of the Commission's 2016 meetings may be found in Appendix A. Appendix B contains a list of all PWSs as defined by SB423 while Appendix C contains the cost estimates for alternative water sources as identified by PWSs. The composition of the Work Groups is listed in Appendix D and Appendix E provides a status report of the DEP aboveground and underground storage tank programs.

Work Group 1

(1) A review and assessment of the effectiveness and the quality of information contained in updated SWPPs required for certain public water systems by the provisions of section nine-c, article one, chapter sixteen of this code.

Recommendations of Work Group 1:

At the time of this report, the BPH has received SWPPs from every PWS subject to provisions of SB423. The agency has approved 122 plans at this time.

Recommendation 1.1

The Commission advances the recommendation to require either an annual evaluated and documented exercise of the SWPPs or a documented annual review, and update if necessary, of the SWPPs, with the utility reporting this information to the BPH.

Narrative

An annual exercise of the SWPPs would allow the PWS to review, refine and update the actions and goals identified in the plan. An exercise allows the opportunity for integral responding partners outside of the PWS to become more aware of the SWPPs and the water system. Exercises can benefit all parties in implementing plans, identifying deficiencies and/or weaknesses which can subsequently be addressed. The exercise would benefit the necessary first responders and parties that would be involved in an emergency event. This allows the public water utilities to have a better working relationship with the partners that would be responding outside of the utility and vice versa. Exercises could be conducted and maintain confidentiality, if that is desired, while still notifying BPH of the exercise. Exercises should be conducted in a format prescribed by the DHSEM that follows federal Homeland Security exercise guidelines. An alternative would be to have an annual review and update of the SWPPs. This would consist of bringing together emergency responders and other stakeholders to review and provide comments on the SWPPs as necessary.

Recommendation 1.2

The Commission advances the recommendation that DEP and/or DHHR notify downstream water utilities if there is a change in substance and/or a substantive change within an aboveground storage tank as outlined in W.Va. Code §22-30- 9 (b) 1-6. Such notification is to be made as soon as possible.

Narrative

As the owners of aboveground storage tanks modify the tanks or contents, the downstream water utilities should be notified as soon as possible of the changes. The notifications would allow the water utilities to make any necessary adjustments to their SWPPs, thereby keeping the plans as current as possible. Notification also keeps the water utility knowledgeable of potential contaminants within the watershed. Work Group 1 discussed the online website application available at the DEP showing “Flow Distance above Public Water Supplies” at <http://tagis.dep.wv.gov/pswcheck/> and made a recommendation that DEP and DHHR collaborate to possibly add additional contact information concerning the public utilities.

Recommendation 1.3

The Commission advances the recommendation that the state contract with an outside organization to review and evaluate the effectiveness of SWPPs and practices.

Narrative

The state is in need of better information about the effectiveness and the quality of information contained in updated SWPPs as well as the effects on surface water and groundwater resources. To help meet this need, BPH would procure a contractor to evaluate the effectiveness of the efforts to prevent the movement of contaminants into surface and groundwater systems from land uses. Outcomes from this study would enhance understanding of the effectiveness of key protection practices in preventing surface and groundwater degradation and guidance for refining and implementing practices to strengthen surface and groundwater protection effectiveness. The study could include an investigation of spill notification to PWSs as well as gathering information on insurance coverage related to impacts on public water utilities.

Recommendation 1.4

The Commission advances the recommendation that the Legislature review the proposed alternative water sources (Appendix C) so that it will be aware of the scope of needs and funding necessary as it considers further guidance.

Narrative

Included in Appendix C is a listing of the primary initial alternative from each of the PWSs protection plans. This listing includes the alternative sources and an estimate for the necessary infrastructure improvement. These alternatives have not been fully studied and are only initial alternatives.

Work Group 2

(2) A review and assessment of the effectiveness of legislation enacted during the 2014 Regular Session of the West Virginia Legislature, as it pertains to assisting PWSs in identifying and reacting or responding to identified potential sources of significant contamination, and increasing public awareness and public participation in the emergency planning and response process.

Recommendations of Work Group 2:

Recommendation 2.1

The Commission advances the recommendation that additional funding be considered to continue implementation of electronic databases from BPH and DEP which will allow for more complete, efficient and error free analyses and reporting.

Narrative

These databases provide updated information for PWSs to update SWPPs. Therefore, it is recommended that this process be expedited to the extent possible and that funding for this process be implemented through the Legislature. Funding may be required for continual full implementation.

Recommendation 2.2

The Commission advances the recommendation that current and past Commission reports be used to craft future legislation.

Narrative

There has been concern that the PWSSSC reports have not been afforded the proper hearing.

Recommendation 2.3

The Commission advances the recommendation that the spill reporting hotline should collect information on whether spills came from an aboveground storage tank, and whether and when downstream public water systems were notified of the spill.

Narrative

Information is collected to know what spill is related to aboveground storage tanks and relayed to the downstream water system. The spill reporting hotline collects information on spills that come from aboveground storage tanks and could track as to whether and when downstream water systems are notified of the spill.

Work Group 3

(3) The extent of available financing and funding alternatives which are available to existing PWSs to pursue projects which are designed to create alternate sources of supply or increased stability of supply in the event of a spill, release or contamination event which impairs the water system's primary source of supply.

Recommendations of Work Group 3:

Recommendation 3.1

The Commission advances the recommendation that the Legislature should make a \$2,000,000 continuing appropriation to the DHHR, BPH in furtherance of its source water protection efforts. This funding shall also be used to provide grant monies to systems as they begin their statutorily required three year updates and to help fund the RAIN or other type of system. In addition, the BPH should commence an investigation of the RAIN or other type systems to determine if such a statewide network could be implemented.

Narrative

The West Virginia Legislature made a \$1.7 million appropriation to the BPH in response to our recommendation last year and we commend them for doing so. This year's recommendation for a \$2.0 million annual appropriation recognizes the fact that water systems are now completing the adoption of their plans following approval of BPH, implementing the recommendations contained therein and beginning the process of updating the plans so that they are compliant

with the statutory mandate contained in SB373. All of this costs money. Any grant funds sent to the systems minimizes the rate impact to customers for statutorily mandated source water protection planning efforts.

Recommendation 3.2

The Commission advances the recommendation that the West Virginia Legislature amend West Virginia Code 16-1-9c to include a new subsection designated as subsection (i) to read as follows:

(i) The Secretary is authorized to propose legislative rules for promulgation pursuant to article three, chapter twenty-nine-A to implement the provisions of this section that may include a schedule for the submission of Source Water Protection Plans by public water utilities pursuant to subsection (f) that staggers the schedule for the submission of Source Water Protection Plans, except that for the purpose of staggering the dates of submission of updated Source Water Protection Plans, the Secretary may designate a schedule of submission greater than three years from the initial submission required by a legislative rule promulgated pursuant to this subsection.

Narrative

The intent of this recommendation is to allow the DHHR Secretary to propose legislative rules that stagger the statutorily required, updated SWPPs. The first statutory deadline in submitting SWPPs was met by all systems, save one. The outstanding SWPP was submitted shortly after the deadline. PWSs understand the importance of source water protection planning, but they also understand that the State of West Virginia has limited resources within the DHHR to review the plans, suggest changes and then review the update plans; all while it is also planning and conducting the statutorily required hearings.

This change will provide for more efficient processing of the SWPPs and should be adopted.

Recommendation 3.3

The Commission advances the recommendation that the IJDC and BPH, Drinking Water Treatment Revolving Fund amend their preliminary project ranking and/or scoring structures to add emphasis for source water protection projects.

Narrative

Currently, the IJDC does not give preference to source water protection projects. Public utilities have expended great resources in creating their SWPPs. Many of the SWPPs have proposed construction projects in order to fully implement their plans. If source water protection is to occur, the IJDC must have those projects in its project ranking and/or scoring structures.

Recommendation 3.4

The Commission advances the recommendation that the Legislature resume the appropriation of \$40 million per year from the video lottery proceeds to the IJDC to allow the Council to play an active role in source water protection.

Narrative

For the past few years, the Legislature has reduced the amounts appropriated to the IJDC. This has caused a serious issue with the many projects seeking funding. As SWPPs are approved by the DHHR and move toward implementation, a shortage of funding could mean a lack of implementation of SWPPs. Lack of implementation means systems will not have the tools to further react if a spill occurs that threatens its water supply.

Work Group 4

(4) A review and consideration of the recommendations of the U.S. Chemical Safety and Hazard and Investigation Board after its investigation of the Bayer Crop Science incident of 2008.

Recommendation of Work Group 4:

The Commission advances that the recommendations of the CSB be followed without redundancy using the existing rules and agencies of the state.

Narrative

Work Group 4, having reviewed the CSB recommendations on the Bayer Crop Sciences incident and the Freedom Industries incident and having reviewed the West Virginia Chemical Release Prevention Program, believes that there is existing authority under the current West Virginia statutes and programs and agencies to fulfill the recommendations made by the CSB.

Work Group 5

(5) Any recommendations or suggestions the study commission may offer to improve the infrastructure of existing PWSs, to provide safe and reliable sources of supplies, and to pursue other measures designed to protect the integrity of public water service.

Recommendations of Work Group 5:

Recommendation 5.1.A

The Commission advances the recommendation that the Legislature should clarify that the utility doesn't have an implied duty to complete gaps in information on SDSs that are provided/submitted. SB373 previously required SDSs to be submitted with the Spill Prevention Response Plan, but changes made in SB423 the following year removed this requirement. It is our recommendation that the legislation be amended to require SDS information be provided with the Spill Prevention and Response Plans. If there is missing information, the entity submitting the SDS should have the burden of providing additional information. Furthermore, a current web link shall be provided by DEP to ensure that SDS information is available at a central repository accessible to PWSs.

Recommendation 5.1.B

Advance a recommendation that WV Code §22-30-10(a) be modified to ensure that downstream PWSs are provided with the type and quantity of fluid stored in the regulated aboveground storage tanks at the facility and the SDS associated with the fluids in storage.

Recommendation 5.2

The Commission advances the recommendation that upon reporting to the spill response hotline all spills must, as soon as possible, be reported to any potentially-impacted PWSs and to the BPH. We further recommend that such notification be made through protocols established and coordinated with existing spill notification systems (e.g. spill reporting hotlines), with emergency response systems (e.g. county 911 systems) and with existing GIS and databases (such as those operated by the DHSEM, county 911 systems and the DEP), if possible. By efficiently utilizing existing GIS data, the spill location should be cross-referenced with a database of PWS information and the PWSs which may be impacted so that they can be quickly determined and automatically notified. Every effort will be made to determine location using GIS coordinates.

The reporting system should, at a minimum, provide information on the precise location of the spill, the date and time of occurrence, the material(s) released and the stream(s) potentially

impacted. Additional training/scripts for those taking the calls is recommended to obtain consistent information for each event.

All spills must be reported with reference to standardized GPS coordinate systems. We further recommend that the system be based upon the widely used and well-understood latitude/longitude system with location data obtained from a GPS receiver. Furthermore, correction notices will be issued, as necessary, and confirmation of the response and confirmation of the resolution shall be distributed.

Narrative

The intent of the recommendations is to ensure the timeliest and most accurate information regarding spills that may enter the waterways is provided to the appropriate entities. At times, reports received related to spills are incomplete and in some cases inaccurate based on initial reporting from the scene. Additional training/scripts provided to those receiving the spill notification calls would improve consistency and accuracy of the information obtained from the entity submitting the notification for the event.

Recommendation 5.3

The Commission advances the recommendation that DHSEM and LEPC provide available information to the PWSs, that they are not statutorily prohibited from providing to the public, to assist PWSs in identifying mobile threats.

Narrative

The Work Group recommendation focuses on mobile threats which were not specifically addressed in SB373 or SB423. Mobile threats pose as great or greater threat to PWSs as fixed facilities. Due to the dynamic nature of chemicals moved in transportation, this presents a difficult challenge to having complete SWPPs. LEPCs and local emergency responders are an invaluable resource to PWSs and should be consulted in the development of SWPPs. LEPCs have information such as commodity flow studies, hazard analysis, transportation routes and other key information that is vital to PWS's SWPP development.

Recommendation 5.4

The Commission advances the recommendation that the Legislature should consider legislation, should it be introduced, to establish income tax credits for landowners for source water protection.

Narrative

Similar programs have succeeded in many states, including Maryland (Md. Code § 10-723) and Virginia (Va. Code Ann. § 58.1-510-513) and provide incentives for landowners to protect source water. Any tax credits would be offset by other revenue sources.

Recommendation 5.5

The Commission advances the recommendation that the BPH evaluate, and potentially implement, the RAIN, or another similar system, to establish a statewide network in West Virginia in coordination with water systems throughout the state.

Narrative

RAIN is in place and being used in the northern part of the state. The recommendation focuses on the importance that RAIN or a similar water quality system be evaluated for other areas of the state. RAIN appears interested in possible expansion if funding is available.

APPENDIX A
Public Water System Supply Study Commission Meeting Minutes

December 11, 2015

Public Water System Supply Study Commission Meeting
December 11, 2015 at 1:00 pm
WV Public Service Commission

Members Present

Amy Swann (Acting Chair), WV Rural Water Association; David Acord, WV Public Service Commission; Michael McCawley, WVU School of Public Health (Phone); Terry Polen, WV DEP (Phone); Melissa Cross on behalf of Jimmy Gianato, WVDHSSEM; Jeffrey McIntyre WV Business & Industry Council; Edward Watson, Canaan Valley Institute (Phone); Tim Ball, WV Municipal League; Evan Hansen, WV Rivers Coalition (Phone); Pamela Nixon, Citizen Representative (Phone); Rebecca McPhail WV Business & Industry Council; and Walter Ivey, Bureau for Public Health

Call To Order

Chair, Amy Swann conducted the introductions, gave opening remarks, and then asks everyone to take a moment to review the minutes from the December 4, 2015 meeting. The group had no corrections, David Acord made a motion to approve the minutes, Walter Ivey second, all voted in favor by saying aye.

Discussion

A final report has to be submitted to the joint committee by December 15, 2015 the purpose is to review the current report status, edit and finalize recommendations.

Following extensive discussion, each recommendation in the report was reviewed, edited, voted on and accepted by the Commission members. These recommendations are reflected in the final report.

A motion was made by Dave Acord to adopt the final report and submit to the Committee on Government and Finance. Tim Ball seconded the motion, all voted in favor.

A motion was made by Tim Ball to allow the Bureau for Public Health staff to make technical, non-substantive corrections as necessary. Rick Roberts seconded the motion, all voted in favor.

Public Comments: None

Ms. Swann entertained a motion to adjourn, all members agreed.

August 17, 2016

West Virginia Public Water System Supply Study Commission Meeting
August 17, 2016
10:00AM – 12:00PM
Governor's Conference Room – Suite #10

Attendees

Commission Members Present:

Walt Ivey, Bureau for Public Health (*representing Commission Chair - BPH Commissioner Dr. Rahul Gupta*); Rick Roberts, EL Robinson Engineering Company; Pam Nixon; Dr. Michael McCawley, WVU School of Public Health; David Acord, WV Public Service Commission; Amy Swann, WV Rural Water Association; Dr. Terry Polen, WV Department of Environmental Protection; Evan Hansen, Downstream Strategies; and Rebecca McPhail, WV Manufacturers Association

Participated via conference call:

Tim Ball, Morgantown Utility Board; Ed Watson, Canaan Valley Institute; and Jeffrey McIntyre, WV-American Water Company

Commission Members Absent:

Dr. Rahul Gupta, Chair; and Jimmy Gianato, WV Division of Homeland Security and Emergency Management

Community Members Present:

Lewis Baker, WV Rural Water Association; Ken Ward, Jr., Gazette-Mail; Joseph James, Downstream Strategies; Patrick Murphy, BPH Office of Environmental Health Services; Angie Rosser, WV Rivers Coalition; Brian Skinner, BPH; Barb Taylor, BPH; and Bill Toomey, BPH

Welcome & Meeting Overview

Walt Ivey (*representing Commission Chair – BPH Commissioner Dr. Rahul Gupta*) welcomed everyone to the meeting. All Commission members introduced themselves.

December 11, 2015 meeting minutes were presented for approval. An edit was noted to be incorporated – Rick Roberts attended December 11th meeting, name was omitted from listed members present. December 11, 2015 meeting minutes will be corrected to include Rick Roberts' attendance. Dr. Polen motioned to approve December 11, 2015 meetings with noted correction. David Acord seconded the motion. Vote was taken and all were in favor.

December 11, 2015 meeting minutes were approved.

The 2015 Public Water System Supply Study Commission Report was submitted to the Legislature on December 15, 2015. Walt Ivey reviewed the presentation that Dr. Gupta gave to the Joint Committee on Government and Finance of the West Virginia Legislature on February 9, 2016. Copy of report and presentation was provided.

Legislative Updates

Brian Skinner provided legislative updates on components of a couple of the recommendations and related bills in the 2016 session.

- Recommendation 1.2: *Modify WV Code §22-30-14 to clarify what information can be released by the public water systems in their source water protection plans.* The language suggested in Appendix D from the 2015 Commission Report made it into a bill. It was initially introduced February 18, 2016 as SB625 in which during the process was modified. Senate Judiciary made significant modification to degree that provisions were substantially reduced to focus on the concern that public water systems would feel inhibited in providing information on potential contaminant sources the way the statute was written even though in public domain. Ultimately SB625 attempted to modify provision of Section 9c, Article 1, Chapter 16 by pulling into provision code that BPH

addresses and regulates. Attempted to modify writing in the way the public water systems felt they could allow information without violating the law.

- Recommendation 3.2: *Recommends code be revised to allow BPH to develop rules for the staggering of the submittal of future source water protection plans.* Could not find where any legislation was provided or proposed.
- Recommendation 5.1: *Recommendation that the legislation be amended to require the Safety Data Sheet (SDS) information be provided with the Spill Prevention and Response Plans to the DEP. Any missing information must be provided by the entity submitting the SDS. Recommend that DEP develop a web link to ensure that SDS information is available at a central repository accessible to the public utilities.* Could not find where any legislation was provided or proposed.
- Recommendation 5.4: The Commission advances a recommendation that the Legislature should consider legislation to establish income tax credits for landowners for source water protection. Recommendation was introduced in SB554 and referred to the Committee on Finance but not taken up; perhaps at next session.

Walt Ivey opened the floor for discussion/questions from Commission members on the legislative updates.

Rick Roberts asked what is the best way to deal with these types of recommendations; deal directly with DEP to get in rule package rather than go through the legislative process. Brian Skinner replied yes, the way administrative procedures act and rule making provisions are set up is for various agencies to amend their rules and have vetted through legislative review process, via public comments or being addressed by the committee itself.

No other questions/comments from Commission members were presented in regards to legislative updates.

Source Water Protection Plans Update

Bill Toomey, OEHS, was introduced by Walt Ivey to provide an update on the source water protection plans (SWPP). On or before July 1, 2016 was date for SWPP to be submitted to BPH. BPH has received quite a few SWPP.

Currently, West Virginia has 125 water systems that were required to develop/provide SWPP. That breaks out to 109 surface water systems and 16 systems that are referred to as “surface water influenced groundwater or SWIG” utilities.

OEHS is in the process of developing guidance on determining which groundwater system could be determined to fall under new classification called SWIG. This hasn't been released yet. There was a study performed by the **United States Geological Survey** (USGS). The study has been completed but the report is not published yet. OEHS is using the information gained from this study to develop the guidance.

Per West Virginia law, SWPP are to be submitted on or before July 1, 2016. SWPP are also to be updated every three years or if a significant change occurs in the watershed area. OEHS is recommending to the water systems (at least) a yearly review or exercise of their SWPP. Systems are being advised to keep their SWPP updated and active.

124/125 utilities submitted plans for approval by the July 1, 2016 date. OEHS staff is currently reviewing plans to make sure they meet required elements for approval. Total of 5 OEHS staff work in the source water protection program; 3 of those staff members are funded from some of

the state funding currently provided to the program in addition to GIS supported from the state funding.

Seven public hearings have been held to date with more to come. Public hearings are advertised through the state register, local media releases by DHHR Communications, advertisement in local papers and listed on the source water program website. There hasn't been a large attendance at these public hearings.

As of the end of July 2016, seven SWPP have been approved. Approved copies are forwarded to DEP and the local health officer of the respective county.

The templates and instructions used can be found by visiting the source water protection site at www.wvdhhr.org/oehs/eed/swap/.

In regards to funding, state appropriations received in 2014-2015 was \$1.5 million; 2015-2016 was \$1.7 million; and 2016-2017 is \$1.7 million. Total for three year period is \$4.97 million received from the state. Federal appropriated drinking water revolving funding (2014-2016) was used as well for an EPA supplied contractor to assist with the program. Other funds used on the program are provided from DEP funding known as well-head protection/well protection. All these sources were used to move the program forward.

As of July 31, 2016, expenses total \$370,000 for salaries, benefits, etc. of individuals with OEHS that work on the program.

Commitment and grant funding provided to help support water systems in developing their plans was \$2.6 million. Total spent to date, with salaries, commitments, etc. is \$2.9 million. Additionally, a little over \$1 million was spent from the EPA contractor, wellhead protection program, etc. for a total of \$4.02 million spent as of the end of July 2016.

In summary, expenses supported personnel costs to work on the program, provided 116 utilities with support to plan for their plan development, and grants provided to regional planning and development councils within the state to supply various engineering contracts to the various water utilities.

Sources of potential contaminates list was sent to utilities in 2015; second round planned (updates) within the next few months.

In regards to monitoring progress as a reporting need, OEHS is working with WV Interactive to build a source water application. Application will provide utilities a way to enter their updates with their SWPP and provide OEHS a means to retrieve data for reporting purposes. Additionally, OEHS is working on a GIS portal that will make information available to the general public and water utilities.

An example of information retrieved from reports is the single source feasibility study. This is one element within the protection plan that certain utilities were required to provide to OEHS. This information lists all existing possible alternative strategies that utilities could turn to in an event of a disaster or concern. OEHS had a contractor develop a feasibility guide (matrix) to stay consistent with how utilities developed these numbers. Alternative strategies include backup in-takes, interconnections, treated water storage, raw water storage and others such as wells, reservoirs, etc. 31% of utilities took backup in-takes as a viable alternative for an estimated total cost of \$158 million (that is what it would cost that utility to put in the backup in-take. Other viable alternatives include interconnections with 26% at \$96 million; treated water storage with 15% at \$34 million; raw water storage with 14% at \$24 million; systems looking at

wells or reservoirs with 14% at \$37 million. Total estimated costs \$349 million for utilities to move forward with these alternative strategies. Preliminary designs and estimates, before anything is built or developed, would have to be looked at - additional core studies.

Template and instructions were developed to retrieve information from reports such as information associated with the system, water treatment and storage of system, how threats are prioritized, management strategies, track progress of implementation, operations during loss of power, future water supply needs, emergency response plan, and communication plan.

Next steps include: annual review recommended of SWPP, prepare grant program to help support implementation of SWPP, and prepare guidance and implement SWIG determinations. Through these efforts, two major developments/models (source water protection monitor) were developed – Corona Environmental (WV-American Water Company brought in to help expanded in Potomac River area) and a model developed by Downstream Strategies working with Morgantown Utility Board. Both models may set precedence nationally.

Walt Ivey opened the floor for discussion/questions from Commission members on the SWPP updates.

Walt Ivey asked about the legislation BPH enacted to allow staggering of submittal plans – how did it work out? Bill Toomey replied that it didn't – received a mass of plans at end of deadline. Suggested they may try and stagger on the three year review – but initially didn't come staggered.

Rick Roberts asked if OEHS tracks spills. Bill Toomey replied that OEHS is trying to work on that – it's a broader issue that needs continued discussion. Bill Toomey directed question to Walt Ivey to elaborate. Walt Ivey said not tracking "per say" but following spills. OEHS receives notification of spills and follows-up with systems as they are received, providing assistance if needed. Rick Roberts commented that spills should be documented so we know the circumstances. If we know the circumstances, we may plan better. Walt Ivey agreed.

Jeff McIntyre commented that there could be unforeseen circumstances in interconnecting - may not be practical. Both utilities would need to converse with each other to see if it's feasible. Walt agreed has to work on both sides. The utility providing water has to be able to provide the water to the utility that needs the water. Would need to be reviewed when it got to that point – has to be an agreement on both ends.

Bill Toomey added that OEHS worked with the Rivers Coalition to set up 3-4 public meetings around the state to get individuals active in the source water protection process. These were conducted before submission of the plans. Funding was provided by DEP, DHHR and a few other groups.

No other questions/comments received regarding SWPP updates.

Commission's Review Process of Source Water Protection Plans

Walt Ivey asked for the Commission's thoughts on the review process of the received SWPP. The review process is actually targeted at Work Group 1, but since plans have been submitted what is the desire of the Commission? Does the Commission want to review as a whole or leave it to Work Group 1 for review? If the Commission would like to review SWPP, how many?

Rick Roberts said he would like to look at some – but not all. Rick Roberts suggested the Commission review some as an entire group in categories such as different sizes. Next Commission meeting will have SWPP to review. Rick Roberts requested the Commission

receive SWPP via email for review prior to the next meeting. Walt suggested maybe emailing a link to access SWPP to review.

Amy Swann suggested reviewing by size, interconnections, stand-alone, etc. Walt Ivey suggested Bill Toomey pull a variety of what conditions are = larger size, smaller size, new water sources, alternate water sources, etc. This will offer a variety of conditions to review. Rick Roberts suggested to review one that OEHS feels is very thorough.

GIS Mapping Tool for Source Water Protection Planning Presentation – Hansen & Ball

Walt Ivey introduced Evan Hansen and Tim Ball. Evan Hansen worked with Tim Ball on their SWPP. Evan and Tim presented the “Morgantown Utility Board – Source Water Protection Monitor” which is a mapping tool development for the SWPP. (Handout)

Their goal was to develop a GIS tool that would score and prioritize. Two main components of the tool - assist with spill responses and management plan (manage upstream threats, identify facilities, etc.) Spill responses and management plan are both used in the Threat Matrix as a way to look at a spill and quickly understand its threat to the water system and to take action accordingly. Spills are divided into two types – known source and unknown source.

This tool is accessible anywhere. Can work on cell phones, secure password protected and not accessible to the public. It can be accessed via web browser.

There are four components in a threat: (1) toxicity, (2) quantity of spill, (3) total distance to intake and (4) distance from tank to nearest stream. Components are combined to receive a score. System is also color coded based on threat and size.

Evan Hansen provided a demonstration/overview of the tool to the Commission.

Walt Ivey opened the floor for discussion/questions from Commission members on the GIS mapping tool demonstration from Evan Hansen.

Dr. Michael McCawley asked what if you didn't know toxicity of a spill. Evan Hansen replied that the threat matrix calculation assumes 100%.

Pam Nixon wanted to know if it takes in consideration of the stream flow. Evan Hansen – yes, it uses a simple method based on flow and real time.

Rebecca McPhail wanted to know if there is an availability of an alert system that can notify utilities in the spill area to check their system. Evan Hansen replied no.

Walt Ivey suggested if any other Commission member had a tool they would like to share with the Commission to let him know and they could take it up at a later date.

No other questions/comments received regarding the GIS mapping tool demonstration from Evan Hansen.

Review of Existing Workgroup Structure & Update

Work Group 1

Walt Ivey reviewed the members of Work Group 1. Walt Ivey asked Commission members if anyone wanted added or removed from Work Group 1. Amy Swann asked to be placed on Work Group 1 with Lewis Baker as her proxy. Walt Ivey asked the Commission if there were any concerns regarding her addition to Work Group 1. No concerns from the Commission. Walt Ivey asked for a motion to change Work Group 1. Tim Ball motioned for the change, Evan

Hansen second the motion. Vote was taken - all in favor. **Amy Swann will be added to Work Group 1 (determine proxy as needed).**

Work Group 2

No changes or additions to members of Work Group 2.

Work Group 3

No changes or additions to members of Work Group 3.

Work Group 4

No changes or additions to members of Work Group 4.

Dr. Michael McCawley, Chair, wanted the Commission to know that Work Group 4 was given a copy of the Chemical Safety Board report on the MCHM spill to review and comment. Group is currently reviewing but this is not under their current charter. Dr. McCawley, Chair, wanted to request this be put under their charter. Walt Ivey said it may be up to the Commission; it is not a designated part of the legislation. Group was chartered to look at the Bayer Corp Science Incident of 2008. Request was directed to Brian Skinner for response/answer. Brian Skinner will review statute and get back with Work Group 4.

Amy Swann commented since Work Group 5 was a “catch all” group (Work Group 4’s charge being specific), would it be possible to charge that group with the MCHM review and Work Group 5 could in turn request Work Group 4 to review. It was suggested language was being ready by the code; code doesn’t talk about Work Groups.

Work Group 5

No changes or additions to members of Work Group 5.

Walt Ivey informed the Commission the Work Group membership list will be updated to reflect the changes and distributed to the members.

2016 Report Content, Format and Timeline for Completion

Walt Ivey reminded the Commission that the 2016 report must be submitted to the Legislature on December 15, 2016. Walt Ivey asked the Commission if there were any suggestions/changes as to the procedures in completing/formatting the report. He asked if the Commission wanted to follow the same procedures as last year. Commission members had no changes to the process.

Walt Ivey suggested that Work Groups develop their own schedule to conduct their respective meetings. Work Groups will need to have their responsible sections complete and ready to add to the report when ready.

The entire Commission will meet once in September, once in October, twice in November and twice in December to start preparing for the report. Andrea Fisher will distribute possible dates/times for upcoming Commission meetings.

Upcoming Meeting Topics

Walt Ivey asked Commission for upcoming meeting topics or suggestions on presentations.

Jeff McIntyre would like to work with Corona to present their tool at the next Commission meeting.

No other topics discussed/presented.

Public Comments

Walt Ivey opened the floor for discussion/questions from the public regarding the Commission meeting.

Question was asked in regards to the GIS mapping tool presented by Evan Hansen. Can the variables/data be modified once it's entered? Evan Hansen replied can be updated at any time.

Angie Rosser wanted to comment on their collaboration with OEHS regarding the public participation component. WV Rivers Coalition developed a tool kit that is public friendly. It provides the public with basic information and how the public can play a role in source water protection. The tool is located on their website. Five public forums in four regions of the state have been held with 247 participants and 55 community/local partners. Ten water utilities were cooperative partners in the events. Key in turn out is the involvement of the community/local partners. WV Rivers Coalition will create a survey of the public's perspective – did the public have any opportunity to provide their input. Survey results will be shared with the Commission.

Angie Rosser also added that EPA Region III has an interest on the new law implementation of overlay of SWPP or “watershed-based plans” impaired. WV Rivers Coalition will perform an analysis and comparisons of the overlay – how to move in step together cost effectively.

Angie Rosser commented that it is obvious that discussion needs to continue on the implementation and accountability of the SWPP. She hopes over the next year or two the Commission reviews and makes recommendations.

No other public comments were received.

Dr. Terry Polen motioned to adjourn the meeting; motion seconded by Rick Roberts. Public Water System Supply Study Commission meeting adjourned at 11:50AM.

September 26, 2016

West Virginia Public Water System Supply Study Commission Meeting
September 26, 2016
10:00AM – 12:00PM
Office of the Cabinet Secretary – 1 Davis Square CR 93

Attendees

Commission Members Present:

Dr. Rahul Gupta, Chair; Tim Ball, Morgantown Utility Board; Rick Roberts, EL Robinson Engineering Company; Pam Nixon; Dr. Michael McCawley, WVU School of Public Health; David Acord, WV Public Service Commission; Amy Swann, WV Rural Water Association; Dr. Terry Polen, WV Department of Environmental Protection; Evan Hansen, Downstream Strategies; and Jeffrey McIntyre, WV-American Water Company

Participated via conference call:

Ed Watson, Canaan Valley Institute; and Rebecca McPhail, WV Manufacturers Association

Commission Members Absent:

Jimmy Gianato, WV Division of Homeland Security and Emergency Management

Community Members Present:

Jennifer Heymann, WV-American Water Company; Angie Rosser, WV Rivers Coalition; Patrick Murphy, BPH Office of Environmental Health Services; Walt Ivey, BPH Office of Environmental Health Services; Bill Toomey, BPH Office of Environmental Health Services; Brian Skinner, BPH; Barb Taylor, BPH; Toby Wagoner, BPH; and Scott Rodeheaver, BPH Office of Environmental Health Services.

Welcome & Meeting Overview

Dr. Rahul Gupta, Chair welcomed everyone to the meeting. All Commission members introduced themselves.

August 17, 2016 meeting minutes were presented for approval. Rick Roberts motioned to approve August 17, 2016 minutes. Jeff McIntyre seconded motion. Vote was taken and all were in favor. **August 17, 2016 meeting minutes were approved.**

Examples of Source Water Protection Plans

Dr. Gupta, Chair introduced Bill Toomey, Office of Environmental Health Services (OEHS) to provide an overview of the Source Water Protection Plans (SWPP). SWPP had to be submitted to BPH by July 1, 2016. At the last Commission meeting, 124 out of 125 water systems had submitted their SWPP. As of today, 125 out of 125 water systems have submitted SWPP; all have complied.

Rule indicates SWPP will be updated every three years. OEHS is looking at development of a staggering time period process for submission of SWPP. Also OEHS is looking at recommendation of a yearly review or exercise of SWPP by the respective water utility company.

The surface water influenced groundwater (SWIG) study has been completed by the United States Geological Survey (USGS) and available on their website. OEHS is continuing development of an internal guidance document on moving forward with determining SWIG systems.

To date, OEHS has held public hearings for 41 systems, and 64 systems currently have public hearings scheduled or to be scheduled. From the information that OEHS has on 39 systems, 145 individuals actually attended a public hearing, which is an average of 7.6 persons per hearing. This is just to provide an idea about the public hearings. Public hearings are noted online in advance.

OEHS is currently working on a grant program to offer to water systems across the State. It is in draft format and currently in review. OEHS is anticipating offering this to public water supply systems to assist with support of the implementation of their SWPP. West Virginia Interactive is currently building a SWPP application. OEHS anticipates the application to be up and running next spring.

OEHS brought redacted SWPP plans of Morgantown Utility Board (MUB) and the City of Lewisburg for review. MUB started the process early (before the development of OEHS' template) therefore their SWPP was created by them. MUB met all requirements and has been approved. The City of Lewisburg used OEHS' template. City of Lewisburg met all requirements but hasn't been approved yet – public hearing is coming up.

The basic guidelines to be included in SWPP per code are:

- Contingency plan in response to contaminations
- Examination and analysis of public water system's ability to isolate or divert contaminated water

- Examination and analysis of public water system's ability to switch to an alternate water source or intake
- Examination and analysis of a public water system's ability to close water intake in an event that the primary water source has become contaminated
- Operational information (average # of operational hours, quantity of water, etc.)
- List of potential sources of contaminants
- Management plan
- Communication plan
- Examination of technical and feasibility of implementing an early warning system

The OEHS is looking at a development of a portal that selected committee members can receive granted access to review the detailed SWPP. OEHS would like to provide access to review a few large systems, a few small systems and a few medium systems - with a total of six to review. Confidentiality agreements will need to be signed by individuals. Individuals interested, could contact/email the BPH Commissioner's Office and OEHS would then provide instructions on accessing the portal. This would be viewed through a secured website with a password.

Dr. Gupta, Chair would like to publicly applaud OEHS for their work on the SWPP. The legislation states that 180 days from July 1st SWPP to be approved by OEHS. OEHS has done an outstanding job given the timeframe.

Dr. Gupta, Chair opened the floor for discussion/questions from Commission members on the SWPP update.

Jeff McIntyre had a question in regards to accessing the reports. Would OEHS obtain the utility company's approval to share the reports that are submitted in confidence to BPH? OEHS has not thought about that – but can discuss. Jeff McIntyre said there's info in the reports that utilities want to protect, as a regulatory agency what is BPH opening up? Walt Ivey replied that we will review this. Dr. Gupta, Chair replied what will be looked at is the role of the Commission - intersection of the members of the Commission, roles of the Commission, and the regulatory framework and submission. We will look at the intentions of from both sides. Walt Ivey added that part of the charge of the Commission is to review plans and make recommendations based on submitted plans. Workgroup 1 is charged with that.

Dr. Gupta, Chair will look at charge of Commission. Dr. Gupta instructed members to send an email to Andrea Fisher if interested in reviewing reports and what system. Dr. Gupta will obtain clear guidance with the availability of SWPP before reviewing. This will be conducted in the next few weeks before addressing.

Tim Ball asked if OEHS reviewed enough plans to provide an overall impression of what has been submitted. Scott Rodeheaver replied that overall, plans are thorough and well done. The standards have been met. OEHS is happy with them. Bill Toomey added that he believes the assistance of the engineering contractors and the availability of the template and guidance instructions helped with the consistency of development of SWPP.

Evan Hansen asked if the grant program would be going out through the regional planning and development councils. Bill Toomey replied that OEHS hasn't determined the final approach on that. He believes right now, it will go out through our agency to the water utilities. Scott Rodeheaver said consultants would like to be notified as well. Evan Hansen asked if it would be targeted to only smaller systems. Bill Toomey said currently open to all systems. Evan Hansen asked if certain sections of the plans will be funded for implementation. Bill Toomey replied it is a very broad range – public outreach possibility, tabletop exercise, monitoring program. The

whole package is still in review. Water systems are encouraged to submit joint applications if they wanted too.

Amy Swann commented that she was glad to hear about cutting the middleman. This allows more money for systems.

No other questions/comments received regarding SWPP updates.

Presentation on GIS Mapping Tool for Source Water Protection Planning Presentation – WV American Water Company

Jeff McIntyre introduced Jennifer Heymann, Source Water Protection manager of WV American Water Company (WVAWC). Jennifer Heymann provided a demonstration of WVAWC's system developed by their consultant (Corona) to the Commission.

The system pulls data from readily available databases on command and searches for anything that is available to integrate into system. It has healthcare, monitoring, emergency response, etc. Corona is the lead developer on this. American Water has implemented this around the country.

Dr. Gupta, Chair opened the floor for discussion/questions from Commission members on the GIS mapping tool demonstration from WVAWC.

Dr. McCawley commented that he assumed it was only available for individuals that operate the plant. Jennifer Heymann replied, yes – permission varies by location. The water quality staff has access and the operator staff has access to certain components. Dr. McCawley asked if access could be made available to others such as DEP. Jeff McIntyre responded that is an entirely different question. The whole system was built strictly around security protocols. Jennifer Heymann and her backup are the only ones that can see everything. WVAWC receives information so confidential from manufacturers that they want to ensure the system can protect it. Water treatment plant operators have a view of what the chemicals are but may not have specific formulas. WVAWC can grant permission to anyone, anywhere and make it available. WVAWC hasn't decided on that. Jeff McIntyre added if WVAWC would happen to get into an interdepartmental agency partnership that is something they could do. Dr. McCawley also wanted to know if somebody has a need to know, can you push a button and provide that info. Jeff McIntyre replied that Corona is working on the development of a button to push in case of an emergency to make it accessible to emergency responders so they would have readily available info that WVAWC has to help with the response.

Dr. McCawley asked if there was a category that can identify a chemical in which the toxicology info is not clear, an agreed upon definition of a new chemical. Is there a category that can identify the toxicity rating and the way it's being treated? Jennifer Heymann replied that this is a forthcoming feature of the system – under development.

Dr. Gupta, Chair wanted to clarify that SB373 was the genesis for the parent company wanting to have this in all its locations. Jeff McIntyre replied, not for the parent company. WVAWC started first by what was heard during the legislature and the bills that were introduced. WVAWC spent close to \$400,000 with the partnership - Water Resource Foundation. WVAWC's facility was the first one done in the country and a beta process. American Water liked what WVAWC was doing and adopted it universally.

Per Dr. Gupta, Chair, DMAPS presented an event management tool about a year ago. Dr. Gupta wanted to know if the Commission had an interest for DMAPS to return and provide an update. Dr. Gupta stated he was impressed when he initially saw their presentation. Jeff

McIntyre replied it is always good to see what other people are doing. Dr. Gupta informed Commission members that BPH will make the request.

No other questions/comments received regarding the GIS mapping tool demonstration from WVAWC.

Workgroup Updates

Work Group 1

No specific update to share – just getting started. A meeting will be setup within the next few weeks.

Work Group 2

As of this morning, 39,605 tanks have been registered. Inspections that have been completed on above ground storage tanks (ASTs), specifically, are 1,667; 50 of those have been issued. DEP's effort (especially Scott Mandirola) needs to be applauded in notifying AST owners on their need to be in compliance with the passed legislation.

Work Group 3

No specific update to share. Have meet once, and the second meeting is scheduled next week. Group hopes to have recommendations to share by the next meeting.

Work Group 4

Informed the Commission, that the Chemical Safety Board's report on MCHM will be presented on September 28, 2016 at the Four-Point Sheraton in Charleston.

Work Group 5

No specific update to share. An upcoming meeting is scheduled.

Public Comments

Dr. Gupta, Chair opened the floor for discussion/questions from the public regarding the Commission meeting.

Angie Rosser wanted to comment on the small grant award from DEP. With this award, she plans to improve source water quality in Buckhannon and Marlinton areas. She has a verbal commitment for funding to work on the small Shenandoah system. This may attract more clean water act funding.

No other public comments were received.

Dr. Terry Polen motioned to adjourn the meeting; motion seconded by Dr. McCawley. Public Water System Supply Study Commission meeting adjourned at 11:30AM.

October 20, 2016

West Virginia Public Water System Supply Study Commission Meeting
October 20, 2016
10:00AM – 12:00PM
Office of the Cabinet Secretary – 1 Davis Square CR 93

Attendees

Commission Members Present:

Dr. Rahul Gupta, Chair; Rick Roberts, EL Robinson Engineering Company; Pam Nixon; David Acord, WV Public Service Commission; Dr. Terry Polen, WV Department of Environmental Protection; Evan Hansen, Downstream Strategies; and Rebecca McPhail, WV Manufacturers Association

Participated via conference call:
Ed Watson, Canaan Valley Institute

Commission Members Absent:

Jimmy Gianato, WV Division of Homeland Security and Emergency Management; Tim Ball, Morgantown Utility Board; Dr. Michael McCawley, WVU School of Public Health; Jeffrey McIntyre, WV-American Water Company; and Amy Swann, WV Rural Water Association

Community Members Present:

Walt Ivey, BPH Office of Environmental Health Services; Bill Toomey, BPH Office of Environmental Health Services; Brian Skinner, BPH; Barb Taylor, BPH; Toby Wagoner, BPH; and Scott Rodeheaver, BPH Office of Environmental Health Services.

Welcome & Meeting Overview

Dr. Rahul Gupta, Chair welcomed everyone to the meeting. All Commission members introduced themselves.

September 26, 2016 meeting minutes were presented for approval. Rick Roberts motioned to approve September 26, 2016 minutes. David Acord seconded motion. Vote was taken and all were in favor. **September 26, 2016 meeting minutes were approved.**

Update on Source Water Protection Plans and Hearings

Dr. Gupta, Chair introduced Bill Toomey, Office of Environmental Health Services (OEHS) to provide an update of the Source Water Protection Plans (SWPP). As of today, 125 SWPP have been reviewed. 117 systems with public hearings across the State; this would be approximately 47 separate hearings held – for total of 117 systems. As of today, OEHS is approaching 50 systems with an improved plan. Current review checklist of scheduled hearings posted on OEHS website, plans are to provide/add if the system has been approved onto that checklist for individuals interested. Total attendees for the public hearings are 333 individuals based on OEHS records.

Current 2016 grant application program is currently available - posted on website.

Dr. Gupta, Chair opened the floor for discussions/questions from Commission members on the update of SWPP and hearings.

Evan Hansen wanted to know the deadline for submitting grant applications. Bill Toomey's reply was the end of November 2016. Scott Rodeheaver added there has been a lot of interest so far.

No other questions/comments received regarding update of SWPP and hearings.

Workgroup Updates

Work Group 1

Walt Ivey provided the update on Work Group 1. Group met by phone. Group reviewed last year's recommendations and talked about potential new recommendations. The next meeting is scheduled for October 28, 2016. Recommendations will be similar to last time but may be a couple of extra ones.

Dr. Gupta reminded the Commission that we are working toward the final document that is due December 15, 2016.

Work Group 2

Dr. Terry Polen provided the update on Work Group 2. Group met on October 6, 2016. DEP gave a presentation on above ground storage tanks. Workgroup had questions which included how many times the public water systems were actually shut down during the time and looking into data for the spill response line.

Based on information DEP has now, spill line started July 1, 2009 (since Work Group); there have been reported complaints (all over the board). Grand total of 19,295 complaints (for example: 57% sewage spills (11,072) as of October 12, 2016, 854 industrial spills, and 994 oil and gas spills).

Beyond Work Group charge - a discussion was brought up about the line of how much confidentiality information can be out there and how much public information should be available.

Dr. Polen's grad students at the University of Maryland performed some work on that. Dr. Polen presented Dr. Gupta with a document to get us thinking a little further – Boston College Environmental Affairs Law Review's *Balancing National Security with a Community's Right-to-Know: Maintaining Public Access to Environmental Information Through EPCRS's Non-Preemption Clause*.

Dr. Polen suggested the Commission look further into the Chemical Facility Anti-Terrorism Standards (CFAS), which came out in 2007 of section 550 of the Department of Homeland Security Appropriation Act and Executive Order 13650. They have a variety of different pieces within the report including analysis of looking at different facilities, some of the facilities effected are chemical manufacturing, energy, utilities, agriculture food, explosives, mining's, health care etc. public water systems are excluded.

Dr. Polen would like to recommend to the Commission that we get someone to present those pieces – CFAS and Executive Order 136501 - that would give us a better view of the questions about the confidentiality line. Dr. Gupta commented that this will be looked into and provided to the group at a later date.

Evan Hansen suggested Jimmy Gianato may have folks that could present on this topic. Dr. Gupta agreed that Jimmy Gianato may know someone on the national perspective to present. Dr. Gupta suggested he will reach out to Jimmy Gianato to get assistance with facilitating the appropriate folks to talk about this.

Work Group 3

David Acord provided the update on Work Group 3. Group has met a couple of times. At last meeting, group came up with three recommendations and will be advancing those to the full Commission.

Work Group 4

Pam Nixon – nothing to report.

Work Group 5

David Acord provided the update on Work Group 5. Group has met twice so far. At this time, group has three recommendations they have voted on to pass to the Commission. Those involve SDS information, spill notifications and mobile threats. Group is discussing three

additional topics. Group has a meeting coming up next week, October 27, 2016. Group is hoping to conclude their recommendations in the next couple of weeks then will forward all recommendations to the full Commission for consideration.

Dr. Gupta requested that the document shared by Dr. Polen be forwarded to the full Commission for info/use. Dr. Polen wanted to express that he is not backing this document – just wanted to share – found informational.

Dr. Gupta wanted to inform the Commission that BPH/OEHS is doing its part on what can be disclosed in regards to SWPP. BPH, Homeland Security and DEP can work together to evaluate the direction moving forward is in context with the intent of the legislation. BPH will set up a meeting within the three agencies.

Evan Hansen wanted to recommend that the Commission get Angie Rosser, WV Rivers Coalition, to speak on their project to help encourage the public's participation in the SWPP. They conducted a survey on the public's participation. Suggested Angie Rosser could give a presentation on the survey results. Dr. Gupta agreed.

Pam Nixon wanted to mention a future event scheduled on November 2, 2016 at the DEP. The EPA will hold a listening session on their hazardous chemical spill prevention rule that they are currently writing. Dr. Polen wanted to verify that this is not the DEP rule, but the spill pollution counter control measures (SPCC) that ties directly into petroleum based products. Please keep in mind different entity/piece.

Rebecca McPhail mentioned a Chemical Safety Workshop scheduled October 27, 2016 at the Embassy Suites. More information on the workshop is located on their website. Vanessa Sutherland is the keynote speaker.

Public Comments

Dr. Gupta, Chair opened the floor for discussion/questions from the public regarding the Commission meeting.

No other public comments were received.

Dr. Terry Polen motioned to adjourn the meeting; motion seconded by Rebecca McPhail. Public Water System Supply Study Commission meeting adjourned at 10:45AM.

November 10, 2016

West Virginia Public Water System Supply Study Commission Meeting
November 10, 2016
10:00AM – 12:00PM
Office of the Cabinet Secretary – 1 Davis Square CR 93

Attendees

Commission Members Present:

Dr. Rahul Gupta, Chair; Rick Roberts, EL Robinson Engineering Company; David Acord, WV Public Service Commission; Dr. Terry Polen, WV Department of Environmental Protection; Tim Ball, Morgantown Utility Board; and Laura Martin, WV-American Water Company (*proxy for Jeffrey McIntyre*)

Participated via conference call:

Ed Watson, Canaan Valley Institute; Pam Nixon; Evan Hansen, Downstream Strategies; Rebecca McPhail, WV Manufacturers Association; and Dr. Michael McCawley, WVU School of Public Health

Commission Members Absent:

Jimmy Gianato, WV Division of Homeland Security and Emergency Management and Amy Swann, WV Rural Water Association

Community Members Present:

Angie Rosser, WV Rivers Coalition; Patrick Murphy, BPH Office of Environmental Health Services; Jim Ellars, BPH Office of Environmental Health Services; Bill Toomey, BPH Office of Environmental Health Services; Brian Skinner, BPH; Toby Wagoner, BPH; and Ken Ward, Jr., Charleston Gazette-Mail

Welcome & Meeting Overview

Dr. Rahul Gupta, Chair welcomed everyone to the meeting. All Commission members introduced themselves.

Dr. Gupta reminded Commission members that the recommendations are due to the Legislature by December 15, 2016. Dr. Gupta requested that recommendations be presented and voted on at the next meeting of November 22, 2016.

October 20, 2016 meeting minutes were presented for approval. Rebecca McPhail motioned to approve October 20, 2016 minutes as presented. Rick Roberts seconded motion. Vote was taken and all were in favor. **October 20, 2016 meeting minutes were approved.**

Update on Source Water Protection Plans and Hearings

Dr. Gupta, Chair introduced Bill Toomey, Office of Environmental Health Services (OEHS) to provide an update of the source water protection plans (SWPP) and hearings. As of today, 125 SWPP have been reviewed. A total of 125 hearings have been held. Bill Toomey mentioned that OEHS had to redo several of the hearings that are currently in the process of being planned. 111 SWPPs have been approved.

Dr. Gupta, Chair opened the floor for discussions/questions from Commission members on the update of SWPP and hearings.

Rick Roberts asked why some of the hearings had to be redone. Bill Toomey replied it was due to some of the communications not going out properly on scheduling them; redoing several to make sure all are covered.

No other questions/comments received regarding update of SWPP and hearings.

Workgroup Updates

Work Group 1

In Walt Ivey's absence, Patrick Murphy provided the update on his behalf. Work Group 1 has been working on four recommendations. The recommendations are as follows:

1. Require either an annual evaluated and documented exercise of the SWPP or a documented annual review and update if necessary of the SWPP with the utility reporting this information to the Bureau.

2. DEP and/or DHHR notify downstream water utilities if there is a change in substance and/or a substantive change within an aboveground storage tank as outlined in WV Code §22-30-9 (b) 1-6. Such notification is to be made as soon as possible.
3. Evaluate the effectiveness of SWPP and practices.
4. Legislature review the proposed alternative water sources and provide further guidance on refining the cost estimates, prioritizing and funding these projects.

Dr. Gupta, Chair opened the floor for discussions/questions from Commission members on the recommendations presented during the update provided by Work Group 1.

No questions/comments received.

Work Group 2

Dr. Terry Polen provided the update on Work Group 2. On Monday – November 14, 2016 a strawman draft will be distributed to the Commission on the findings, facts and recommendations that the Work Group has worked on with both DHHR and DEP.

Dr. Gupta, Chair opened the floor for discussions/questions from Commission members on the update provided by Work Group 2.

No questions/comments received.

Work Group 3

In Amy Swann's absence, David Acord provided the update on Work Group 3. Amy Swann, Chair has been out for the past several weeks. Work Group 3 has not met since their last meeting. There are still three recommendations that Work Group 3 anticipates submitting to the full Commission. No additional meetings are anticipated.

Dr. Gupta, Chair opened the floor for discussions/questions from Commission members on the update provided by Work Group 3.

No questions/comments received.

Work Group 4

Dr. Michael McCawley provided the update on Work Group 4. Work Group 4 has a statement which basically states the review should be accepted and suggests a chemical protection plan.

Dr. Gupta, Chair asked if the Work Group anticipates that to be the sole recommendation or will the group have more recommendations at the next meeting.

Work Group 4 would like to review the newest Chemical Safety Board (CSB) report. Dr. McCawley stated they have recommendations that can be made for that report. Work Group 4 will meet again as soon as possible.

Dr. Gupta, Chair stated that when Commission was put in place, five charges were identified and the work groups were derived based on those charges. At that time, the CSB recommendations on the spill were not particularly given a charge, however it is reasonably within the purview of the work of the Commission for Work Group 4 to review and make recommendations since the group is already working on one CSB report. Commission members would need to vote/agree upon Work Group 4 taking this on.

Dr. Polen motioned to allow Work Group 4 to also take in consideration of the recent recommendations of the CSB that was just released and evaluate those for potential recommendations to the Legislature by December 15, 2016. Rick Roberts/Tim Ball seconded motion.

Dr. Gupta opened the floor for discussion on this motion.

Evan Hansen added that after reading Ken Ward's coverage of the CSB report, some individuals are critical of it. It's alleged the report doesn't distinguish appropriately between the different substances that actually spilled and might make some mistakes that the time line wasn't clarified in as much detail as would be expected; might not be a full account of what happened. Evan Hansen added that it seems valid issues were brought up in the paper. Evan Hansen asked if that is something within the purview of the Commission to review the report in detail and weigh in if we think it needs to be adjusted.

Brian Skinner, BPH General Counsel, replied that the Commission has a role to develop facts and recommendations for the Legislature, if it draws any conclusions from CSB's report whether valuable or not, would have to be framed within recommendations to the Legislature. The Commission doesn't have any authority outside that limited role. If the Commission finds no value in the conclusions drawn by the CSB report, it can either work on a recommendation or suggest the Legislature do something else based on the inadequacies of the CSB; addressing the CSB, a part from that, is not appropriate. Brian Skinner's response sounded appropriate to Evan Hansen.

No other discussion on the motion. Vote was taken and all were in favor. **Approved - Work Group 4 will take in consideration the recent recommendations of the CSB that was just released and evaluate those for potential recommendations to the Legislature by December 15, 2016.**

Work Group 5

David Acord provided the update on Work Group 5. Work Group 5 has recommendations on five areas: SDS information, spill reporting, local threats, income tax credits for source water protection and river alert information network. Their last meeting is scheduled today after the Commission meeting. They will finalize the language of the recommendations. Work Group 5 anticipates sending the full Commission all the information prior to the next scheduled Commission meeting.

Dr. Gupta, Chair opened the floor for discussions/questions from Commission members on the update provided by Work Group 5.

No questions/comments received.

Dr. Gupta, Chair asked Commission members if there were any other business to discuss prior to opening floor for Public Comments.

Patrick Murphy asked about the availability of Tier II data. Is it possible to get Jimmy Gianato's office to discuss Tier II chemicals and access to chemical information at a Commission meeting? Rick Roberts asked what do you mean as far as releasing it? Patrick Murphy replied, yes. Rick Roberts replied that it is already sent to county commissions, local fire departments, and local EMS planning. Dr. Polen replied there are exceptions – some chemical information can be withheld from releasing by Homeland Security.

Dr. Gupta, Chair responded that this seems to be a reoccurring topic of discussion and agrees

that a discussion on Tier II chemicals needs to take place. Current deadline is to produce and submit recommendations to the Legislature, following that Commission can move forward to having experts come in and present/discuss CFATS and Tier II chemicals. Dr. Polen will assist with finding individuals to present on this topic. Dr. Gupta will reach out to Jimmy Gianato's office.

Dr. Polen suggested this be added as a recommendation that states the Commission needs to clarify this topic. It is wise that the Commission knows what is out there before making recommendations as to the direction to proceed.

Evan Hansen added that at the last Commission meeting he requested to have Angie Rosser attend a future meeting to give a presentation on the survey results WV Rivers Coalition conducted related to the public participation in the source water protection process. He thought it was agreed she would be added to the agenda – just wanted to make sure we don't lose sight of that. He requested to add her to meeting on November 22nd. Angie Rosser is available on November 22nd and will be added to the agenda.

Laura Martin thought the Commission may be interested in knowing the Water Research Foundation will be publishing a new report on guidance on identifying potential sources of water contaminants. The report is being written in accordance to the AWWA standards. Laura Martin/Jeffrey McIntyre will share the report with the Commission once it becomes available.

Public Comments

Dr. Gupta, Chair opened the floor for discussion/questions from the public regarding the Commission meeting.

No other public comments were received.

Dr. Terry Polen motioned to adjourn the meeting; motion seconded by David Acord. Public Water System Supply Study Commission meeting adjourned at 10:38AM.

November 22, 2016

West Virginia Public Water System Supply Study Commission Meeting
November 22, 2016
10:00AM – 12:00PM
Office of the Cabinet Secretary – 1 Davis Square CR 93

Attendees

Commission Members Present:

Walt Ivey (*proxy - participated as Chair in Dr. Rahul Gupta's absence*); David Acord, Public Service Commission; and Laura Martin, WV-American Water Company (*proxy for Jeffrey McIntyre*)

Participated via conference call:

Tim Ball, Morgantown Utility Board; Ed Watson, Canaan Valley Institute; Pam Nixon; Dr. Michael McCawley, WVU School of Public Health; Dr. Terry Polen, WV Department of Environmental Health Protection; and Evan Hansen, Downstream Strategies;

Commission Members Absent:

Dr. Gupta, Chair; Rick Roberts, EL Robinson Engineering Company; Amy Swann, WV Rural Water Association; Jimmy Gianato, WV Division of Homeland Security and Emergency

Management; and Rebecca McPhail, WV Manufacturers Association

Community Members Present:

Barb Taylor, Bureau for Public Health (BPH); Bill Toomey, BPH-Office of Environmental Health Services (OEHS); and Angie Rosser, WV Rivers Coalition

Welcome & Meeting Overview

Walt Ivey welcomed everyone to the meeting. All Commission members introduced themselves.

November 10, 2016 meeting minutes were presented for approval. Tim Ball motioned to approve November 10, 2016 minutes as presented. David Acord seconded motion. Vote was taken and all were in favor. **November 10, 2016 meeting minutes were approved.**

Source Water Protection Community Engagement Presentation – Angie Rosser

WV Rivers Coalition developed a *Safe Water for WV* program to educate the public about the source water protection plan (SWPP) process. Five (5) regional public forums with 72 community partners on how to get involved in source water protection and how to review and comment on their utility's SWPPs were held. Following the first year of the program, the public was surveyed to gauge their satisfaction and involvement in the SWPP process. Angie Rosser attended the Commission meeting to provide the members with the survey results (handout).

The survey was distributed via email and shared on social media for two weeks at the end of October. 175 responses were received from 33 counties.

The majority of the public felt sufficient information was not provided by the water utility. Most individuals did not know they could get involved in the SWPP process.

Respondents were asked open ended questions to gain insight on how to improve the SWPP process and quality. Responses regarding the public notice included: provide earlier and multiple public notices; longer comment periods; include notice in water bill; provide discount on bill with involvement; more advertisements; post in stores and post offices; and improve communication from the utility. Responses regarding improving public participation included: hold meetings to accommodate different schedules; include citizen involvement on water boards and source water protection meetings; and involve watershed and other water-focused groups in each community.

Monitoring and implementation were important components. Respondents noted to make sure SWPP were carried out and suggested to provide SWPP status reports to the public and focus groups every six months to assure diligent implementation and progress.

WV Rivers Coalition hopes the survey results prompts the Commission to really look at how to obtain public involvement in the future.

Walt Ivey opened the floor for discussion/questions from Commission members on the survey results presentation.

No questions/comments received.

Work Group Updates

Work Group 1

Walt Ivey provided the update for Work Group 1. Work Group 1 has four recommendations but they are not ready to submit to the Commission for review/voting. Work Group 1 will submit the recommendations at the December 1, 2016 Commission meeting.

Floor was opened for discussion/questions from Commission members on Work Group 1 update. No questions/comments received.

Work Group 2

Dr. Terry Polen provided the update for Work Group 2. Dr. Polen distributed a strawman draft to the Commission via email last week (11.14.16). Dr. Polen stated Work Group 2 recommendations are not ready to be submitted to the Commission for review/voting. Work Group 2 will have their recommendations ready by the December 1, 2016 Commission meeting.

Floor was opened for discussion/questions from Commission members on Work Group 2 update. No questions/comments

Work Group 3

In Amy Swann's absence, David Acord provided the update on Work Group 3. David Acord noted Work Group 3 adopted four recommendations. David Acord stated the Work Group 3 members voted on the recommendations and believes they are final and ready to submit to the full Commission for review/vote. Ed Watson agreed Work Group 3 recommendations are in final form.

David Acord reviewed the recommendations:

Recommendation 3.1:

The Legislature should make a \$2,000,000 continuing appropriation to the Department of Health and Human Resources, Bureau for Public Health in furtherance of its source water protection efforts. This funding shall also be used to provide grant monies to systems as they begin their statutorily required three year updates. In addition, the Bureau should commence an investigation of the RAIN or other type systems to determine if such a state wide network could be implemented. It is noted that Workgroup 5 has a similar recommendation in support of Work group 3's recommendation.

Recommendation 3.2:

That the West Virginia Legislature amend West Virginia Code 16-1-9c to include a new subsection designated as subsection (i) to read as follows:

- (i) The Secretary is authorized to propose legislative rules for promulgation pursuant to article three, chapter twenty-nine-A to implement the provisions of this section that may include a schedule for the submission of Source Water Protection Plans by public water utilities pursuant to subsection (f) that staggers the schedule for the submission of Source Water Protection Plans, except that for the purpose of staggering the dates of submission of updated Source Water Protection Plans, the Secretary may designate a schedule of submission greater than three years from the initial submission required by a legislative rule promulgated pursuant to this subsection.

Recommendation 3.3:

Advance a recommendation to the full Commission that the West Virginia Infrastructure and Jobs Development Council and the Bureau for Public Health, Drinking Water Treatment Revolving Fund amend their preliminary project ranking and/or scoring structures to add emphasis for source water protection projects.

Recommendation 3.4:

Advance a recommendation that the Legislature appropriate \$40 Million from the Video Lottery Proceeds to the West Virginia Infrastructure and Jobs Development Council to allow the Council to play an active role in source water protection.

David Acord wanted to note that the River Alert Information Network (RAIN) was referenced in Work Group 3's recommendations as well as in Work Group 5.

David Acord moved to have the Commission vote on the recommendations of Work Group 3. Dr. Polen requested to postpone the review/voting of Work Group 3's recommendations until the December 1, 2016 Commission meeting.

Walt Ivey agreed to postpone voting on Work Group 3's recommendations until the December 1, 2016 meeting since most Commission members were participating in the meeting via conference call. This would allow members time to review prior to the next Commission meeting December 1, 2016.

Floor was opened for discussion/questions from Commission members on Work Group 3 update.

Evan Hansen wanted clarification on the reference of RAIN that was noted in the two different Work Groups. He didn't understand the last sentence in Recommendation 3.1, *"It is noted that Workgroup 5 has a similar recommendation in support of Work group 3's recommendation."*

David Acord replied that Work Group 3 references funding for RAIN and Work Group 5 references implementing RAIN or similar system.

Evan Hansen has no objections to the recommendations; just suggest that in lieu of listing in separate places may be able to be combined. This will be discussed at the next Commission meeting December 1, 2016. No questions/comments received.

Work Group 4

Dr. Michael McCawley provided the update on Work Group 4. Dr. McCawley states that their next Work Group meeting is scheduled for December 2, 2016 where they will discuss the recent Chemical Safety Board report. Work Group 4 will have their recommendations ready after their December 2, 2016 meeting.

Floor was opened for discussion/questions from Commission members on Work Group 4 update. No questions/comments received.

Work Group 5

David Acord provided the update for Work Group 5. Work Group 5 has five recommendations for the Commission to consider and they are ready for the Commission to vote on. David Acord noted that recommendations were the same as last year but with a few wording edits.

As discussed previously, recommendations will be reviewed/voted on by Commission at next meeting December 1, 2016.

Floor was opened for discussion/questions from Commission members on Work Group 5 update.

No questions/comments received.

Walt Ivey recommended that all recommendations be finalized by the next Commission meeting.

Walt Ivey mentioned to the Commission, last year the Commission gave the Bureau the ability to make technical edits to the recommendations and legislative report. Is this something to consider this year as well.

Dr. Terry Polen motioned to allow the Bureau the ability to make technical edits to the recommendations and legislative report as necessary. David Acord seconded motion. Vote was taken and all were in favor. **Bureau for Public Health will have the ability to make technical edits to the recommendations and legislative report.**

Walt Ivey suggested that if any questions or comments arise, email to the Commission so discussions can be held at the next meeting.

Brian Skinner, BPH Counsel, commented that Commission members need to be cognitive of the public nature of these meetings. It is acceptable to email questions/comments, but cannot derive resolutions, etc. – can't come into the Commission meeting as resolving an issue, etc. All issues/decisions need to be done in public view.

Public Comments

Walt Ivey opened the floor for discussion/questions from the public regarding the Commission meeting.

Angie Rosser commented that she would like to congratulate OEHS in completing the hearings. No other public comments were received.

David Acord motioned to adjourn the meeting; motion seconded by Laura Martin. Public Water System Supply Study Commission meeting adjourned at 10:47AM.

December 1, 2016

West Virginia Public Water System Supply Study Commission Meeting
December 1, 2016
10:00AM – 12:00PM
Office of the Cabinet Secretary – 1 Davis Square CR 93

Attendees

Commission Members Present:

Walt Ivey (*proxy - participated as Chair in Dr. Rahul Gupta's absence*); Tim Ball, Morgantown Utility Board; Pam Nixon; David Acord, Public Service Commission; Dr. Terry Polen, WV

Department of Environmental Protection; Evan Hansen, Downstream Strategies; Rebecca McPhail, WV Manufacturers Association; and Brett Morgan, WV-American Water Company (proxy for Jeffrey McIntyre)

Participated via conference call:

Ed Watson, Canaan Valley Institute and Dr. Michael McCawley, WVU School of Public Health

Commission Members Absent:

Dr. Gupta, Chair; Rick Roberts, EL Robinson Engineering Company; Amy Swann, WV Rural Water Association; and Jimmy Gianato, WV Division of Homeland Security and Emergency Management

Community Members Present:

Barb Taylor, Bureau for Public Health (BPH); Bill Toomey, BPH-Office of Environmental Health Services (OEHS); Patrick Murphy, BPH-OEHS; Toby Wagoner, BPH; Brian Skinner, BPH; and Lewis Baker, WV Rural Water Association

Welcome & Meeting Overview

Walt Ivey welcomed everyone to the meeting. All Commission members introduced themselves.

November 22, 2016 meeting minutes were presented for approval. Rebecca McPhail motioned to approve November 22, 2016 minutes as presented. David Acord seconded motion. Vote was taken and all were in favor. **November 22, 2016 meeting minutes were approved as presented.**

Walt Ivey informed the Commission that before the Work Groups submit their recommendations to the full Commission, the recommendations must be formally approved within the Work Group itself prior to presenting to the full Commission.

A meeting has been scheduled on December 8, 2016 (8:30AM – 10:00AM) – prior to the full Commission meeting – to accommodate the Work Groups that need to formally approve their recommendations. The December 8, 2016 8:30AM meeting has been posted on the WV Secretary of State's Online Meeting Notices.

Walt Ivey noted that all Work Groups must have their recommendations ready for submission to the full Commission on December 8, 2016 for voting/acceptance. The required Legislative Report is due by December 15, 2016.

Work Group Updates

Work Group 1

Walt Ivey provided the update for Work Group 1. Work Group 1 developed four recommendations. The recommendations haven't been formally voted/accepted within Work Group 1. Work Group 1 will formally vote on the recommendations at the December 8, 2016 (8:30AM) meeting and then move forward.

Walt read the recommendations:

Recommendation 1.1

The Commission advances the recommendation to require either an annual evaluated and documented exercise of the SWPP or a documented annual review, and update if necessary, of the SWPP, with the utility reporting this information to the BPH.

(Same as last year – made a few wording edits.)

Walt asked for questions/comments from the Commission on Recommendation 1.1. None were received.

Recommendation 1.2

The Commission advances the recommendation that DEP and/or DHHR notify downstream water utilities if there is a change in substance and/or a substantive change within an aboveground storage tank as outlined in W.Va. Code §22-30-9 (b) 1-6. Such notification is to be made as soon as possible.

(Similar to last year with the exception of emphasis on DEP and DHHR notifying water utilities of any changes ASAP.)

Walt asked for questions/comments from the Commission on Recommendation 1.2. None were received.

Recommendation 1.3

The Commission advances the recommendation for evaluating the effectiveness of source water protection plans and practices.

(New recommendation – intent is to have the program reviewed by a third party source ensure nothing is overlooked and items that are to be done, are getting done.)

Walt asked for questions/comments from the Commission on Recommendation 1.3. Questions/comments received:

Evan Hansen asked about recommendations overlapping with other Work Group recommendations (Work Group 2 – effectiveness)? Dr. Polen replied there may need to be an overlap – all are under the same legislation – could combine recommendations. Walt Ivey asked if there is a concern if a recommendation overlaps with another. Evan Hansen replied no - wants to make sure all intentions are clear to the Legislature.

(Public Comment) Lewis Baker had a comment regarding Work Group 1 – Recommendation 1.3. He suggested that in order to make the program effective, timeline reporting, spill insurance and equipment monitoring may need to be explored. Suggested to explore what other states are doing. Compare one West Virginia plan to another.

Walt Ivey replied the intent of this recommendation is to have a third party review the program to see what has been done and if changes/improvements need made. What the Work Group is making as a recommendation is to go to the Legislature to suggest what we think should be done and request funding to do this. At that point, we would go into more details in what exactly we are going to do when developing a contract. Recommendation is providing an overview of what to be done – don't feel this is the time to go into details. Mr. Baker agreed this sounded reasonable.

Recommendation 1.4

The Commission recommends that the Legislature review the proposed alternative water sources and provide further guidance on refining the cost estimates, prioritizing, and funding these projects.

(New recommendation – providing list of first alternatives from each SWPP and estimated cost at that. This is the “first shot” as to what the first alternatives would be. These will be

listed/included in the report as an appendix. Estimate cost \$348 million. This isn't saying that all first alternatives are viable; just an identifier as to what has been submitted.)

Walt asked for questions/comments from the Commission on Recommendation 1.4. Questions/comments received:

Rebecca McPhail asked how many alternative intakes are there. Walt Ivey replied they wouldn't all necessarily be intakes; variety. Not all are viable options – good indication of thought process and work that may potentially need to happen moving forward.

Evan Hansen asked about analyzing the results – don't know if Legislature would do this. May be something the Bureau or Commission could perform next year. Expand recommendation to include some suggestion about giving the Commission the ability to do this next year. Walt Ivey responded that he believes this is something the Commission could take up next year. More information would be available and could expand on the recommendation with some of the work that happens over the year. The Commission could take up whether Legislation provides directive or not.

Dr. Polen commented it ties in with the “confidentiality thing” of looking at where the line is. Dr. Polen suggests the Commission take on defining and then recommending to the Legislature as to where that is with the understanding from CERCLA (Comprehensive Environmental Response, Compensation, & Liability Act), EPCRA (Emergency Planning & Community Right-to-Know Act), etc.

Tim Ball commented that he is conflicted with this recommendation. He agrees the Legislature needs a summary/exposure of the scope of the problem and cost to repair/correct – valuable information for them to have. However, his concerns are with the wording of the recommendation. Believes it suggests a level of centralized planning that he finds objectionable. Feels the Program was setup to allow utilities to determine their own priorities – respects local authority which is important. If the Commission asks for guidance with priorities that suggests a level of centralized planning that is not consistent with the way the program started.

Recommendation 1.4 is revised to read:

The Commission recommends that the Legislature review the proposed alternative water sources and provide further guidance. ~~on refining the cost estimates, prioritizing, and funding these projects.~~

All Commission members agreed. – No other comments were received.

Work Group 2

Dr. Polen, Chair, provided the update for Work Group 2. Work Group 2 is still in the process of preparing their recommendations. Dr. Polen's intentions were to share the strawman draft with the Commission members for comments/suggestions and correspond via email. Work Group 2 will have their recommendations complete by December 8, 2016. Work Group 2 will formally vote on the recommendations at the December 8, 2016 (8:30AM) meeting and then move forward.

Work Group 3

David Acord provided the update for Work Group 3 in Amy Swann's (Chair) absence. Work Group 3 developed four recommendations. The recommendations have been formally voted/accepted within Work Group 3 and ready for submission to the full Commission.

David Acord read the recommendations:

Recommendation 3.1:

The Legislature should make a \$2,000,000 continuing appropriation to the Department of Health and Human Resources, Bureau for Public Health in furtherance of its source water protection efforts. This funding shall also be used to provide grant monies to systems as they begin their statutorily required three year updates. In addition, the Bureau should commence an investigation of the RAIN or other type systems to determine if such a statewide network could be implemented. It is noted that Workgroup 5 has a similar recommendation in support of Work group 3's recommendation.

(Similar to last year's, but added the "River Alert Information Network (RAIN) information.)

Walt asked for questions/comments from the Commission on Recommendation 3.1. Questions/comments received:

Evan Hansen mentioned the possible overlap of RAIN in Work Group 3 and Work Group 5. David Acord noted that Work Group 5 is encouraging BPH to use a statewide system and Work Group 3 is based on supporting.

Dr. Polen asked how the recommendations will be incorporated into the Legislative Report. Walt replied that recommendations are listed by Work Groups and to keep with consistency, the report will be created/prepared like last year.

Walt Ivey recommends taking out last sentence of 3.1.

Evan Hansen suggested adding "*and to fund the RAIN or other type system.*"

Tim Ball suggested adding "*to help fund RAIN*".

(Public Comment) Lewis Baker wanted to add that it is important to remember when it comes to funding, to allow for maintenance of whatever system is decided/used.

Recommendation 3.1 is revised to read:

The Legislature should make a \$2,000,000 continuing appropriation to the Department of Health and Human Resources, Bureau for Public Health in furtherance of its source water protection efforts. This funding shall also be used to provide grant monies to systems as they begin their statutorily required three year updates **and to help fund the River Alert Information Network (RAIN) or other type system.** In addition, the Bureau should commence an investigation of the RAIN or other type systems to determine if such a statewide network could be implemented. ~~It is noted that Workgroup 5 has a similar recommendation in support of Work group 3's recommendation.~~

David Acord made a motion to adopt Recommendation 3.1 as revised. Dr. Polen seconded motion. Vote was taken and all were in favor. **Recommendation 3.1 is approved/adopted as revised and will be included in the 2016 Legislative Report.**

Recommendation 3.2:

That the West Virginia Legislature amend West Virginia Code 16-1-9c to include a new subsection designated as subsection (i) to read as such: "*The Secretary is authorized to propose legislative rules for promulgation pursuant to article three, chapter twenty-nine-A to implement the provisions of this section that may include a schedule for the submission of*

Source Water Protection Plans by public water utilities pursuant to subsection (f) that staggers the schedule for the submission of Source Water Protection Plans, except that for the purpose of staggering the dates of submission of updated Source Water Protection Plans, the Secretary may designate a schedule of submission greater than three years from the initial submission required by a legislative rule promulgated pursuant to this subsection.”

Walt asked for questions/comments from the Commission on Recommendation 3.2. None were received.

David Acord made a motion to adopt Recommendation 3.2 as read. Pam Nixon seconded motion. Vote was taken and all were in favor. **Recommendation 3.2 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 3.3:

Advance a recommendation to the full Commission that the West Virginia Infrastructure and Jobs Development Council and the Bureau for Public Health, Drinking Water Treatment Revolving Fund amend their preliminary project ranking and/or scoring structures to add emphasis for source water protection projects.

(Same as last year.)

Walt asked for questions/comments from the Commission on Recommendation 3.3. Questions/comments received:

Tim Ball asked if the Work Group’s discussion included the subject of the leading agency’s MHI based loan eligibility loan criteria. David Acord replied no – it did not. Walt added the intent is to make sure to elevate as a priority of a source water protection plan not to distinguish as to what levels – become a level of scoring.

David Acord made a motion to adopt Recommendation 3.3 as read. Tim Ball seconded motion. Vote was taken and all were in favor. **Recommendation 3.3 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 3.4:

Advance a recommendation that the Legislature appropriate \$40 Million from the Video Lottery proceeds to the West Virginia Infrastructure and Jobs Development Council to allow the Council to play an active role in source water protection.

Walt Ivey asked for questions/comments from the Commission on Recommendation 3.4. Questions/comments received:

Rebecca McPhail asked what other programs could be impacted if reallocating. David Acord replied any new treatment facilities, upgrades, extensions, etc. All could be competing for money.

Dr. Polen wondered why the \$40 million. David Acord responded that the \$40 million was the initial appropriation but over the last several years has been reduced to about \$20-\$30 million. Work Group recommends taking it back to the \$40 million. Work Group understands it may be a tough sale due to the current budget issues of the state. But the Work Group felt this was important.

Evan Hansen asked if any other money is appropriated by the Legislature for that. David Acord replied his understanding is the \$40 million and any proceeds that comeback from previous

loans help to fund. Evan Hansen asked is this \$40 million a year. David Acord replied it used to be, but currently less.

Evan Hansen asked if this is a funding source for alternative sources (list of projects). David Acord responded his understanding is the \$40 million could go towards any project brought forward to the Council. Walt Ivey commented the Council would decide how to extend the funds to various projects.

Terry Polen asked if it would be valuable to add the list of projects/items this could potentially/additionally fund to protect the water supply? Walt Ivey replied the intent was to make aware that the shortage of funding could be a lack of implementation of the source water protection – if there is no infrastructure money – there's no next steps/going forward of performing the work.

(Public Comment) Lewis Baker commented that the recommendation needs to clarify that the fund was reduced to \$20-\$30 million and Commission wants to bring it back up to \$40 million. Dr. Polen agreed with Mr. Baker. When Dr. Polen read the recommendation he thought Commission was asking for an additional \$40 million.

Walt Ivey suggested adding “resume the previous appropriation of \$40 million per year.....”

(Public Comment) Lewis Baker also commented that getting back to \$40 million maybe even ask for more since we are adding source water protection – maybe ask \$50 million. David Acord responded that we are asking for the appropriation of \$40 million total. Council decides how the money is utilized whether for extension, upgrades, or source water protection. Walt Ivey added it covers water, waste water and economic development; it's a Council decision.

Recommendation 3.4 is revised to read:

Advance a recommendation that the Legislature **resume the appropriation of appropriate \$40 Million per year** from the Video Lottery proceeds to the West Virginia Infrastructure and Jobs Development Council to allow the Council to play an active role in source water protection.

David Acord made a motion to adopt Recommendation 3.4 as revised. Evan Hansen seconded motion. Vote was taken and all were in favor. **Recommendation 3.4 is approved/adopted as revised and will be included in the 2016 Legislative Report.**

Work Group 4

Dr. Michael McCawley provided the update for Work Group 4. Work Group 4 is meeting on December 2, 2016 to finalize their recommendations – has been publically posted. Work Group 4 will have recommendations to the full Commission at the December 8, 2016 scheduled meeting.

Work Group 5

David Acord provided the update for Work Group 5. Work Group 5 developed five recommendations. The recommendations have been formally voted/accepted within Work Group 5 and ready for submission to the full Commission.

David Acord read the recommendations:

Recommendation 5.1:

The Legislature should clarify that the utility doesn't have an implied duty to complete gaps in information on Safety Data Sheets (SDSs) that are provided/ submitted. Senate Bill 373 (2014)

previously required SDS to be submitted with the Spill Prevention Response Plan, but changes made in Senate Bill 423 (2015) removed this requirement. It is our recommendation that the legislation be amended to require the SDS information be provided with the Spill Prevention and Response Plans. If there is missing information, the entity submitting the SDS should have the burden of providing additional information. Furthermore, a current web link shall be provided by DEP to ensure that SDS information is available at a central repository accessible to PWSs.

Advance a recommendation that the Legislative Rules adopted to implement WV Code §22-30-10(a) shall ensure that downstream PWSs are provided with the type and quantity of fluid stored in the regulated aboveground storage tanks at the facility and the location of the SDS associated with the fluids in storage.

(Same as last year - Commission approved in 2015.)

Walt asked for questions/comments from the Commission on Recommendation 5.1. Questions/comments received:

Rebecca McPhail trying to recall issues that were related to the amount of paperwork involved. Not actually getting it there, but how it would be maintained in providing those and if not, was there discussion of utilization of an electronic database referencing those when submitting plans.

Evan Hansen replied originally the legislation required actual SDS to be submitted; then backed off and language was about the location of the SDS - which can be interpreted as physical location as in on site or an electronic location. Practical point of view often meant water systems didn't have access of the SDS.

Rebecca McPhail questioned assuming the water systems are getting a paper copy, how do they store it? Is there an electronic solution? (Thinking about efficiency.)

Evan Hansen replied the issue with SDS is there are multiple SDS for the same substance put out by different manufacturers which are at times not consistent with one another. Seems like appropriate for the burden to be on owner/operator as to what is being stored in the tank.

Rebecca McPhail commented is it logical if they have to go through a paper filing system to retrieve information and they are a large water system with SDS from different facilities. Don't know if it's less efficient to call the operator and ask for the SDS to be faxed/sent over now.

Tim Ball responded it assumes cooperation from the operator which is not a good assumption.

Rebecca McPhail questioned is there a way to have enforceable cooperation?

Tim Ball replied as the operator of the largest publically owned system in the state, I would welcome the problem of dealing with the paperwork.

(Public Comment) Lewis Brewer added time is of the essence when there is a spill.

Tim Ball agreed electronically would be more efficient but afraid lost a year of obtaining that information in any form because for most of the submissions they have received location is described as on site at the operator's facility; which is totally useless. Electronic would be easier to manage but if had to choose between waiting another year for electronic vs. obtaining paper now – give me paper now.

Rebecca McPhail commented point is taken – just trying to figure out quickest, easiest way.

Walt Ivey asked Tim Ball are you getting SDS? Tim Ball replied with a couple of exceptions – no. He is receiving inventory of chemicals and, as SDS are concerned, 99% respond “they are on file” with the chemical operator facility. Brett Morgan added this is similar as to what WV American Water Company is receiving.

Walt Ivey asked Bill Toomey does he know if there is an effort to make this available through BPH or DEP? Bill Toomey replied not that he is aware of.

Dr. Polen replied as for the type and quantity of fluids stored it brings it back to the where the line is between what Homeland Security says and we can and should be able to do. Water systems need all information to keep safe. Rebecca McPhail replied this is where we get stuck in the middle.

Rebecca McPhail commented by providing the location, they feel like they are meeting the requirement of the statute. Tim Ball said they are.

Rebecca McPhail needed to leave Commission meeting. Curious as to learn more about how folks are storing them. She doesn't see this as a big challenge. May have security issues that can be addressed in another way.

In regards to the 2nd paragraph in 5.1 rules adopted to implement, Evan Hansen added we need some rules to make this happen effectively. Dr. Polen asked about adding language on confidentiality issues; couple of words referencing confidentially issue.

Dr. Polen suggested to table the discussion/approval on recommendation 5.1 until next week December 8th at 8:30AM. Commission agreed.

Recommendation 5.2:

All spills must immediately, upon discovery, be relayed to any potentially impacted PWSs and to the BPH. We further recommend that such notification be made through protocols established and coordinated with existing spill notification systems (spill reporting hotlines), with emergency response systems (county 911 systems) and with existing geographic information system (GIS) and databases (such as those operated by the DHSEM, county 911 systems and the DEP), if possible. By efficiently utilizing existing GIS data, the spill location should be cross referenced with a database of PWS information and the PWSs which may be impacted so that they can be quickly determined and automatically notified. Every effort will be made to determine location using GIS coordinates.

The reporting system should, at a minimum, provide information on the precise location of the spill, the date and time of occurrence, the material(s) released and the stream(s) potentially impacted. Additional training/scripts for those taking the calls is recommended to obtain consistent information for each event.

All spills must be reported with reference to standardized GPS coordinate systems. We further recommend that the system be based upon the widely used and well-understood Latitude/Longitude system with location data obtained from a GPS receiver. Furthermore, correction notices will be issued, as necessary, and confirmation of the response and confirmation of the resolution shall be distributed.

(Same as last year)

Walt asked for questions/comments from the Commission on Recommendation 5.2. Questions/comments received:

(Public Comment) Lewis Baker asked if there was a penalty for not reporting immediately? Dr. Polen replied yes there are notification issue requirements (\$10,000 per day). Lewis Baker asked if someone would be fined for not reporting immediately? Dr. Polen responded that it depends on the situation. Lewis Baker commented that some states have gone to, in lieu of using the word, immediately, creating a deadline such as 1 – 2 hours. Our system says immediately. There is no good definition of immediately. Dr. Polen responded that there is also a reporting issue. Lewis Baker commented that it would be nice to have a national reporting system for all to follow. He suggests this may be something to investigate further next year, burden needs to go on the spiller.

Walt Ivey suggested changing the wording of the recommendation to accommodate Mr. Baker's concerns.

Recommendation 5.2 is revised to read:

Upon reporting to the spill response hotline, all spills must, ~~immediately, upon discovery, as soon as possible~~, be ~~relayed reported~~ to any potentially impacted PWSs and to the BPH. We further recommend that such notification be made through protocols established and coordinated with existing spill notification systems (spill reporting hotlines), with emergency response systems (county 911 systems) and with existing geographic information system (GIS) and databases (such as those operated by the DHSEM, county 911 systems and the DEP), if possible. By efficiently utilizing existing GIS data, the spill location should be cross referenced with a database of PWS information and the PWSs which may be impacted so that they can be quickly determined and automatically notified. Every effort will be made to determine location using GIS coordinates.

The reporting system should, at a minimum, provide information on the precise location of the spill, the date and time of occurrence, the material(s) released and the stream(s) potentially impacted. Additional training/scripts for those taking the calls is recommended to obtain consistent information for each event.

All spills must be reported with reference to standardized GPS coordinate systems. We further recommend that the system be based upon the widely used and well-understood Latitude/Longitude system with location data obtained from a GPS receiver. Furthermore, correction notices will be issued, as necessary, and confirmation of the response and confirmation of the resolution shall be distributed.

Evan Hansen made a motion to adopt Recommendation 5.2 as revised. David Acord seconded motion. Vote was taken and all were in favor. **Recommendation 5.2 is approved/adopted as revised and will be included in the 2016 Legislative Report.**

Recommendation 5.3:

Advance a recommendation that DHSEM and Local Emergency Planning Committees (LEPC) provide available information to the PWSs, that they are not statutorily prohibited from providing to the public, to assist PWSs in identifying mobile threats.

(Same as last year)

Walt asked for questions/comments from the Commission on Recommendation 5.3. None were received.

Evan Hansen made a motion to adopt Recommendation 5.3 as read. David Acord seconded motion. Vote was taken and all were in favor. **Recommendation 5.3 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 5.4:

The Legislature should consider legislation, should it be introduced, to establish income tax credits for landowners for source water protection.

(Same as last year with exception of adding "should it be introduced".)

Walt asked for questions/comments from the Commission on Recommendation 5.4. None were received.

Tim Ball made a motion to adopt Recommendation 5.4 as read. Dr. Terry Polen seconded motion. Vote was taken and all were in favor. **Recommendation 5.4 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 5.5:

The Bureau for Public Health evaluate, and potentially implement, the River Alert Information Network (RAIN) or another similar system to establish a statewide network in West Virginia, in coordination with water systems throughout the state,

(New recommendation)

Walt asked for questions/comments from the Commission on Recommendation 5.5. None were received.

David Acord made a motion to adopt Recommendation 5.5 as read. Pam Nixon seconded motion. Vote was taken and all were in favor. **Recommendation 5.5 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Walt Ivey asked the Commission for any additional comments/questions before going to public comments.

Walt Ivey noted that the full Commission meeting scheduled on December 8, 2016 will be extended to all the Commission to begin preparation/review of the required Legislature Report. The extension of the meeting has been posted and is in compliance with public meeting notice.

Evan Hansen proposed that the Commission take an active step to get on the upcoming January/February Legislative interim schedule prior to the start of the session. He questioned if the Commission Chair would be the appropriate person to seek this.

Tim Ball suggested to delegate a spokesman. Mr. Ball suggested the Commission Chair is the logical one. He suggested that maybe adding this proposal to the cover letter that accompanies the Legislature Report.

Walt Ivey stated that this request will be added to the December 8, 2016 agenda for discussion.

Public Comments

Walt Ivey opened the floor for discussion/questions from the public regarding the Commission meeting.

Note: Only public participant at meeting was Lewis Baker of WV Rural Water Association. Mr. Baker participated/provided public comments during/throughout the Commission meeting – as so noted in report.

No other public comments were received.

Tim Ball motioned to adjourn meeting. Dr. Polen seconded motion. Commission meeting was adjourned at 12:04PM.

December 8, 2016

West Virginia Public Water System Supply Study Commission Meeting
December 8, 2016
10:00AM – 12:00PM
Office of the Cabinet Secretary – 1 Davis Square CR 93
DRAFT to be approved at next Commission meeting

Attendees

Commission Members Present:

Dr. Rahul Gupta, Chair; Rick Roberts, E.L. Robinson Engineering Company; Ed Watson, Canaan Valley Institute; Pam Nixon; Dr. Michael McCawley, WVU School of Public Health; David Acord, Public Service Commission; Dr. Terry Polen, WV Department of Environmental Protection; Amy Swann, WV Rural Water Association; Evan Hansen, Downstream Strategies; Rebecca McPhail, WV Manufacturers Association; and Laura Martin, WV-American Water Company (*proxy for Jeffrey McIntyre*)

Participated via conference call:

Tim Ball, Morgantown Utility Board

Commission Members Absent:

Jimmy Gianato, WV Division of Homeland Security and Emergency Management

Community Members Present:

Barb Taylor, Bureau for Public Health (BPH); Walt Ivey, BPH-Office of Environmental Health Services (OEHS); Bill Toomey, BPH-OEHS; Toby Wagoner, BPH; Brian Skinner, BPH; Lewis Baker, WV Rural Water Association; and Ken Ward, Charleston-Gazette Mail

Welcome & Meeting Overview

Dr. Gupta, Chair welcomed everyone to the meeting. All Commission members introduced themselves.

December 1, 2016 meeting minutes were presented for approval. David Acord motioned to approve December 1, 2016 minutes as presented. Rebecca McPhail seconded motion. Vote was taken and all were in favor. **December 1, 2016 meeting minutes were approved as presented.**

Discuss Request to Attend Upcoming Interim Meeting/Designate Spokesperson

Topic was directed to Evan Hansen to elaborate on since he presented this topic at the December 1, 2016 Commission meeting. Evan Hansen suggested the Commission needs to make more head way with the Legislature. Last year (2015) presented at the Legislature, but would like to take it a step forward. Suggests after submitting the report on December 15, 2016, Commission should reconvene to sort the recommendations into categories such as: proposing

changes to state code; proposing changes to state rules; recommendations related to funding the legislation to address; and other. Suggestion is to collate recommendations in a way that the Commission can talk to the appropriate legislative leaders clearly as to what is being asked.

Evan Hansen suggested another Commission meeting before the legislature session begins (February 8, 2017) to work out the details and have a Commission discussion.

Dr. Gupta responded this is certainly something the Commission can do. Dr. Gupta suggested at the next Commission meeting, figure out “3 to 4 buckets” and designate speakers for those buckets and move forward. Commission agreed. **Andrea Fisher will schedule a Commission meeting to be held within the first two weeks of January 2017.** This topic will be tabled until then.

Work Group Updates

Work Group 1

Walt Ivey provided the update for Work Group 1. Work Group 1 developed four recommendations. The recommendations have been formally voted/accepted within Work Group 1 and ready for submission to the full Commission.

Walt read the recommendations:

Recommendation 1.1

The Commission advances the recommendation to require either an annual evaluated and documented exercise of the SWPP or a documented annual review, and update if necessary, of the SWPP, with the utility reporting this information to the BPH.

Ed Watson made a motion to adopt Recommendation 1.1 as read. Amy Swann seconded motion. Vote was taken and all were in favor. **Recommendation 1.1 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 1.2

The Commission advances the recommendation that DEP and/or DHHR notify downstream water utilities if there is a change in substance and/or a substantive change within an aboveground storage tank as outlined in W.Va. Code §22-30-9 (b) 1-6. Such notification is to be made as soon as possible.

Dr. Terry Polen made a motion to adopt Recommendation 1.2 as read. Evan Hansen seconded motion. Vote was taken and all were in favor. **Recommendation 1.2 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 1.3

The Commission advances the recommendation that the State contract with an outside organization to review and evaluate the effectiveness of source water protection plans and practices.

Walt Ivey noted that a small change was made to Recommendation 1.3 from last Commission meeting (December 1, 2016). Further discussions felt like the recommendation was too general in nature. Recommendation was edited to make it more definitive.

Dr. Terry Polen made a motion to adopt Recommendation 1.3 as read. Evan Hansen seconded motion.

Dr. Gupta asked if the funding for the contract was thought about. Walt Ivey stated expectation

was for the Legislature to provide funding. Dr. Gupta questioned if recommendation should be left as is or add a note that it is contingent on funding. Evan Hansen mentioned there are specific funding recommendations mentioned in Work Group 3 – may fall into that. Dr. Gupta suggested to leave as is. No other points or discussion was noted.

With motion in place, vote was taken and all were in favor. **Recommendation 1.3 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 1.4

The Commission recommends that the Legislature review the proposed alternative water sources so that it will be aware of the scope of need and funding necessary as it considers further guidance.

Walt Ivey noted that a small change was made to Recommendation 1.4 from last Commission meeting (December 1, 2016). Change was to identify the Legislature to look at the needs of funding necessary for the alternatives as provided. The list of alternatives will be included in the report as an appendix.

Evan Hansen made a motion to adopt Recommendation 1.4 as read. Rebecca McPhail seconded motion. Vote was taken and all were in favor. **Recommendation 1.4 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Work Group 2

Dr. Polen, Chair, provided the update for Work Group 2. Work Group 2 developed three recommendations. The recommendations have been formally voted/accepted within Work Group 2 and ready for submission to the full Commission.

Recommendation 2.1

It is believed that the continued implementation of electronic databases from both BPH and DEP will allow for more complete, efficient, and error free analysis and reporting. This database will provide updated information for the public water systems to update their SWPP. Therefore it's recommended that this process be expedited to the extent possible and that funding for this process be implemented through the Legislature. Funding may be required for continual full implementation.

Ed Watson made a motion to adopt Recommendation 2.1 as read. Pam Nixon seconded motion. Vote was taken and all were in favor. **Recommendation 2.1 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 2.2

There has been consternation and concern that the Commission reports have not been afforded the proper hearing. It is therefore recommended that the current and past reports be used to craft future legislation.

Pam Nixon made a motion to adopt Recommendation 2.2 as read. Dr. McCawley seconded motion. Vote was taken and all were in favor. **Recommendation 2.2 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Recommendation 2.3

The spill reporting hotline should collect information on whether spills come from AST or whether it went downstream and public water systems are notified of the spill.

Rebecca McPhail made a motion to adopt Recommendation 2.3 as read. Ed Watson seconded

motion. Vote was taken and all were in favor. **Recommendation 2.3 is approved/adopted as read and will be included in the 2016 Legislative Report.**

Work Group 3

Work Group 3 recommendations were adopted at the last meeting (December 1, 2016) by the full Commission. For the record, Amy Swann read the adopted recommendations:

Recommendation 3.1:

The Legislature should make a \$2,000,000 continuing appropriation to the Department of Health and Human Resources, Bureau for Public Health in furtherance of its source water protection efforts. This funding shall also be used to provide grant monies to systems as they begin their statutorily required three year updates and to help fund the River Alert Information Network (RAIN) or other type system. In addition, the Bureau should commence an investigation of the RAIN or other type systems to determine if such a statewide network could be implemented.

Recommendation 3.2:

That the West Virginia Legislature amend West Virginia Code 16-1-9c to include a new subsection designated as subsection (i) to read as such: *"The Secretary is authorized to propose legislative rules for promulgation pursuant to article three, chapter twenty-nine-A to implement the provisions of this section that may include a schedule for the submission of Source Water Protection Plans by public water utilities pursuant to subsection (f) that staggers the schedule for the submission of Source Water Protection Plans, except that for the purpose of staggering the dates of submission of updated Source Water Protection Plans, the Secretary may designate a schedule of submission greater than three years from the initial submission required by a legislative rule promulgated pursuant to this subsection."*

Recommendation 3.3:

Advance a recommendation to the full Commission that the West Virginia Infrastructure and Jobs Development Council and the Bureau for Public Health, Drinking Water Treatment Revolving Fund amend their preliminary project ranking and/or scoring structures to add emphasis for source water protection projects.

Recommendation 3.4:

Advance a recommendation that the Legislature resume the appropriation of \$40 Million per year from the Video Lottery proceeds to the West Virginia Infrastructure and Jobs Development Council to allow the Council to play an active role in source water protection.

Work Group 4

Dr. Michael McCawley provided the update for Work Group 4. Work Group 4, having reviewed the US Chemical Safety Board (CSB) recommendations on the Bayer Crop Sciences incident and the Freedom Industries incident, and having reviewed the West Virginia Chemical Release Prevention Program, believes there is existing authority under the current West Virginia statues and programs and agencies to fulfill the recommendations made by the CSB.

Work Group 4 recommends that the Legislature resolve to urge the Governor to review with the agencies of the State the West Virginia Chemical Release Prevention Program as vetted by the US Chemical Safety Board. That review should be used to identify potential gaps in authority and report to the Commission on where those gaps exists and that the recommendations of the CSB be followed without redundancy using the existing rules and agencies of the State.

Dr. Gupta asked for questions/comments from the Commission on Work Group 4 recommendation.

Evan Hansen commented the intent may not be clear. After discussion of the layout/wording of the sentences and redundancy, the recommendation was modified to read: *“The recommendations of the CSB should be followed without redundancy using the existing rules and agencies of the State.”*

No further discussions were encountered. Dr. Gupta asked for a motion to adopt the modified recommendation of Work Group 4.

Dr. Terry Polen made a motion to adopt Work Group 4 Recommendation as modified. Rick Roberts seconded motion.

Dr. Gupta read the final version of Work Group 4 Recommendation to be adopted: “The recommendation of the Chemical Safety Board (CSB) should be followed without redundancy using the existing rules and agencies of the State.”

Vote was taken and all were in favor. **Work Group 4 Recommendation was approved/adopted as read and will be included in the 2016 Legislative Report.**

Work Group 5

David Acord provided the update for Work Group 5. Work Group 5 developed five recommendations. All recommendations, with the exception of 5.1, have been formally voted/accepted within Work Group 5. Recommendation 5.1 was tabled for further discussion at the Work Group meeting on December 8, 2016 at 8:30AM.

David Acord submitted Recommendation 5.1 to the full Commission for approval/acceptance. Recommendation 5.1 was read as follows:

Recommendation 5.1

The Legislature should clarify that the utility doesn’t have an implied duty to complete gaps in information on Safety Data Sheets (SDSs) that are provided/submitted. Senate Bill 373 (2014) previously required SDS to be submitted with the Spill Prevention Response Plan, but changes made in Senate Bill 423 (2015) removed this requirement. It is our recommendation that the legislation be amended to require the SDS information be provided with the Spill Prevention and Response Plans. If there is missing information, the entity submitting the SDS should have the burden of providing additional information. Furthermore, a current web link shall be provided by DEP to ensure that SDS information is available at a central repository accessible to PWSs.

Advance a recommendation that WV Code §22-30-10(a) be modified to ensure that downstream PWSs are provided with the type and quantity of fluid stored in the regulated aboveground storage tanks at the facility and the SDS associated with the fluids in storage.

David Acord made a motion to adopt Recommendation 5.1 as read. Rick Roberts seconded motion. Vote was taken and all were in favor. **Recommendation 5.1 is approved/adopted as read and will be included in the 2016 Legislative Report.**

For the record, David Acord read recommendations (5.2; 5.3; 5.4; and 5.5) that were previously adopted by the Commission:

Recommendation 5.2:

Upon reporting to the spill response hotline, all spills must, as soon as possible, be reported to any potentially impacted PWSs and to the BPH. We further recommend that such notification be made through protocols established and coordinated with existing spill notification systems (spill reporting hotlines), with emergency response systems (county 911 systems) and with existing

geographic information system (GIS) and databases (such as those operated by the DHSEM, county 911 systems and the DEP), if possible. By efficiently utilizing existing GIS data, the spill location should be cross referenced with a database of PWS information and the PWSs which may be impacted so that they can be quickly determined and automatically notified. Every effort will be made to determine location using GIS coordinates.

The reporting system should, at a minimum, provide information on the precise location of the spill, the date and time of occurrence, the material(s) released and the stream(s) potentially impacted. Additional training/scripts for those taking the calls is recommended to obtain consistent information for each event.

All spills must be reported with reference to standardized GPS coordinate systems. We further recommend that the system be based upon the widely used and well-understood Latitude/Longitude system with location data obtained from a GPS receiver. Furthermore, correction notices will be issued, as necessary, and confirmation of the response and confirmation of the resolution shall be distributed.

Recommendation 5.3:

Advance a recommendation that DHSEM and Local Emergency Planning Committees (LEPC) provide available information to the PWSs, that they are not statutorily prohibited from providing to the public, to assist PWSs in identifying mobile threats.

Recommendation 5.4:

The Legislature should consider legislation, should it be introduced, to establish income tax credits for landowners for source water protection.

Recommendation 5.5:

The Bureau for Public Health evaluate, and potentially implement, the River Alert Information Network (RAIN) or another similar system to establish a statewide network in West Virginia, in coordination with water systems throughout the state,

Dr. Gupta asked for any additional comments/questions from the Commission members regarding the recommendations in place. Dr. Gupta explained that the next steps would be to compile all the information and prepare the final report. Report will be submitted and all Commission members shall receive a copy of the final report.

Public Comments

Dr. Gupta opened the floor for discussion/questions from the public regarding the Commission meeting.

No other public comments were received.

Rebecca McPhail motioned to adjourn meeting. David Acord seconded motion. Commission meeting was adjourned at 10:43AM.

APPENDIX B
Public Water Systems as Defined by SB 423

System ID	System Name	County	Planning and Development Regions (1-11)	DEP Watershed Group (1-5)	Type System	Population
WV3300508	HAMMOND PSD	BROOKE	11	1	SW	2,186
WV3300512	FOLLANSBEE HOOVERSON HEIGHTS	BROOKE	11	1	SW	5,702
WV3300516	WEIRTON AREA WATER BOARD	BROOKE	11	1	SW	22,694
WV3301504	CHESTER	HANCOCK	11	1	SW	3,119
WV3301811	RIPLEY CITY OF	JACKSON	5	1	SW	5,078
WV3302603	CAMERON WATER	MARSHALL	10	1	SW	1,052
WV3303516	WHEELING WATER	OHIO	10	1	SW	22,222
WV3304307	HUGHES RIVER WATER	RITCHIE	5	1	SW	4,278
WV3304405	SPENCER WATER DEPT	ROANE	5	1	SW	5,002
WV3304802	MIDDLEBOURNE WATER WORKS	TYLER	5	1	SW	1,267
WV3304803	SISTERSVILLE MUNICIPAL WATER	TYLER	5	1	SW	1,892
WV3305205	PINE GROVE WATER	WETZEL	10	1	SW	593
WV3305402	CLAYWOOD PARK PSD	WOOD	5	1	SW	7,695
WV3300101	BELINGTON TOWN OF	BARBOUR	7	2	SW	2,153
WV3300104	PHILIPPI CITY OF	BARBOUR	7	2	SW	3,281
WV3300901	WEST UNION TOWN OF	DODDRIDGE	6	2	SW	1,895
WV3301705	CLARKSBURG WATER BOARD	HARRISON	6	2	SW	18,310
WV3301714	LUMBERPORT TOWN OF	HARRISON	6	2	SW	1,788
WV3301721	SHINNSTON CITY OF	HARRISON	6	2	SW	4,903
WV3302104	WVAW - WESTON	LEWIS	7	2	SW	11,436
WV3302502	FAIRMONT CITY OF	MARION	6	2	SW	29,170
WV3302503	FAIRVIEW TOWN OF	MARION	6	2	GU	834
WV3302515	MONONGAH TOWN OF	MARION	6	2	SW	3,171
WV3303111	MORGANTOWN UTILITY BOARD	MONONGALIA	6	2	SW	56,209
WV3303908	KINGWOOD WATER BOARD	PRESTON	6	2	SW	3,102
WV3303912	PRESTON COUNTY PSD 1	PRESTON	6	2	SW	4,043
WV3303914	ROWLESBURG WATER WORKS	PRESTON	6	2	SW	707
WV3303917	TERRA ALTA WATER WORKS	PRESTON	6	2	GU	1,488
WV3304204	HARMAN TOWN OF	RANDOLPH	7	2	GU	188
WV3304202	BEVERLY TOWN OF	RANDOLPH	7	2	SW	2,475
WV3304203	ELKINS CITY OF	RANDOLPH	7	2	SW	8,270
WV3304209	MILL CREEK WATER DEPT	RANDOLPH	7	2	SW	976
WV3304605	TAYLOR COUNTY PSD	TAYLOR	6	2	SW	1,322

System ID	System Name	County	Planning and Development Regions (1-11)	DEP Watershed Group (1-5)	Type System	Population
WV3304701	DAVIS WATER WORKS	TUCKER	7	2	SW	878
WV3304704	HAMRICK PSD	TUCKER	7	2	SW	1,643
WV3304707	PARSONS CITY OF	TUCKER	7	2	SW	1,512
WV3304709	THOMAS CITY OF	TUCKER	7	2	SW	672
WV3304711	TIMBERLINE FOUR SEASON RESORT MANAGEMENT	TUCKER	7	2	GU	591
WV3304902	BUCKHANNON WATER BOARD	UPSHUR	7	2	SW	8,697
WV3300202	BERKELEY CO P S W D-BUNKER HILL	BERKELEY	9	3	GU	26,547
WV3300212	MARTINSBURG CITY OF	BERKELEY	9	3	GU	15,650
WV3300218	BERKELEY COUNTY PSWD-POTOMAC RIVER	BERKELEY	9	3	SW	22,396
WV3301204	PETERSBURG TOWN OF	GRANT	8	3	SW	2,841
WV3301205	MOUNTAIN TOP PSD	GRANT	8	3	SW	2,088
WV3301405	ROMNEY WATER DEPT	HAMPSHIRE	8	3	SW	1,948
WV3301412	CENTRAL HAMPSHIRE PSD GREEN SPRING	HAMPSHIRE	8	3	GU	1,172
WV3301601	MOOREFIELD MUNICIPAL WATER	HARDY	8	3	SW	2,689
WV3301613	HARDY COUNTY PSD BAKER	HARDY	8	3	SW	150
WV3301979	Deerfield Village Subdivision	JEFFERSON	9	3	GU	99
WV3301905	CHARLES TOWN UTILITIES	JEFFERSON	9	3	SW	14,488
WV3301912	CORPORATION OF HARPERS FERRY	JEFFERSON	9	3	SW	1,801
WV3301933	CORPORATION OF SHEPHERDSTOWN	JEFFERSON	9	3	SW	4,000
WV9919068	BURR INDUSTRIAL PARK	JEFFERSON	9	3	GU	2,370
WV3302915	KEYSER CITY OF	MINERAL	8	3	SW	5,202
WV3302921	PIEDMONT MUNICIPAL WTR WKS	MINERAL	8	3	SW	775
WV3302928	FRANKFORT PSD	MINERAL	8	3	SW	5,468
WV3303301	BERKELEY SPRINGS CITY OF	MORGAN	9	3	SW	3,629
WV3303308	PAW PAW WATER WORKS	MORGAN	9	3	SW	552
WV3303602	FRANKLIN MUNICIPALITY OF	PENDLETON	8	3	SW	1,732
WV3303611	PENDLETON CO PSD-UPPER TRACT	PENDLETON	8	3	GU	448
WV3303613	PENDLETON CO PSD(BRANDYWINE)	PENDLETON	8	3	SW	804
WV3300315	BOONE RALEIGH P S D	BOONE	3	4	SW	1,317
WV3300402	FLATWOODS CANOE RUN PSD	BRAXTON	7	4	SW	4,143
WV3300404	SUGAR CREEK PSD	BRAXTON	7	4	SW	1,191

System ID	System Name	County	Planning and Development Regions (1-11)	DEP Watershed Group (1-5)	Type System	Population
WV3300406	WVAW- GASSAWAY	BRAXTON	7	4	SW	2,127
WV3300408	BURNSVILLE PUBLIC UTILITY	BRAXTON	7	4	SW	789
WV3300701	GRANTSVILLE MUNICIPAL	CALHOUN	5	4	SW	841
WV3300801	CLAY WATER DEPT	CLAY	3	4	SW	1,341
WV3300806	CLAY-ROANE PSD (PROCIOSUS DISTRICT)	CLAY	3	4	SW	2,162
WV3301004	ARMSTRONG PSD	FAYETTE	4	4	SW	2,318
WV3301024	MOUNT HOPE WATER	FAYETTE	4	4	SW	1,955
WV3301029	WVAWC MONTGOMERY DISTRICT	FAYETTE	4	4	SW	4,724
WV3301037	KANAWHA FALLS PSD	FAYETTE	4	4	SW	2,379
WV3301046	WVAWC NEW RIVER REGIONAL WTR TRTMT PLT	FAYETTE	4	4	SW	25,760
WV3301104	GLENVILLE UTILITY	GILMER	7	4	SW	2,395
WV3301307	LEWISBURG	GREENBRIER	4	4	SW	10,050
WV3301315	ALDERSON WATER	GREENBRIER	4	4	SW	2,680
WV3302009	CEDAR GROVE COMMUNITY OF	KANAWHA	3	4	SW	1,090
WV3302016	WVAWC-KANAWHA VALLEY DIST	KANAWHA	3	4	SW	198,521
WV3302031	ST ALBANS WATER	KANAWHA	3	4	SW	13,265
WV3302205	LINCOLN PSD	LINCOLN	2	4	SW	4,981
WV3302801	ATHENS TOWN OF	MERCER	1	4	SW	4,802
WV3302804	BLUEWELL PSD	MERCER	1	4	SW	6,135
WV3302813	GREEN VALLEY GLENWOOD PSD BULLTAIL	MERCER	1	4	SW	1,869
WV3302835	WVAWC BLUEFIELD DISTRICT	MERCER	1	4	SW	12,174
WV3302849	GREEN VALLEY GLENWOOD PSD GLENWOOD	MERCER	1	4	SW	5,775
WV3302852	POCAHONTAS WATER SYSTEM	MERCER	1	4	SW	1,933
WV3303206	RED SULPHUR PSD	MONROE	1	4	SW	5,352
WV3303401	RICHWOOD WATER DEPT	NICHOLAS	4	4	SW	2,940
WV3303402	CRAIGSVILLE PSD	NICHOLAS	4	4	SW	4,723
WV3303403	NETTIE LEIVASY PSD	NICHOLAS	4	4	SW	3,151
WV3303404	SUMMERSVILLE MUNICIPAL WATER	NICHOLAS	4	4	SW	5,746
WV3303405	WILDERNESS PSD	NICHOLAS	4	4	SW	4,475
WV3303802	CASS SCENIC RAILROAD	POCAHONTAS	4	4	SW	1,023
WV3303803	MARLINTON TOWN OF	POCAHONTAS	4	4	SW	1,400
WV3303808	CHEAT MOUNTAIN WATER SYSTEM	POCAHONTAS	4	4	SW	1,867
WV3303812	POCAHONTAS COUNTY PSD	POCAHONTAS	4	4	GU	557

System ID	System Name	County	Planning and Development Regions (1-11)	DEP Watershed Group (1-5)	Type System	Population
WV3304005	HURRICANE CITY OF	PUTNAM	3	4	SW	8,266
WV3304011	PUTNAM P S D	PUTNAM	3	4	SW	21,719
WV3304104	BECKLEY WATER COMPANY	RALEIGH	1	4	SW	49,058
WV3304407	WALTON PSD	ROANE	5	4	SW	1,925
WV3304507	BIG BEND PSD	SUMMERS	1	4	SW	1,039
WV3304513	WVAWC BLUESTONE PLANT	SUMMERS	1	4	SW	26,499
WV3305103	COWEN PSD	WEBSTER	4	4	SW	2,518
WV3305104	WVAW - WEBSTER SPRINGS	WEBSTER	4	4	SW	1,692
WV3300608	WVAWC - HUNTINGTON DIST	CABELL	2	5	SW	86,827
WV3300609	MILTON WATER	CABELL	2	5	SW	4,883
WV3302203	WEST HAMLIN CITY OF	LINCOLN	2	5	SW	2,964
WV3302331	LOGAN WATER BOARD CITY OF	LOGAN	2	5	SW	4,505
WV3302336	MAN WATER WORKS	LOGAN	2	5	SW	1,008
WV3302347	BUFFALO CREEK PSD	LOGAN	2	5	SW	2,829
WV3302357	LOGAN CO PSD- GREENVILLE SYSTEM	LOGAN	2	5	SW	3,960
WV3302364	LOGAN COUNTY PSD - NORTHERN REGIONAL	LOGAN	2	5	SW	15,715
WV3302434	MCDOWELL COUNTY PSD BARTLEY	MCDOWELL	1	5	GU	1,632
WV3302435	MCDOWELL COUNTY PSD BERWIND	MCDOWELL	1	5	GU	863
WV3303002	GILBERT WATER WORKS	MINGO	2	5	SW	1,145
WV3303003	KERMIT WATER WORKS	MINGO	2	5	SW	1,424
WV3303005	MATEWAN WATER WORKS	MINGO	2	5	SW	2,237
WV3303009	WILLIAMSON UTILITY BOARD	MINGO	2	5	SW	4,213
WV3303029	MINGO COUNTY PSD - NAUGATUCK	MINGO	2	5	SW	4,654
WV3305004	FORT GAY WATER WORKS	WAYNE	2	5	SW	2,287
WV3305007	WAYNE WATER TOWN OF	WAYNE	2	5	SW	5,684
WV3305009	KENOVA MUNICIPAL WATER	WAYNE	2	5	SW	9,254
WV3305516	OCEANA COMMUNITY OF	WYOMING	1	5	SW	4,410
WV3305517	PINEVILLE MUNICIPAL	WYOMING	1	5	SW	2,945

APPENDIX C
Public Water Systems' Evaluation of Alternative Sources of Water

PWSID #	COUNTY	SYSTEM NAME	INTAKE	VIABLE ALTERNATIVE	ESTIMATED COST
3300101	BARBOUR	TOWN OF BELINGTON	TYGART VALLEY RIVER	1) INTAKE MILL CREEK REWORKED	\$1,718,000
3300408	BRAXTON	BURNSVILLE PUBLIC UTILITY BOARD	LITTLE KANAWHA RIVER	1) INTAKE SALT LICK CREEK	\$1,136,125
3300608	CABELL	WVAV HUNTINGTON WATER SYSTEM	IN001 24TH ST PRIMARY OHIO RIVER	1) INTAKE GUYANDOTTE RIVER: INDUSTRIAL INTAKE	\$9,300,000
3300801	CLAY	CLAY WATER DEPARTMENT	ELK RIVER	1) INTAKE BUFFALO CREEK	\$1,400,000
3301037	FAYETTE	KANAWHA FALLS PSD	KANAWHA RIVER	1) INTAKE LOOP CREEK IN DEEPWATER, WV--NEED TO VERIFY QUANTITY ADEQUATE	\$1,544,000
3301204	GRANT	CITY OF PETERSBURG	SOUTH BRANCH POTOMAC RIVER	1) NEW INTAKE SOUTH BRANCH POTOMAC RIVER	\$217,500
3301205	GRANT	MOUNTAIN TOP PSD	MILL RUN RESERVOIR (QUARRY)	1) INTAKE STONY RIVER	\$792,425
3301315	GREENBRIER	ALDERSON WATER	GREENBRIER RIVER	1) INTAKE MUDDY CREEK	\$1,129,000
3301405	HAMPSHIRE	CITY OF ROMNEY	SOUTH BRANCH POTOMAC RIVER	1) INTAKE MILL CREEK	\$1,005,575
3301601	HARDY	CITY OF MOOREFIELD	IN001 OLD PLANT SOUTH FORK OF SOUTH BRANCH POTOMAC RIVER; IN002 NEW PLANT SFSBPR	1) UPGRADE EXISTING INTAKE ON SOUTH BRANCH POTOMAC RIVER-TOWN HAD OLD BID OF \$750,000	\$1,087,500
3301905	JEFFERSON	CHARLESTOWN UTILITY BOARD	SHENANDOAH RIVER	1) INTAKE MILLVILLE QUARRY	\$1,175,000
3301933	JEFFERSON	CORPORATION OF SHEPHERDSTOWN	POTOMAC RIVER	1) INTAKE TOWN RUN	\$1,002,000
3302016	KANAWHA	WVAV KANAWHA VALLEY SYSTEM	ELK RIVER	1) INTAKE ON KANAWHA RIVER AT CHARLESTON	\$56,000,000
3302852	MERCER	POCAHONTAS WATER SYSTEM	ABBS VALLEY CREEK	1) INTAKE PINNACLE ROCK LAKE	\$2,016,300
3302915	MINERAL	CITY OF KEYSER	NEW CREEK	1) INTAKE NORTH BRANCH POTOMAC RIVER	\$1,289,775
3302921	MINERAL	CITY OF PIEDMONT	VERSO INTAKE PAPER MILL PRIMARY NORTH BRANCH POTOMAC RIVER	1) INTAKE WESTERNPORT TAP, STILL IN FUTURE, LINE IN PLACE NEEDS TAPPED	\$72,800
3303002	MINGO	GILBERT WATER WORKS	GUYANDOTTE RIVER-NEW INTAKE	1) INTAKE GILBERT CREEK	\$368,625
3303111	MONONGALIA	MORGANTOWN UTILITY BOARD	MONONGAHELA RIVER	1) INTAKE CHEAT LAKE	\$19,000,000
3303301	MORGAN	CITY OF BERKELEY SPRINGS	SPRING INTAKE	1) INTAKE POTOMAC RIVER	\$1,170,625

PWSID #	COUNTY	SYSTEM NAME	INTAKE	VIABLE ALTERNATIVE	ESTIMATED COST
3303401	NICHOLAS	RICHWOOD WATER DEPT.	NORTH FORK CHERRY RIVER-- DAM AT RUDOLF FALLS	1) INTAKE SUMMIT LAKE	\$5,517,000
3303404	NICHOLAS	SUMMERSVILLE MUNICIPAL WATER	GAULEY RIVER/ SUMMERSVILLE DAM	1) INTAKE MUDDLETY CREEK (NEEDS CAPACITY STUDIED TO VERIFY QUANTITY)	\$6,741,000
3303405	NICHOLAS	WILDERNESS PSD	ANGLINS CREEK & MEADOW RIVER PRIMARY, ACTIVE	1) INTAKE ANGLINS CREEK OUT OF POSSIBLE INFLUENCE OF MEADOW RIVER	\$844,379
3303602	PENDLETON	TOWN OF FRANKLIN	DRY RUN SPRING	1) UPGRADE INTAKE ON THORN CREEK	\$725,000
3303802	POCAHONTAS	CASS SCENIC RAILROAD	LEATHERBARK RUN	1) INTAKE GREENBRIER	\$518,000
3303803	POCAHONTAS	TOWN OF MARLINTON	KNAPP CREEK	1) INTAKE GREENBRIER RIVER	\$1,174,000
3303812	POCAHONTAS	POCAHONTAS PSD	SPRINGS SP 001, SP002 AND SP 003	1) INTAKE EAST FORK GREENBRIER RIVER	\$1,500,000
3303914	PRESTON	ROWLESBURG WATER WORKS	CHEAT RIVER	1) INTAKE FILL HOLLOW-REHAB DAM & REPLACE LINE, SYSTEM EVALUATING-NO COST PROVIDED	NOT PROVIDED
3303917	PRESTON	TERRA ALTA WATER WORKS	HOPEMONT #1, #2, #3	1) INTAKE TERRA ALTA LAKE-NO OTHER DETAILS OR COSTS	
3304202	RANDOLPH	TOWN OF BEVERLY	TYGART VALLEY RIVER	1) INTAKE BEAVER CREEK	\$1,387,000
3304203	RANDOLPH	ELKINS MUNICIPAL WATER	TYGART VALLEY RIVER RESERVOIR	1) INTAKE TYGART VALLEY RIVER	\$4,700,000
3304211	RANDOLPH	HUTTONSVILLE PSD	ELWATER FORK RESERVOIR	1) INTAKE TYGART VALLEY RIVER	\$2,291,000
3304513	SUMMERS	WVAW BLUESTONE WATER SYSTEM	NEW RIVER (BLUESTONE LAKE)	1) INTAKE LITTLE BLUESTONE OR NEW RIVER	\$16,700,000
3304701	TUCKER	DAVIS WATER WORKS	WEIMER RUN IMPOUNDMENT	1) INTAKE DEVIL'S RUN	\$395,000
3304709	TUCKER	CITY OF THOMAS	SPRING FED RESERVOIR	1) INTAKE PENDLETON CREEK (NEED TO VERIFY SUPPLY)	\$820,100
3304902	UPSHUR	BUCKHANNON WATER BOARD	BUCKHANNON RIVER	1) INTAKE STONE COAL LAKE	\$12,490,000
3305103	WEBSTER	COWEN PSD	GAULEY RIVER	1) INTAKE WILLIAMS RIVER	\$2,310,000
3305517	WYOMING	MUNICIPAL WATER WORKS PINEVILLE	GUYANDOTTE	1) RELOCATE PINNACLE CREEK INTAKE	\$46,375
				TOTAL INTAKES	\$157,866,104
3300609	CABELL	MILTON WATER	MUD RIVER	1) INTERCONNECTION WVAW	\$17,714
3300806	CLAY	CLAY ROANE PSD	ELK RIVER	1) INTERCONNECTION TOWN OF CLAY	\$200,000
3301004	FAYETTE	ARMSTRONG PSD	KANAWHA RIVER	1) INTERCONNECTION KANAWHA FALLS	\$1,744,000
3301104	GILMER	CITY OF GLENVILLE	LITTLE KANAWHA	1) INTERCONNECTION WVAW WESTON	\$631,124

PWSID #	COUNTY	SYSTEM NAME	INTAKE	VIABLE ALTERNATIVE	ESTIMATED COST
3301412	HAMPSHIRE	CENTRAL HAMPSHIRE PSD	SP001-GREEN SPRING; SP002-SPRINGFIELD WD; SP003 RAVEN ROCK	1) INTERCONNECTION FRANKFORT PSD	\$536,258
3301504	HANCOCK	CHESTER MUNICIPAL WATER	INFILTRATION GALLERY OHIO RIVER	1) INTERCONNECTION W/NEWELL COMPANY (GW)	\$439,890
3301714	HARRISON	TOWN OF LUMBERPORT	MANMADE RESERVOIR ON JONES RUN	1) INTERCONNECTION CITY OF SHINNSTON	\$83,500
3301721	HARRISON	CITY OF SHINNSTON	TYGART VALLEY RIVER	1) INTERCONNECTION CLARKSBURG NEEDS UPGRADES	\$2,669,976
3301811	JACKSON	CITY OF RIPLEY	MILL CREEK @ O'BRIEN DAM	1) INTERCONNECTION WITH RAVENSWOOD VIA NORTHERN JACKSON PSD	\$69,520
3302009	KANAWHA	COMMUNITY OF CEDAR GROVE	KANAWHA RIVER	1) INTERCONNECTION WVAW KANAWHA VALLEY	\$85,000
3302031	KANAWHA	CITY OF SAINT ALBANS	COAL RIVER	1) INTERCONNECTION WVAW KANAWHA VALLEY	\$2,300,000
3302104	LEWIS	WVAW WESTON WATER SYSTEM	WEST FORK RIVER	1) INTERCONNECTION WITH WVAW WEBSTER SPRINGS	\$21,200,000
3302203	LINCOLN	CITY OF WEST HAMLIN	GUYANDOTTE RIVER	1) INTERCONNECTION WVAWC	\$347,800
3302205	LINCOLN	LINCOLN PSD	LOW DRAWOFF POINT COAL RIVER	1) INTERCONNECT WVAWC	\$510,144
3302336	LOGAN	MAN WATER WORKS	GUYANDOTTE RIVER	1) INTERCONNECTION WITH BUFFALO CREEK PSD	\$263,538
3302347	LOGAN	BUFFALO CREEK PSD	TONEY FORK INTAKE	1) INTERCONNECTION BUFFALO CREEK PSD	\$282,288
3302357	LOGAN	LOGAN CO. PSD GREENVILLE	GUYANDOTTE RIVER (UPPER INTAKE)	1) INTERCONNECTION BUFFALO CREEK PSD	\$710,303
3302801	MERCER	TOWN OF ATHENS	ATHENS LAKE (AKA LAUREL CREEK)	1) INTERCONNECTION WVAW BLUESTONE	\$2,632,589
3302835	MERCER	WVAW BLUEFIELD WATER SYSTEM	3 RESERVOIRS: ADA, HORTON AND KEE	1) INTERCONNECTION WITH WVAW BLUESTONE	\$22,600,000
3303003	MINGO	KERMIT WATER WORKS	LOW DRAWOFF POINT TUG FORK RIVER-PRIMARY	1) INTERCONNECTION--A BROKEN RIVER CONNECTION THAT WHEN REPAIRED ESTABLISHES SERVICE TO EAST KERMIT AND PROVIDES AN INTERCONNECTION WITH MINGO COUNTY PSD	\$452,790
3303611	PENDLETON	PENDLETON CO. PSD BRANDYWINE	BIG SPRING	1) INTERCONNECTION PETERSBURG	\$881,277
3304011	PUTNAM	PUTNAM PSD	POPLAR FORK RESERVOIR & LARCH FORK RESERVOIR	1) INTERCONNECTION CITY OF HURRICANE	\$8,400,000
3304209	RANDOLPH	MILL CREEK WATER DEPARTMENT	MILL CREEK	1) INTERCONNECTION HUTTONSVILLE PSD	\$253,500

PWSID #	COUNTY	SYSTEM NAME	INTAKE	VIABLE ALTERNATIVE	ESTIMATED COST
3304307	RITCHIE	HUGHES RIVER WATER BOARD	HUGHES RIVER	1) INTERCONNECTION CLAYWOOD PARK PSD	\$4,045,300
3304704	TUCKER	HAMRICK PSD	DRY FORK	1) INTERCONNECTION CITY OF PARSONS	\$410,500
3304707	TUCKER	CITY OF PARSONS	SHAVERS FORK	1) INTERCONNECTION HAMRICK PSD--CURRENT PLANS ARE TO INTERCONNECT BOTH SO EACH COULD SUPPLY THE OTHER IF NEEDED	\$586,500
3304802	TYLER	MIDDLEBOURNE MUNICIPAL WATER WORKS	#2 INTAKE MIDDLE ISLAND CREEK	1) CURRENTLY INTERCONNECTED TO TYLER CO. PSD - INTERCONNECTION NEEDS 7500' OF 6" LINE UPGRADED AND A PRESSURE REDUCING VALVE TO FULLY SUPPLY MIDDLEBOURNE	\$818,860
3305004	WAYNE	FORT GAY WATER WORKS	TUG FORK RIVER	1) INTERCONNECTION LOUISA WATER IN KY	\$279,892
3305007	WAYNE	TOWN OF WAYNE	LOW DRAWOFF POINT TWELVEPOLE CREEK	1) INTERCONNECTION (LAVALLETTES PSD--PURCHASES FROM KENOVA-- NEAR WOLF CREEK; INTERCONNECT TO LAVALLETTES NEAR CHERRY BRANCH WOULD USE WATER FROM WVAW HUNTINGTON)	\$509,529
3305009	WAYNE	KENOVA MUNICIPAL WATER	BIG SANDY RIVER	1) INTERCONNECTION WVAW HUNTINGTON	\$567,938
3305104	WEBSTER	WVAW WEBSTER SPRINGS	ELK RIVER	1) INTERCONNECTION WITH WVAW WESTON	\$21,200,000
3305402	WOOD	CLAYWOOD PARK PSD	LITTLE KANAWHA RIVER	1) INTERCONNECTION PARKERSBURG	\$440,000
				TOTAL INTERCONNECTIONS	\$96,169,730
3300402	BRAXTON	FLATWOODS CANOE RUN	ELK RIVER	1) TREATED WATER STORAGE 607K GAL. TANK	\$801,875
3300516	BROOKE	WEIRTON AREA WATER BOARD	OHIO RIVER	1) TREATED WATER STORAGE- 1,025K GAL. STANDPIPE TANK	\$1,021,375
3301024	FAYETTE	MOUNT HOPE WATER	MINE INTAKE TO RAW WATER PUMP	1) USE EXISTING TANKS AT BOY SCOUT CAMP AND PUMP STATION	\$1,538,000
3301705	HARRISON	CLARKSBURG WATER BOARD	WEST FORK RIVER	1) 31 TREATED WATER STORAGE-MULTIPLE TANKS APPROXIMATELY 4,000K GAL.	\$4,206,075
3302331	LOGAN	CITY OF LOGAN WATER DEPARTMENT	GUYANDOTTE RIVER	1) TREATED WATER STORAGE - THREE 816K GAL. TANKS	\$2,781,750
3302364	LOGAN	LOGAN COUNTY PSD NORTHERN REGIONAL	GUYANDOTTE RIVER	1) TREATED WATER STORAGE 1,260K GAL. TANK	\$1,200,125
3302435	MCDOWELL	MCDOWELL CO. PSD BERWIND	BERWIND WELL	1) TREATED WATER STORAGE 195K GAL. TANK	\$403,625
3302804	MERCER	BLUEWELL PSD	SHUPE RESERVOIR	1) TREATED WATER STORAGE 105K GAL. TANK	\$406,625

PWSID #	COUNTY	SYSTEM NAME	INTAKE	VIABLE ALTERNATIVE	ESTIMATED COST
3302849	MERCER	GREEN VALLEY GLENWOOD PSD GLENWOOD	GLENWOOD RESERVOIR	1) TREATED WATER STORAGE 1,260K GAL. TANK	\$1,200,125
3302928	MINERAL	FRANKFORT PSD	IN001 PATTERSON CREEK	1) TREATED WATER STORAGE: 4 EXISTING TANKS NEED DEMOLISHED AND REPLACED WHILE INCREASING VOLUME	\$1,812,000
3303005	MINGO	MATEWAN WATER WORKS	TUG FORK RIVER	1) TREATED WATER STORAGE 607K GAL. TANK	\$801,875
3303009	MINGO	WILLIAMSON UTILITY BOARD	TUG FORK RIVER	1) TREATED WATER STORAGE 1,260K GAL. TANK	\$1,200,215
3303029	MINGO	MINGO COUNTY PSD NAUGATUCK	TUG FORK RIVER	1) TREATED WATER STORAGE 2,000K GAL. ELEVATED TANK	\$3,722,900
3303908	PRESTON	KINGWOOD WATER WORKS	CHEAT RIVER	1) TREATED WATER STORAGE 2,490K GAL. TANK	\$2,400,250
3304104	RALEIGH	BECKLEY WATER COMPANY	GLADE RESERVOIR; SWEENEYSBURG MINE	1) TREATED WATER STORAGE W/SWEENEYSBURG PRODUCTION	\$8,909,160
3304407	ROANE	WALTON PSD	SILCOTT FORK RESERVOIR	1) TREATED WATER STORAGE 50K GAL. TANK	\$240,850
3304605	TAYLOR	TAYLOR COUNTY PSD	TYGART DAM TYGART LAKE (TYGART VALLEY RIVER)	1) TREATED WATER STORAGE	\$695,000
3304803	TYLER	SISTERSVILLE MUNICIPAL WATER	OHIO RIVER	1) TREATED WATER STORAGE REHABILITATE TANK TAKEN OUT OF SERVICE	\$300,000
				TOTAL TREATED WATER STORAGE	\$33,641,825
3300404	BRAXTON	SUGAR CREEK PSD	ELK RIVER	1) RAW WATER STORAGE 297K GAL. TANK	\$713,375
3300512	BROOKE	FOLLANSBEE HOOVERSON HTS.	OHIO RIVER	1) RAW WATER STORAGE 2,026K GAL. TANK	\$1,726,700
3300901	DODDRIDGE	TOWN OF WEST UNION	MIDDLE ISLAND CREEK (MIC)	1) RAW WATER STORAGE 1,000K GAL. TANK	\$993,625
3301307	GREENBRIER	CITY OF LEWISBURG	GREENBRIER RIVER	1) RAW WATER STORAGE 2,000K GAL. TANK	\$4,552,000
3301613	HARDY	HARDY COUNTY PSD BAKER	IN001 PARKER HOLLOW RESERVOIR	1) RAW WATER STORAGE 300K GAL. TANK	\$650,000
3302434	MCDOWELL	MCDOWELL CO. PSD BARTLEY	BARTLEY SOURCE	1) RAW WATER STORAGE 491K GAL. TANK	\$713,375
3302515	MARION	TOWN OF MONONGAH	TYGART VALLEY RIVER	1) RAW WATER STORAGE 666K GAL. TANK	\$909,375
3303206	MONROE	RED SULPHUR PSD	HANCOCK SPRING; COBURN SPRING; RICH CREEK INTAKE	1) RAW WATER STORAGE 816K GAL. TANK	\$927,250
3303308	MORGAN	PAW PAW WATER WORKS	POTOMAC RIVER	1) RAW WATER STORAGE 297K GAL. TANK	\$564,125
3303402	NICHOLAS	CRAIGSVILLE PSD	GAULEY RIVER	1) RAW WATER STORAGE 3,000K GAL. TANK	\$3,936,000

PWSID #	COUNTY	SYSTEM NAME	INTAKE	VIABLE ALTERNATIVE	ESTIMATED COST
3303403	NICHOLAS	NETTIE LEIVASY PSD	PANTHER CREEK	1) RAW WATER STORAGE 1,000K GAL TANK	\$2,935,000
3304005	PUTNAM	CITY OF HURRICANE	HURRICANE RESERVOIR	1) RAW WATER STORAGE 1.000K GAL. TANK	\$1,500,000
3304204	RANDOLPH	TOWN OF HARMAN	HARMAN WELL	1) RAW WATER STORAGE 105K GAL. TANK	\$403,625
3304507	SUMMERS	BIG BEND PSD	GREENBRIER	1) RAW WATER STORAGE 209K GAL. TANK	\$506,875
3304711	TUCKER	TIMBERLINE FOUR SEASONS RESORT	WELL #5	1) RAW WATER STORAGE 210K GAL. TANK	\$506,875
3305205	WETZEL	PINE GROVE WATER	NORTH FORK FISHING CREEK	1) RAW WATER STORAGE-CURRENTLY 177K ONLY 70% VIABLE DUE TO PUMP ISSUES, ADD 139K GAL. TANK AND UPGRADE PUMPS TO FULLY UTILIZE STORAGE.	\$478,750
3305516	WYOMING	COMMUNITY OF OCEANA	LAUREL FORK	1) RAW WATER STORAGE 2,026K GAL. TANK	\$1,726,700
				TOTAL RAW WATER STORAGE	\$23,743,650
3300315	BOONE	BOONE RALEIGH PSD	BIG COAL RIVER	1) WELLS DRILLED INTO WATER FILLED ABANDONED MINES	\$500,000
3300406	BRAXTON	WVAW GASSAWAY	ELK RIVER	1) DEVELOP WELLS (PREFERRED); NOTE \$14,800 ANNUAL O & M	\$1,000,000
3300508	BROOKE	HAMMOND PSD	BUFFALO CREEK	1) GROUNDWATER SUPPLY WELLS OR SPRINGS	\$134,000
3302503	MARION	FAIRVIEW WATER SYSTEM	WELLS #1, #2, #3 AND #4	2) MINE POOLS	\$700,000
3302603	MARSHALL	CITY OF CAMERON	EARTHEN DAM	1) WELLS TO REPLACE SURFACE SUPPLY--MURRAY ENERGY IS LONG WALL MINING THE AREA AND THIS IS THEIR PROPOSED BACKUP.	\$888,250
3303516	OHIO	CITY OF WHEELING	OHIO RIVER	1) TWO ADDITIONAL WATER WELLS PLANNED	NO COST PROVIDED
				TOTAL GROUNDWATER (WELLS)	\$3,222,250
3301912	JEFFERSON	CORPORATION OF HARPERS FERRY	POTOMAC RIVER; ELK RUN	1) PORTABLE WATER TREATMENT TRAILER	
3301979	JEFFERSON	JEFFERSON UTILITIES DEERFIELD VILLAGE	WELL #1 -SOUTH PAW LANE; WELL #2-DEERFIELD VILLAGE DRIVE; WELL #3 PATHFINDER COURT	1) WATER TRUCK TO HAUL WATER IN AN EMERGENCY	
3302813	MERCER	GREEN VALLEY GLENWOOD PSD BULLTAIL	JAMES BAILEY RESERVOIR	ALTERNATIVE SOURCE ANALYSIS NOT COMPLETED	
3303616	PENDLETON	PENDLETON CO. PSD UPPER TRACT	SOUTH FORK OF SOUTH BRANCH POTOMAC RIVER	1) OLD SUGAR GROVE NAVAL FACILITY HAS A WATER PLANT ON THEIR PROPERTY THAT COULD BE USED IN AN EMERGENCY.	\$108,750

PWSID #	COUNTY	SYSTEM NAME	INTAKE	VIABLE ALTERNATIVE	ESTIMATED COST
				TOTAL MISCELLANEOUS	\$108,750
3300104	BARBOUR	PHILIPPI PUBLIC WATER SYSTEM	TYGART VALLEY RIVER	1) PLAN TO CONSTRUCT RESERVOIR ON LITTLE LAUREL CREEK	\$5,864,000
3300701	CALHOUN	GRANTSVILLE WATER DEPARTMENT	LITTLE KANAWHA RIVER	1) IMPOUNDMENT BULL RIVER	\$300,000
3301046	FAYETTE	WVAW NEW RIVER	NEW RIVER	1) RAW WATER STORAGE- 20,000K GAL. (5 DAY SUPPLY) RESERVOIR	\$22,600,000
3302502	MARION	CITY OF FAIRMONT	TYGART VALLEY RIVER	1) 11,400K GAL. RESERVOIR	\$3,170,375
3303808	POCAHONTAS	CHEAT MOUNTAIN WATER SYSTEM	SHAVERS FORK LAKE	1) RAW WATER STORAGE USING SILVER CREEK RESERVOIR-CURRENTLY USED FOR SNOWMAKING	\$1,194,000
3303912	PRESTON	PRESTON COUNTY PSD #1		1) FAIRFAX POND IS COUNTED AS RAW WATER STORAGE ALSO	
3304405	ROANE	CITY OF SPENCER	CHARLES FORK LAKE	1) ALTERNATE SOURCE- CONSTRUCT RESERVOIR MILETREE LAKE-A FORMER INTAKE THERE BUT STRUCTURE TOO DILAPIDATED TO USE	\$431,409
				TOTAL RESERVOIRS (IMPOUNDMENTS)	\$33,559,784
				GRAND TOTAL	\$348,312,093

APPENDIX D
Public Water System Supply Study Commission
Work Group Membership

Work Group 1

(A review and assessment of the effectiveness and quality of information contained in updated Source Water Protection Plans required for certain public water systems by the provisions of sections nine-c, article one, chapter sixteen of this code)

Rahul Gupta, MD, MPH, FACP - **Chair**
Commissioner and State Health Officer
Bureau for Public Health

Michael McCawley, PhD
Assistant Professor
WVU School of Public Health

Walt Ivey *(serving as proxy for Dr. Gupta)*
Office of Environmental Health Services
Bureau for Public Health

Jeffrey McIntyre, President
West Virginia American Water Company

Tim Ball
Morgantown Utility Board

Ed Watson
Canaan Valley Institute

Evan Hansen
West Virginia Rivers Coalition

Amy Swann, Executive Director
Rural Water Association

Work Group 2

(A review and assessment of the effectiveness of the legislation enacted during the 2014 Regular Session of the West Virginia Legislature, as it pertains to assisting public water systems in identifying and reacting or responding to the identified potential sources of significant contamination and increasing public awareness and public participation in the emergency planning and response process)

Dr. Terry Polen - **Chair**
WV Department of Environmental Protection

Evan Hansen
West Virginia Rivers Coalition

Rahul Gupta, MD, MPH, FACP
Commissioner and State Health Officer
Bureau for Public Health

Pam Nixon
Citizen Member

Walt Ivey *(serving as proxy for Dr. Gupta)*
Office of Environmental Health Services
Bureau for Public Health

Amy Swann, Executive Director
WV Rural Water Association

Tim Ball
Morgantown Utility Board

Work Group 3

(The extent of available financing and funding alternatives which are available to existing public water systems to pursue projects which are designed to create alternate sources of supply or increased stability of supply in the event of a spill, release or contamination event which impairs the water system's primary source of supply)

Amy Swann, Executive Director - **Chair**
WV Rural Water Association

Rick Roberts
E. L. Robinson Engineering Company

David L. Acord, II (Designee for Mike Albert)
WV Public Service Commission

Ed Watson
Canaan Valley Institute

Jeffrey McIntyre, President
West Virginia American Water Company

Work Group 4

(A review and consideration of the recommendations of the U.S. Chemical Safety and Hazard and Investigation Board after its investigation of the Bayer Crop Science incident of 2008)

Michael McCawley, PhD - **Chair**
Assistant Professor
WVU School of Public Health

Rebecca McPhail, President
West Virginia Manufacturers Association

Pam Nixon
Citizen Member

Ed Watson
Canaan Valley Institute

Dr. Terry Polen (designee)
WV Department of Environmental Protection

Work Group 5

(Any recommendations or suggestions the study commission may offer to improve the infrastructure of existing public water systems, to provide safe and reliable sources of supplies and to pursue other measures designed to protect the integrity of public water services)

David L. Acord, II - **Chair**
WV Public Service Commission

Amy Swann, Executive Director
WV Rural Water Association

Tim Ball
Morgantown Utility Board

Rahul Gupta, MD, MPH, FACP
Commissioner and State Health Officer
Bureau for Public Health

Jeffrey McIntyre, President
West Virginia American Water Company

Walt Ivey *(serving as proxy for Dr. Gupta)*
Office of Environmental Health Services
Bureau for Public Health

Rick Roberts
E. L. Robinson Engineering Company

Evan Hansen
West Virginia Rivers Coalition

APPENDIX E
Department of Environmental Protection
Aboveground Storage Tank Program Status Report

As of November 21, 2016

Total Registered Tanks:	41,616
Total Regulated Tanks:	7,843
Total Level 1 Tanks:	4,912
Total Level 2 Tanks:	2,931

As of December 13, 2016

Aboveground Storage Tank Inspections (All types):	2,163
Aboveground Storage Tank Compliance Monitoring Inspections:	1,832
CMI Follow-Up Inspections & IOVs:	226
Compliance Assistance Inspections:	31
Complaint Responses:	3
Record Reviews:	70
Spill Responses (confirmed releases):	12

Fiscal as of December 12, 2016

Aboveground Storage Tank Fund (3004)

- FY2016 collected: \$ 909,336.65
- FY2017 collected (to date 12-12-16): \$ 712,279.43
- Current Balance: \$1,053,715.73

Leaking Aboveground Storage Tank Fund (3016)

- FY2016 collected: \$ 816,917.81
- FY2017 collected (to date 12-12-16): \$ 125,337.00
- Current Balance: \$ 847,902.74