WATERWORKS ADVISORY COMMITTEE MEETING

Sydnor Hydro, Inc., 2111 Magnolia St, Richmond, Virginia 23223

Wednesday, July 31, 2019

8:30 AM - 2:00 PM

AGENDA

Subject	Time
Meet and Greet with Stakeholders	8:30 – 9:00 AM
Call to Order, Meeting Overview, and Adoption of Minutes from the 04/30/2019 Meeting	9:00 – 9:10 AM
Public Comment Period/Board of Health Update	9:10 – 9:20 AM
ODW Updates	9:20 – 9:40 AM
Draft Policy Update: Boil Water Notices	9:40 – 10:00 AM
WIIN Grant Update	10:00 – 10:15 AM
Break	
Policy & Metrics	10:30 – 11:00 AM
Data Management Update	11:00 – 11:30 AM
Waterworks Operation Fees	11:30 AM – 12:00 PM
Break/Working Lunch	
Emergency Preparedness Website	12:30 – 12:45 PM
WAC By-Laws and Advisory Committee Membership	12:45 – 1:30 PM
Plan for Next Meeting, Adjourn	2:00 PM

Waterworks Advisory Committee (WAC) Meeting Summary July 31, 2019 Final

<u>Members Present</u>: Dwayne Roadcap, ODW (chair); Roger Cronin, ACEC; Geneva Hudgins, AWWA, Jesse L. Royall, Jr. PE, Sydnor; Eric Lasalle, NTNC; Amanda Kelley, sub for Andy Crocker, SERCAP, Scott Kudlas, DEQ; Bailey Davis, DCLS; Skip Harper, DHCD

<u>Guest in Attendance</u>: Robert Edelman, Christine Latino, Jim Moore, Nelson Daniel, Dan Horne, Jeff Wells, Jeremy Hull, Jennifer Coleman, Tony Singh, James Reynolds

Russ Navratil, AWWA; Tom Fauber, VA ABPA; Paul Nyffeler, Aqua Law PLC; John Kingsbury, Fairfax Water; Katie Krueger, Hampton Roads Planning District; Jillian Terhune, City of Norfolk; Laura Bauer, VA American Water Company

Public Comment Period

No public comments

Adoption of Minutes from April 30, 2019 Meeting

WAC members voted unanimously to approve and adopt the draft minutes from the April 30, 2019 meeting. ODW will post the minutes as final on Town Hall.

ODW Updates

Staff

Jim Moore, Director of the Lexington Field Office, will be retiring after 43 years of service with the Department of Health. His last day in the office will be August 30th. ODW leadership will interview candidates for the Lexington field office director position this week.

Tony Singh joined ODW as the Deputy Office Director. Tony is a PE and recently completed his Masters of Public Health at UVA.

James Reynolds is the Field Director for ODW's 6th field office, which will be based in Richmond. James is in the process of filling three additional positions for the field office.

The Division of Technical Services is reviewing applications from candidates to fill open GIS and data analyst positions.

Steve Pellei left ODW's Financial and Construction Assistance Program to pursue an opportunity with another state agency. Keith Kornegay is the acting FCAP director.

Jason Yetter is the Operator Certification Coordinator in the Capacity Development and Training Division and Julie Floyd recently became the Field Working Supervisor for Capacity Development. The Division is also going through the process of reclassifying a position to create new role for a small system coordinator. The small system coordinator with focus on ways to help owners of non-community waterworks achieve and remain in compliance with the Waterworks Regulations.

Waterworks Regulations

The Secretary of Health and Human Services reviewed and approved the proposed amendments to the Waterworks Regulations on June 7. The proposed amendments are currently under review in Governor's Office. The WAC asked staff to provide updates on the status of the regulations as they go through the review process. Updates are posted on the Town Hall website and staff can send email to the WAC when there are updates.

PFOA/PFAS

Mr. Roadcap presented a letter from EPA Assistant Administrator David Ross to U.S. Senator Thomas Carper that says EPA intends to establish a maximum contaminant level for PFOA and PFAS. Dan Horne, SEVFO Director, provided information about PFOA and PFAS (letter and Powerpoint slides are attached).

Proposed Revisions to the Lead & Copper Rule

Although very little is known about the revisions to the lead and copper rule (which is undergoing review at the Office of Management and Budget), VDH anticipates there will be significant changes.

Proposed Perchlorate Rule

EPA is seeking comment on its proposed perchlorate rule. The public comment period is open until August 26. Tony is on a working group with ASDWA that expects to offer comments. EPA proposes an MCL of 56 ppb, but is seeking comment on higher, lower, and no action alternatives.

Paperless work units

Staff are currently working on ways to reduce the number of paper-based processes ODW uses to conduct day-to-day operations. One example is using tablets in the field during sanitary surveys, instead of printing and filling out a paper form in the field, then creating an electronic version of the sanitary survey form in the office following the inspection.

Guidance on Water Main Breaks and when to issue Boil Water Advisories

ODW staff revised the draft guidance on Main Break Types and Responses based on feedback from WAC members at the April 30, 2019 meeting. These include adding a statement that says the guidance is for waterworks with permanent chlorination equipment, removing CT requirements, and adding notes that clarify when to contact ODW.

After discussions, committee members recommended adding a statement in the Type 1 Break and Type 2 Break columns saying, "Return main to Service." The statement would go in the same block as "No Boil Water Advisory (BWA)."

ODW expects to post the guidance on the drinking water section of the VDH website with a frequently asked questions section. Jeff Wells to be the point of contact for any questions or concerns.

WIIN Grant

The goal of the WIIN grant is to reduce exposure to lead in drinking water at schools and child care programs. States can work toward this goal by using grant funds to test for lead in drinking water at schools and child care programs. EPA has allocated \$737,000 to the state of Virginia to pay for testing and education. ODW will manage the grant with assistance from several other VDH offices and state agencies (Department of Education, Department of Social Services, Department of Consolidated Lab Services, VA Tech, UVA, ODU and VCU). Following EPA's guidelines, ODW created and submitted a draft work plan to EPA Region 3 staff for review and comment. The final work plan is due to EPA by August

22. This fall, ODW plans to establish a database through which interested schools and child care programs can submit requests for sampling. Eligible schools and child care programs will receive sample kits (paid for by the grant); they will be responsible for collecting samples and returning them to the laboratory that provided the kit for testing. The labs will analyze the samples and return results to the school/child care program and ODW. This is a voluntary program and ODW will prepare a report of its findings at the conclusion of the program.

Policy and Field Office Metrics

Metrics – see Powerpoint slides in the attachments.

Data Management

SDWIS Prime

Technical Services staff attended a conference in Atlanta. They discovered that the SDWIS Prime is on hold and under assessment. ODW will continue to use SDWIS state. ODW currently has a contractor working on a transition plan for moving data from its proprietary database programs into SDWIS to help with the eventual transition to SDWIS Prime.

CMDP (Compliance Monitoring Data Portal)

In estimating time efficiency, Technical Services has noticed that a large amount of time is being spent keying-in lab data. DCLS transmits monitoring results directly to ODW electronically. However, there are a number of labs that waterworks use to test water samples that provide results via paper reports or in a form that requires ODW staff to enter results in the database manually. Technical Services estimates staff spend 10-15 hours per week in each field office to input data. It is ODW's goal to get the labs to transition from paper-based data to being able to communicate their information electronically. CMDP is a tool that labs can use for electronic data reporting. Staff are going to set up CMDP in a test environment and work with labs to start importing data on a trial basis.

Technical Services staff are also working with software developers (GEC) to find programs to replace other proprietary database applications that are outdated (or develop custom software), such as:

SWIMR R&R Replacement software
SWIFT Sanitary Survey software
SWEPT Replaces project tracking logs

SWPBT Billing Software SWLabs Lab views

Waterworks Operation Fees

See Powerpoint slides in the attachments.

There has been some discussion about moving annual waterworks operation fees from \$2.95 to \$3.00 for each customer account. The total fee due to ODW each year is based on the number of customer accounts multiplied by \$2.95. If the number of accounts multiplied by \$2.95 exceeds \$160,000, the annual operation fee is capped at \$160,000.

NTNC waterworks pay \$90.00 per year and there is no charge for TNC's. Wholesale waterworks do not pay the operation fee if they do not have any individual consumer accounts/connections.

Based on feedback from the WAC and ODW concerns about future funding, ODW proposes to form a stakeholder group to discuss the need for changes to the operation fees and ways to increase revenue.

Nelson Daniel will coordinate the stockholder group for ODW and provide an update on its status at the next WAC meeting.

Emergency Preparedness Website

Bryan Wade showed the WAC what information has been added to the ODW website.

See: http://www.vdh.virginia.gov/drinking-water/emergency-preparedness-and-security/

There is information there including:

- Emergency Preparedness and Response plans,
- Links to AWIA and EPA,
- AWWA resources,
- ODW's response plan,
- rip & run sheets,
- disaster, security and water works related information,
- IT Security,
- water Supply interruption information,
- EPA Links,
- CDC toolbox for drinking water advisories,
- Response Protocol,
- Boil Water FAQ's and templates (information is available in English and Spanish, additional languages will be added later),
- Water Infrastructure security, and
- Links to the Office of Environmental Services' website with information for private wells.

The self-reporting tool is being developed, but not available yet.

By-Laws

Staff presented revised draft by-laws for the WAC. (See attachments that follow.)

The WAC reviewed the draft and made the following suggestions:

Increase the number of ex officio members so that they include:

- (1) Transient Non community (TNC) representative
- (2) Community Waterworks owners one from a large system, one from a small system
- (1) Representative from the Virginia Chapter of the American Backflow Prevention Association
- (1) Representative from the Fire Sprinkler Association
- (1) Representative from the Virginia Plumbing and Mechanical Inspectors Association

Conduct meetings every other month (6 times per year) on Wednesdays.

Staff will make the suggested revisions to the draft bylaws.

Conclusion

ODW staff will poll members to confirm the next meeting dates in the fall and before the end of the year (October and December).						

WAC Meeting

07/31/2019

Attachments and Power Point presentations

Waterworks Advisory Committee (WAC) Meeting Summary

April 30, 2019 Final

<u>Members Present</u>: Dwayne Roadcap, ODW (chair); Geneva Hudgins, AWWA; Jesse L. Royall, Sydnor; Andy Crocker, SERCAP; Mark Estes, VRWA; Steven P. Herzog, VWEA; David F. Van Gelder, Water Operator; Trevor Lawson, DEQ; Bailey Davis, DCLS; Skip Harper, DHCD.

<u>Guests in Attendance</u>: Bob Edelman, Kris Latino, Nelson Daniel, Dan Horne, Jeff Wells, Amanda Davis, Steve Pellei, Barry Matthews, Bryan Wade, Jennifer Coleman, Aaron Moses (ODW Staff)

Tom Fauber, VA APBA; Paul Nyffeler, AquaLaw PLC; Steve Edgemon, Fairfax Water; Robert Bohannon, Hunton Andrews Kurth LLP; Chris Harbin, City of Norfolk; Theresa O'Quinn, Prince William County Service Authority; Laura Bauer, Virginia American Water; Paul Saunders, DPOR; Russ Navratil, VA AWWA.

Public Comment Period

No public comments.

Adoption of Minutes from December 18, 2018 Meeting

WAC members voted unanimously to approve and adopt the draft minutes from the Dec 18, 2018 meeting. ODW will post the minutes as final on Town Hall.

2019 Legislative Session Update

Dwayne Roadcap provided the following information:

- HB1949 Rainwater harvesting; water for human consumption. The constituent, Warrenton-Fauquier Airport, decided that their project will be a waterworks, eliminating the need for the legislation. The bill was tabled in committee.
- HB2358 Potomac Aquifer recharge monitoring; Creates the Potomac Aquifer Recharge Oversight Committee (Committee) and the Potomac Aquifer Recharge Monitoring Laboratory (Lab) to monitor the Hampton Roads Sanitation District's (HRSD) Sustainable Water Infrastructure for Tomorrow (SWIFT) Project. HRSD will fund an engineer position in VDH to monitor lab data. EPA will regulate and permit the project through the underground injection control program

The following bills passed Senate, but did not make it out of the House:

- SB1629 would requires schools to report results of potable water lead testing to VDH.
- SB1622 would require potable water lead testing in child day programs and reporting results to VDH.

Water Infrastructure Improvements for the Nation Act (WIIN): EPA announced on April 29, 2019 that Virginia will be awarded \$737,000 to pay for lead testing in schools and child care facilities. VDH is coordinating the grant for the Commonwealth; ODW is the lead. ODW will be reaching out to other agencies/offices to develop the required work plan and submit it to EPA by the required deadline (not

yet specified, but expected to be within the next 6 to 8 weeks). The grant will pay for sampling and ODW believes testing needs to begin by the end of the calendar year. VDH/ODW will need to come up with criteria to implement the program. WAC members suggested starting with older schools. Skip Harper stated that DHCD would like to be involved if needed.

Current Status of Proposed Amendments to Waterworks Regulations

Nelson Daniel provided information about the status of the proposed amendments:

The proposed amendments to the Waterworks Regulations are under Executive Branch review, currently with the Secretary of Health and Human Resources. The Department of Planning and Budget completed its Economic Impact Analysis in mid-April and concluded that the benefits of the proposed amendments exceed the costs. VDH concurs with the assessment and added a comment in the agency response to emphasize that only a small percentage of waterworks that have to demonstrate that a groundwater source is (or is not) under the direct influence of surface water will have to proceed to the new third step in the groundwater under direct influence (GUDI) of surface water determination process.

The Governor's Office will review the proposed amendments after the Secretary's Office completes their review. There is no specified timeline for the Governor's Office to complete their review.

Process Automation

Aaron Moses presented:

- Process automation will help to implement recommendations from the Virginia Commonwealth University Performance Management Group (VCU PMG) review of ODW's operations.
- Objectives: improve efficiency, reduce paper-based processes.
- Benefits: electronic sanitary survey software on a tablet computer can be used in the field; the application interfaces with waterworks data in ODW's database (SDWIS).
- ODW is considering selecting an optional Consumer Confidence Report (CCR) tool. This tool
 would generate the entire CCR, including the contaminants table, which would be pulled
 from the SDWIS data. ODW's Division of Technical Services will set up a webinar to provide a
 demonstration to ODW staff and WAC members.

Sixth Field office in Richmond Area

Dwayne Roadcap presented:

- ODW will review and adjust work area boundaries to improve support for and interaction with waterworks.
- This follows VCU PMG recommendations.
- ODW will announce the Field Director soon.
- ODW is currently advertising for a Deputy Field Director; ODW plans to hire two additional positions.
- ODW has not determined the physical location for the field office or its work area boundaries.

ODW Waterworks Operation Fees

Steve Pellei presented a Power Point Presentation (copy attached) regarding the Waterworks Operation Fees.

- Waterworks fees are established in law and regulations. There is a \$160,000 cap for individual waterworks and fees for the number of connections cannot exceed \$3.00 per connection (up to the cap of \$160,000).
- 12 waterworks are capped at \$160,000 (i.e., when you multiply the number of connections by current fee (\$2.95/connection), the total exceeds \$160,000).
- Some WAC members wonder if all waterworks are paying their fair share.
- Transient noncommunity waterworks (TNC) require the most technical assistance and compliance oversight from ODW staff, but TNCs do not pay fees.
- A WAC member made a motion saying the WAC should support an increase in the connection fee from \$2.95 to \$3.00. The motion failed (2 in support of the motion, 5 against).
- WAC members asked about the costs (hours and dollars) of regulating TNCs and in general where the money goes in the program.
- WAC members observed that funding from the General Fund has remained flat over the years and the federal funds may be "unstable" in the future.
- WAC members expressed the need to continue to have conversations regarding fee regulations, in part to ensure VDH has adequate financial resources to meet its obligations to regulate waterworks.
- ODW staff will research the basis for using a per-connection fee and report back to the WAC at a future meeting.

Draft ODW Guidance on Main Breaks and Responses

Jeff Wells reviewed draft ODW Guidance on Main Break Types and Responses (Copy attached).

- Type 1 does not include a bacteriological sample for that break.
- Updates includes changes to note 1 and addition of notes 2 and 3.
- Notes 2 and 3 address recommended actions if a bacteriological sample is positive.
- If a boil water advisory is necessary, the waterworks is to contact ODW.
- The guidance is applicable to waterworks that add chlorine/chloramines for disinfection; unchlorinated systems will need to collect bacteriological samples and issue Boil Water Advisories in accordance with current guidance and policies.
- Discussion about the slug chlorination with CT of 100 mg/L min. WAC agreed that this is not practical and not done in practice. Jeff explained that this is a best practice.
- The WAC asked Jeff to make edits and send out revisions to the WAC.
- When the WAC is happy with final product, Dwayne will send to the office of the Commissioner for approval and then post on Town Hall.
- The guidance will be posted on the ODW website
- Next meeting will show website and go over Boil Advisory information

Self-Reporting Tool

Bryan Wade provided information about a self-reporting tool for Boil Water Advisories and other emergencies.

- The tool will be available on ODW's website, and will be accessible using computer, phone, etc.
- The waterworks representative will complete a form, which will send out emails to the ODW field office, Brian, VDEM, etc.
- WAC suggested the waterworks should receive a confirmation email containing a copy of the submitted information.

• Goal of rollout of August to October

<u>Draft Policy Update: Project Review & Permit Procedures Manual</u>

Aaron Moses presented a Power Point Presentation (copy attached) summarizing proposed revisions to the Permit Procedures Manual. Significant changes will include:

- Creating separate applications for Construction Permits and Operation Permits.
- Standardizing the process to handle projects when ODW is awaiting responses to comments, including project returns.
- Field Offices will no longer review change orders and addenda that are non-technical, minor, or not under Part III of the Regulations.
- Implementing a procedure to amend operation permits instead of revoking the permit when there is a change of ownership.
- Extend the General Permit period from 5 to 10 years.
- Future: delegate more review authority to the Field Offices, with the Central Office auditing some projects.
- Future permit manual updates will combine working memos into one document
- Future development of design review guidance and checklists for staff, then share information with design engineers to allow a smoother permitting process.

WAC By-Laws and Advisory Committee Membership

Nelson Daniel reviewed a Power Point Presentation (copy attached) regarding the WAC By-Laws and Advisory Committee Membership. Discussion included:

- Discussion about original Waterworks Regulations and what they said about who is the chair. Dan Horne will look up the original regulations that WAC was formed under.
- Quarterly meetings, for example, third Wednesday of Feb, May, Aug, and November. Discussion about putting it into the bylaws is it necessary? Is this the right frequency?
- Attendance was an issue in the past. A member must attend 2/3 of meetings to remain in good standing. What about sending substitute representatives?
- DEQ was added as ex-officio member; VWEA was added later. The citizen representative was selected and provided by the League of Women Voters.
- In the past, the WAC used to prepare a 1-2 page report to the Commissioner identifying issues to be addressed. The chair and vice chair met with the commissioner. Dwayne to follow up with the Commissioner to determine if this is wanted or helpful. Could add deputy commissioner to this. Last done about 4 years ago.
- Going forward: WAC needs to look at how to revise the bylaws to match amended Waterworks Regulations and look at who is serving now. Reach out to see if members are willing to serve. Set up formal 3 year terms.
- Capacity Development has federal requirements for public participation, met by the WAC. The WAC is extremely important to satisfy these federal requirements.
- Observation that 11 of the original 13 original organizations are represented.

Next Meeting

Dwayne Roadcap discussed the date for the next meeting:

- Suggested third Wednesday of the month.
- ODW will send out a Doodle poll to determine the next meeting date and seek member input on whether meetings should be every other month or quarterly.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

FEB 1 5 2019

The Honorable Thomas R. Carper United States Senate Washington, D.C. 20510

OFFICE OF WATER

Dear Senator Carper:

Thank you for your letter of February 1, 2019, regarding Per- and Polyfluroalkyl Substances (PFAS). The U.S. Environmental Protection Agency (EPA) shares your concern for communities across the United States that continue to deal with these substances. The PFAS issue is a priority for the EPA and we are working cooperatively with our federal and state partners to address PFAS-related issues in order to protect human health and the environment.

On February 14, 2019, the EPA announced the first-ever PFAS Action Plan, available at: https://epa.gov/pfas. This historic plan responds to extensive public interest and input the EPA has received, including at the agency's May 2018 National Leadership Summit and subsequent visits to a number of states across the nation, at which the agency heard directly from the public about PFAS issues in their communities. The Action Plan represents the first time the EPA has built a national, multimedia, multi-program, research, management, and risk communication plan to address an emerging chemical of concern like PFAS. The Action Plan identifies both short-term solutions for addressing PFAS chemicals and long-term strategies that will help provide the tools and technologies states, tribes, and local communities need to clean up sites and provide clean and safe drinking water to their residents. Major actions described in the Action Plan are highlighted below.

PFOS—two of the most well-known and prevalent PFAS chemicals. To do so, the EPA is committed to following the MCL rulemaking process as established by the Safe Drinking Water Act (SDWA)—a process that is designed to ensure public participation, transparency, and the use of the best available science and other technical information. By the end of this year, the EPA will propose a regulatory determination, which is the next step in the Safe Drinking Water Act process for establishing an MCL. The EPA is also gathering and evaluating information to determine if a SDWA regulation is appropriate for a broader class of PFAS.

Cleanup: The EPA has already begun the regulatory development process for listing PFOA and PFOS as hazardous substances and will issue interim groundwater cleanup recommendations for sites contaminated with PFOA and PFOS. This important work will provide additional tools to help states and communities address existing contamination and enhance the ability to hold responsible parties accountable.

Enforcement: The EPA will continue its ongoing enforcement actions, create tools to address PFAS exposure in the environment, and assist states in enforcement activities. Where the EPA finds that there may be an imminent and substantial endangerment to public health related to PFAS contamination, the

agency will consider using its response authority under CERCLA section 104 or utilizing its enforcement authorities such as the SDWA section 1431 or RCRA section 7003.

Monitoring: The EPA will propose to include PFAS in the next round of nationwide drinking water monitoring under the Unregulated Contaminant Monitoring Program. This will improve the EPA's understanding of the frequency and concentration of PFAS occurrence in drinking water. This additional monitoring will utilize newer methods that will detect more PFAS chemicals and at lower levels. The EPA will also consider PFAS chemicals for listing in the Toxics Release Inventory to help the agency identify where these chemicals are being released.

Research: Through additional research, the EPA will rapidly expand the scientific foundation for understanding and managing risk from PFAS. The EPA will develop new analytical methods so that more PFAS chemicals can be detected in drinking water, in soil, and in groundwater. These efforts will improve our ability to monitor and assess potential risks. The EPA's research efforts also include developing new technologies and treatment options to remove PFAS from drinking water and at contaminated sites.

Risk Communications: The EPA will work across the agency—and the federal government—to develop a PFAS risk communication toolbox that includes materials that states, tribes, and local partners can use to effectively communicate with the public.

The PFAS Action Plan will help the EPA and its partners identify and better understand PFAS contaminants generally, clean up current PFAS contamination, prevent future contamination, and effectively communicate risk with the public. To implement the Action Plan, the EPA will continue to work in close coordination with multiple entities, including other federal agencies, states, tribes, local governments, water utilities, the regulated community, and the public.

Again, thank you for your letter and for your focused interest on PFAS. The EPA looks forward to working with you to address this challenge. If you have further questions, please contact me or your staff may contact Matt Klasen in the EPA's Office of Congressional and Intergovernmental Relations at klasen.matthew@epa.gov or (202) 566-0780.

Sincerely,

David P. Ross Assistant Administrator

PFAS 101

Waterworks Advisory Committee Meeting July 31, 2019

Daniel B. Horne, PE

ODW – Southeast Virginia Field Office



What are PFAS?

- Perfluorinated (or polyfluorinated) alkyl substances are a family of man-made organic chemicals that have been manufactured since the mid-1940s
- Extensively produced and used world-wide many industrial and commercial applications:
 - Fire-fighting foam (AFFF)
 - Water-proofing or stain-resistance for clothing, carpet, furniture
 - Food wraps and microwave popcorn bags
 - Non-stick cookware
 - Metal plating operations
 - and many more....

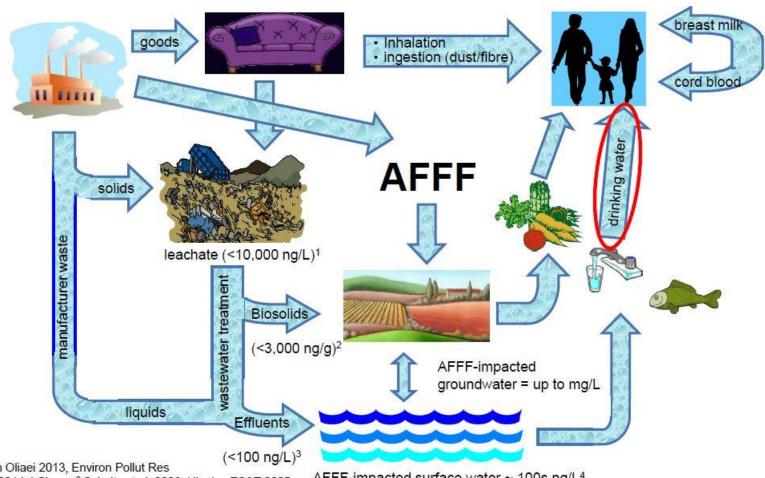


Why Are We Concerned?

- The carbon-fluorine bond is shortest & strongest chemical bond in nature
- PFAS are persistent don't break down naturally and are hard to remove from water – can easily move into the food chain – they also bioaccumulate
- Possible health effects currently indicated:
 - Developmental effects to fetuses or breast-fed infants
 - Thyroid, prostate, kidney, liver, and testicular effects (including cancer)
 - Immune effects (antibody production)



Exposure Routes



Adapted from Oliaei 2013, Environ Pollut Res ¹Allred et al. 2014 J Chrom; ² Schultz et al. 2006; Higgins ES&T 2005 3Schultz et al. 2006 a&b ES&T; 4Ahrens et al. Chemosphere 2015

AFFF-impacted surface water ~ 100s ng/L4

Current Regulatory & Legislative Status

- EPA issued a Lifetime Health Advisory in 2016
 - PFOA, PFOS, and PFOA+PFOS
 - Not a regulation
- EPA issued a PFAS Action Plan in Feb 2019
- EPA has committed to propose a Regulatory Determination in Dec 2019
- Lots of Congressional action current Defense Reauthorization bills include PFAS amendments but differ



ODW GUIDANCE ON MAIN BREAK TYPES AND RESPONSES

For waterworks with permanent chlorination equipment installed and operating

Type 1 Break	Type 2 Break	Type 3 Break	Type 4 Break	
Positive pressure maintained during break	Positive pressure maintained during break	Loss of pressure at break site/possible local depressurization adjacent to the break Loss of pressure at break site/widespread depressurization in the system		
Pressure maintained during repair	Pressure maintained until controlled shutdown	Partial or uncontrolled shutdown; isolated quickly ¹	olled Catastrophic event/	
No signs of contamination intrusion	No signs of contamination intrusion	Possible contamination intrusion ¹	Possible/actual contamination intrusion	
Procedures	Procedures	Procedures	Procedures	
Excavate to below break	Excavate to below break	Excavate to below break	Catastrophic failure response	
Maintain pit water level below break	Maintain pit water level below break	Maintain pit water level below break / Document possible contamination	Document possible contamination	
Repair under pressure	Controlled shutdown to minimize impacts	Notify customers in the vicinity	Notify customers in the vicinity, if possible	
Disinfect repair parts, conduct repairs	Disinfect repair parts, conduct repairs	Disinfect repair parts, conduct repairs	Disinfect repair parts, conduct repairs	
Check residual disinfectant level in distribution system	Conduct low velocity flush (flush 3 pipe volume)	Conduct scour flush (3 ft/sec for 3 pipe volumes)	Conduct scour flush (3 ft/sec for 3 pipe volumes)	
No Boil Water Advisory (BWA)	Check residual disinfectant level in distribution system and ensure it is adequate	Check residual disinfectant level in distribution system and ensure it is adequate	Check residual disinfectant level in distribution system and ensure it is adequate	
No bacteriological sample	No Boil Water Advisory (BWA)	Instruct customers to flush premise plumbing upon return to service	Instruct customers to flush premise plumbing upon return to service	
	Collect one bacteriological sample downstream ^{2,3}	BWA - TBD; based on depressurization extent and potential presence of contamination ^{1,4}	Issue Boil Water Advisory – Contact ODW ^{4,5}	
		If no BWA - Collect one set of bacteriological samples bracketing the site ^{2,3} (If BWA issued use type 4 procedures)	Collect two sets of bacteriological samples 16 hours apart ^{2,3}	
			Lift BWA with concurrence from ODW	

DRAFT

Notes:

- 1. The waterworks should consider the following factors when deciding whether a BWA is necessary: sanitary conditions of repair trench, timeliness of the repair, adherence to AWWA disinfection procedures, disinfectant residual levels after repairs are completed, water clarity after flushing, and the extent of the depressurization area. If the entire depressurization area cannot be flushed or disinfected then a precautionary boil water advisory or additional bacteriological testing should be considered.
- 2. If any bacteriological sample is positive for total coliform then the waterworks should collect additional samples until two satisfactory samples collected 16 hours apart are received. Additional disinfection and/or flushing may be necessary. If no BWA was initially issued then these results alone will not require that one be issued.
- 3. If any bacteriological sample is positive for *E coli* then the waterworks should immediately issue a BWA, perform flushing in the area, ensure adequate disinfectant residual levels in the area and collect additional samples until two satisfactory samples collected 16 hours apart are received.
- 4. If the waterworks issues a BWA then notify your Field Office representative for additional guidance.
- 5. For situations that do not conform to the above guidelines or if the waterworks is unsure how to proceed then contact your Field Office representative for guidance.

Field Office Performance Metrics

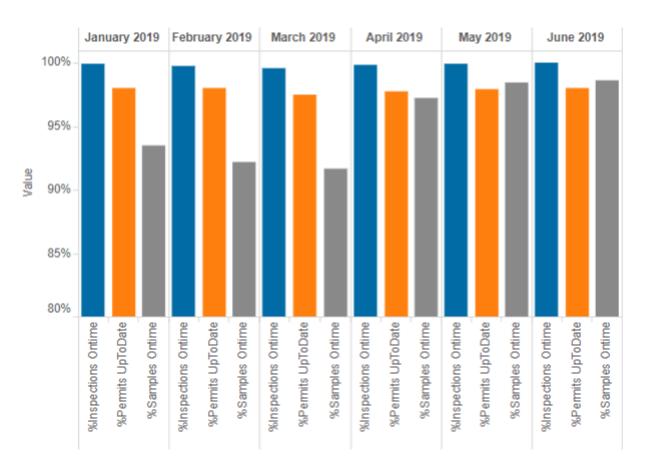
Robert Edelman

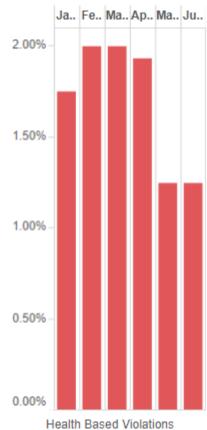
Director, Division of Technical Services

July 31, 2019



2019 Field Office Metrics

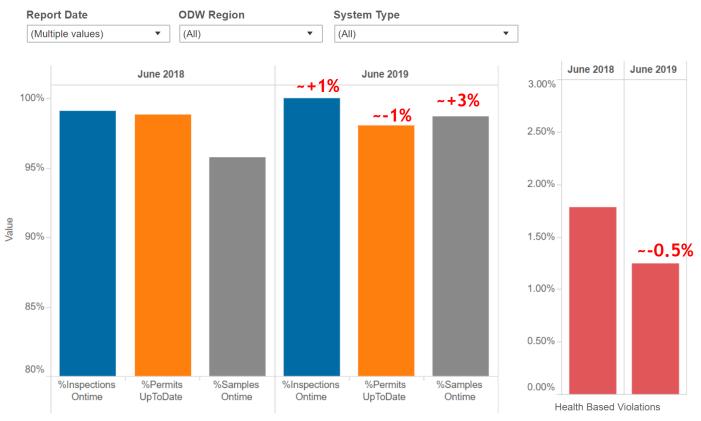






Year over Year

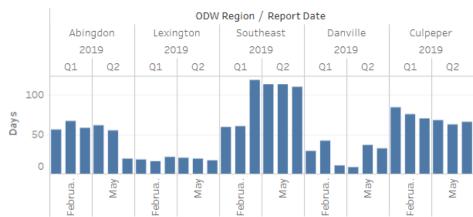
Office of Drinking Water Performance Scorecard



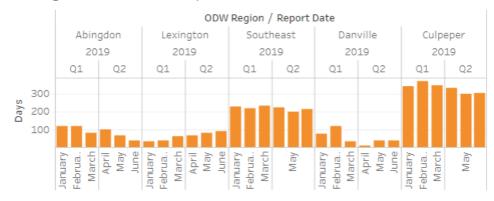


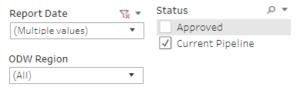
Plan Processing Metrics



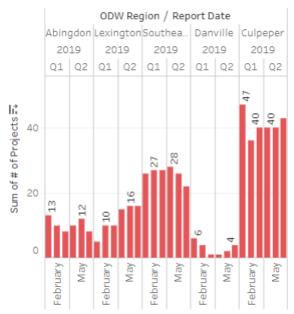


Average Total Time in Pipeline





Total # of Projects

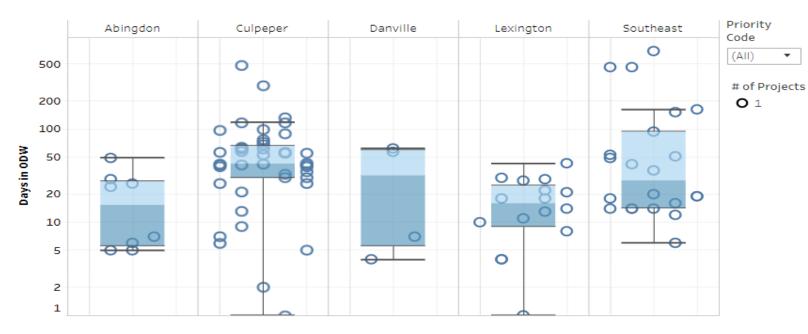




Time in ODW - June 2019

ODW - Plans Processing Time in ODW

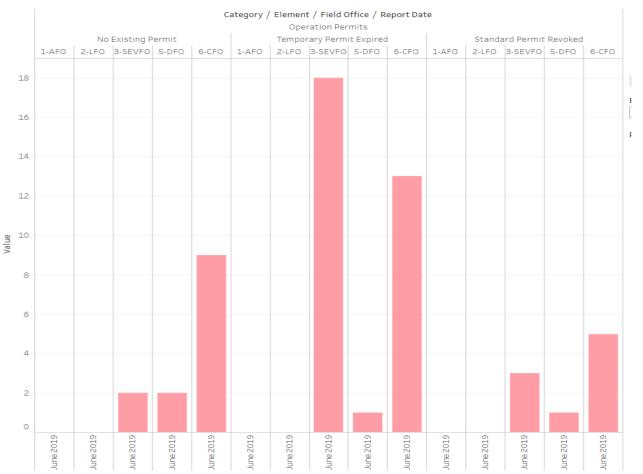




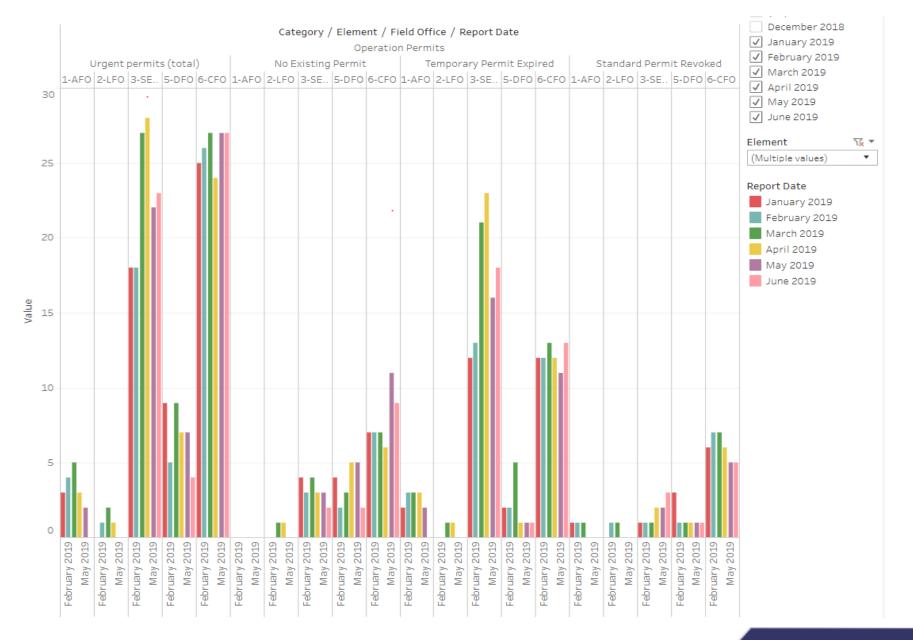
	Abingdon	Culpeper	Danville	Lexington	Southeast	Grand Total
Priority 1		1	1			2
Priority 2-4	4	17	1	1	5	28
Priority 5		10		1	5	16
Priority 6-10	4	15	2	14	12	47
Grand Total	8	43	4	16	22	93



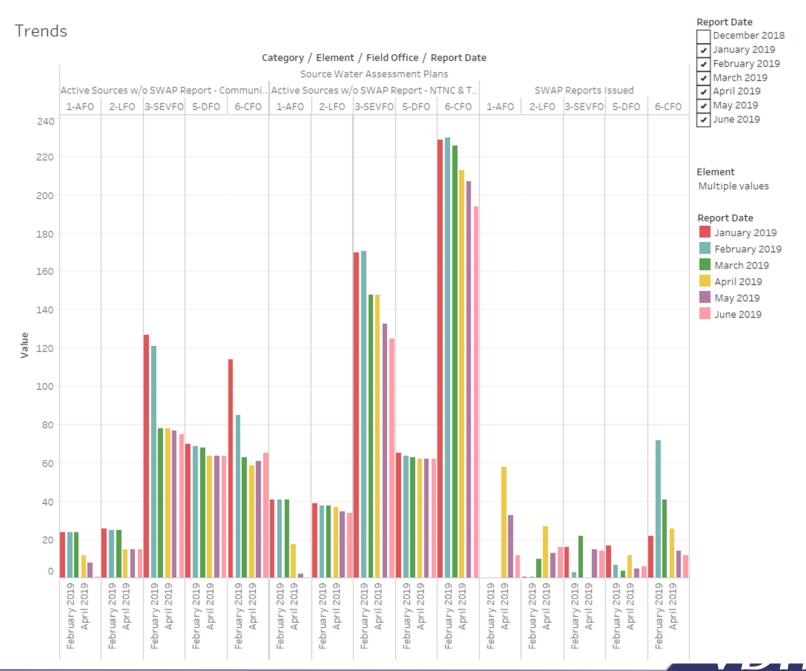
June 2019 Urgent Permits by Cause











IRGINIA EPARTMENT

Questions?

Robert Edelman, PE (804) 864-7490

Robert.Edelman@vdh.Virginia.gov



Data Management Update

Robert D. Edelman, PE
Director, Division of Technical Services
July 31, 2019



Data Management Update

- SDWIS Prime/CMDP
- GEC Software
- Electronic reporting

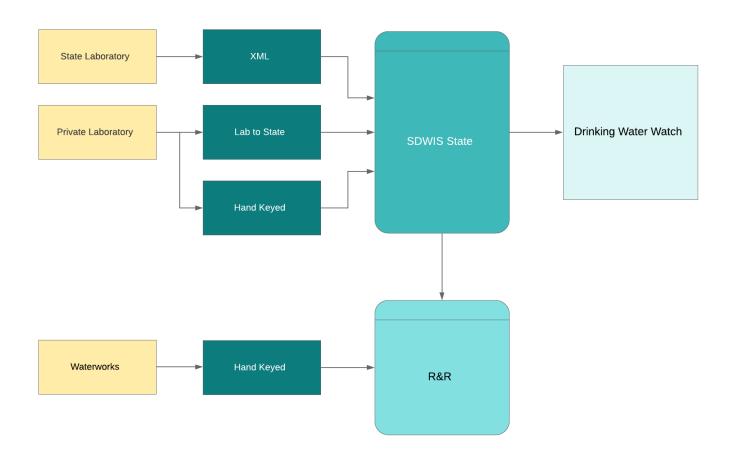


SDWIS Prime

- Currently "under assessment" = on HOLD
- ODW is preparing:
 - Contractors helped create transition plan; beginning the implementation phase
 - Data migration from R&R to SDWIS
 - Upgrading of interfacing applications
- Additional support from external contractors
- Even if Prime never comes, ODW benefits



Current Data Flow



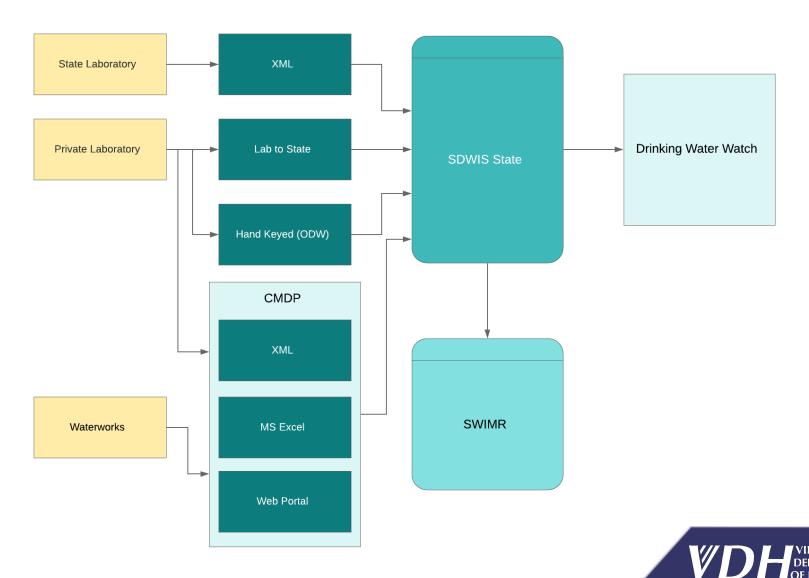


CMDP

- Compliance Monitoring Data Portal -CMDP (Labs)
 - One grant for SDWIS Prime to be used for CMDP support, contractor support
 - Testing with a handful of labs in a test environment by December 2019
 - Largely an educational effort upfront
 - Goal production environment by July 2020



CMDP Addition

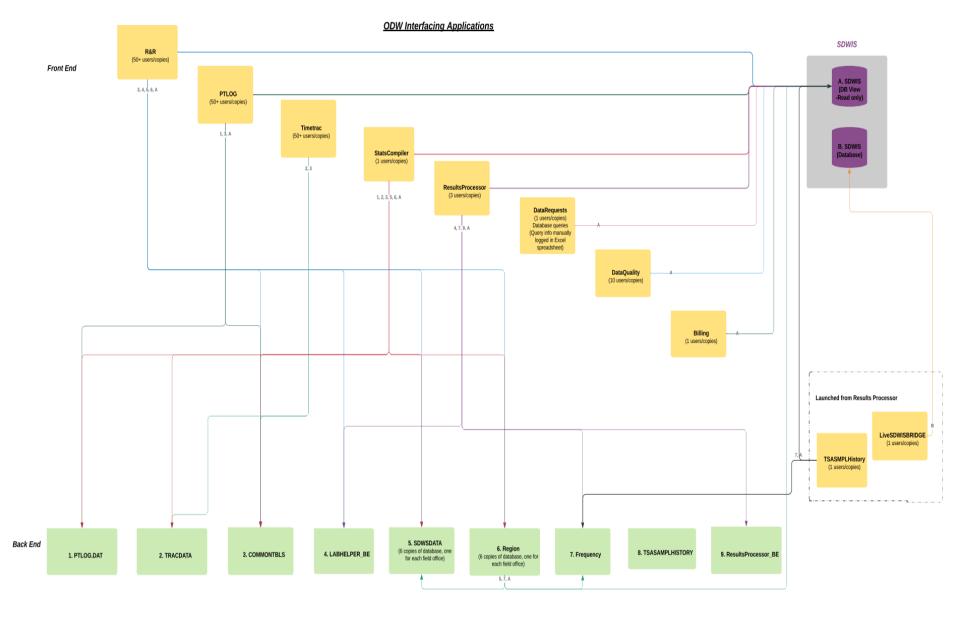


Protecting You and Your Environment

Why GEC Software?

- Only OIM or contractors can program
- MS Access is "not secure"
- OIM requiring Oracle databases
- "from scratch" replacement estimated \$2M-\$4M
- Supporting applications must work with SDWIS/State and SDWIS Prime
- GEC
 - Knows ODW's data (current SDWIS contractor)
 - Software
 - Used by other states good reviews
 - Integrates well with SDWIS (State & Prime)
 - Meets most ODW needs, and can customize







What GEC Software?

- Safe Water Information Management Reporting (SWIMR)
- Safe Water Information Field Tool (SWIFT Surveys)
- Safe Water Engineering Project Tracker (SWEPT)
- Safe Water Consumer Confidence Reports (SWCCR)
- Safe Water Permit Billing Tool (SWPBT)
- Safe Water Lab Views (SWLabs)
- Additional custom database development

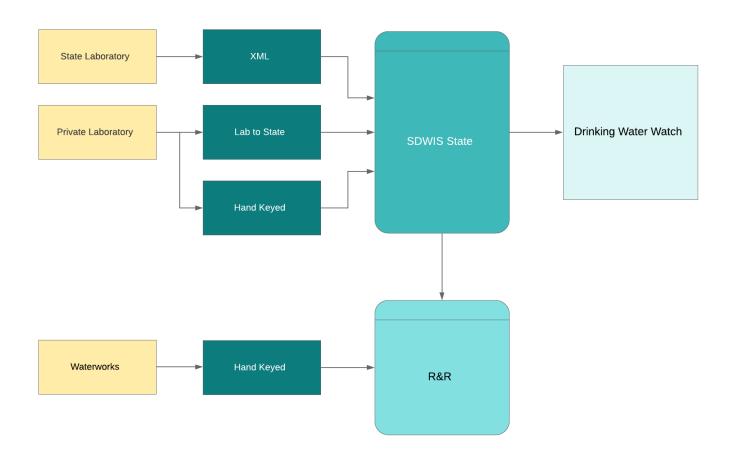


Status

- Received quote from GEC
- Obtaining OIM, VITA, ECOS approval
- Planning
 - Determining req'd steps and sequence
 - Determining customization needs
 - Evaluating current reports and features
 - Considering process improvements
- Procurement/Contracting

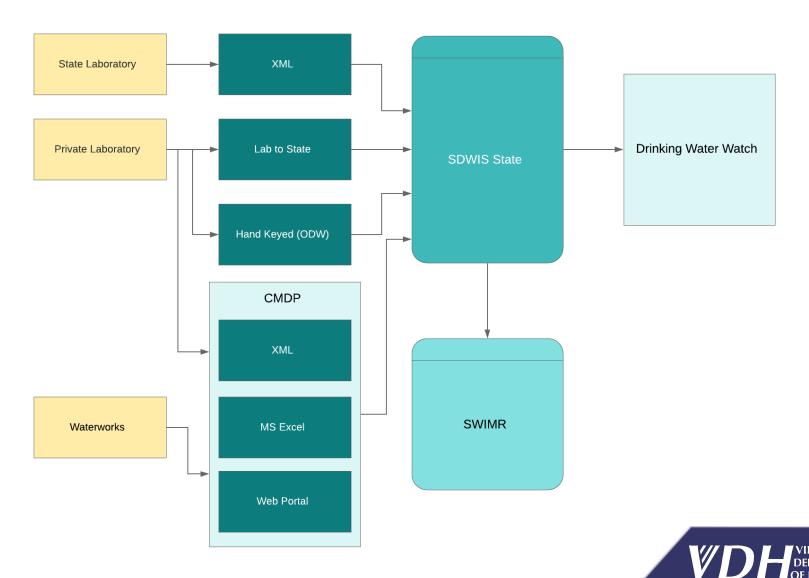


Current Data Flow





CMDP Addition



Protecting You and Your Environment

Electronic Reporting

ODW desires to require electronic reporting of compliance results.

- Significant ODW resources used for keying
- Data Integrity Potential for data errors
- Keying data from a LIMS does not make sense
- Move responsibility to laboratories
- Preparation for SDWIS PRIME
- All compliance samples must be in SDWIS



Data Management Perspective

- CMDP is CROMERR compliant (Cross-Media Electronic Reporting Rule)
- Reduce errors and improve data quality.
- Staff to dedicate time to other water quality matters.
- VDH spam filters block some lab emails from getting through
- Without 100% electronic reporting we get duplication in data, so staff have to spend time going through Reject/Repair.
- Standardize data entries: At the moment, not every field is filled out when staff hand key.



Laboratory Perspective

Extreme care is taken to ensure laboratory results are correct.

Electronic reporting:

- Eliminates data entry errors by ODW
- Data goes from LIMS to CMDP or LTS
- Eliminates paper, scans & faxes to ODW
- Speeds receipt of data
- Lab controls their data



Study: Recent History

- Samples entered into SDWIS between 1/1/18 and 6/30/19
- Classified as either:
 - Bacteriological (TCR)
 - Other (Radionuclides, Chemical, MPN, Lead & Copper, etc.)
- Time to key results:
 - 3 minutes for Bacteriological (TCR) samples
 - 6 minutes for Other

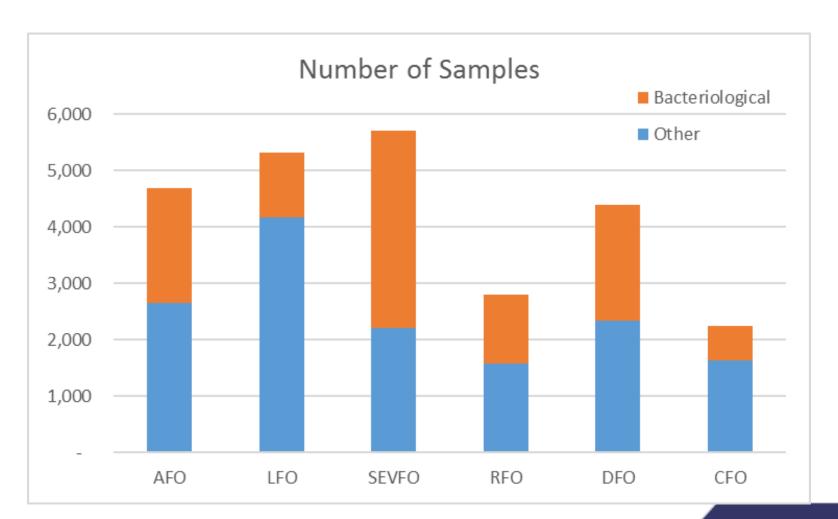


What We Found

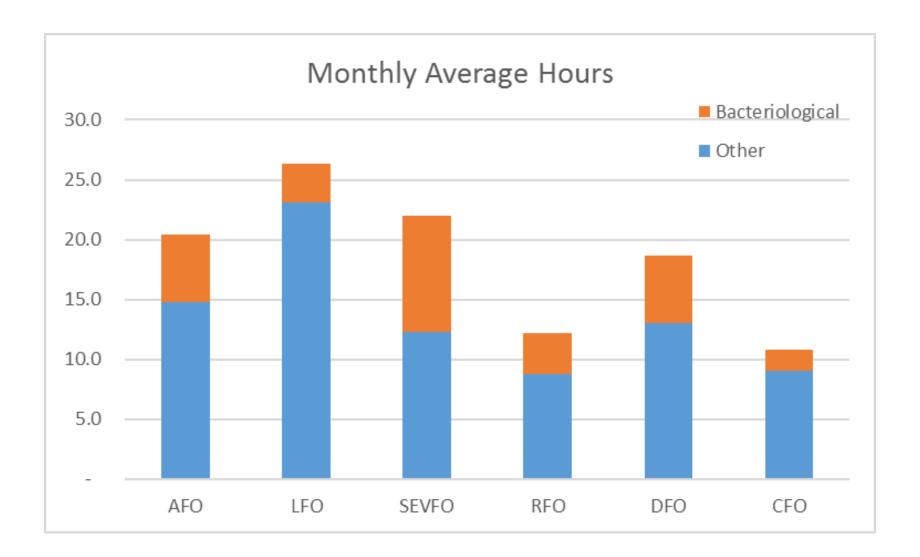
	Other	Bacti	Total	Other	Bacti	Total
	Keyed	Keyed	Keyed	Hours	Hours	Hours
AFO	2,654	2,038	4 602	265	102	367
AFO	2,004	2,030	4,692	200	102	307
LFO	4,162	1,146	5,308	416	57	473
SEVFO	2,204	3,506	5,710	220	175	395
RFO	1,582	1,225	2,807	158	61	219
DFO	2,345	2,041	4,386	234	102	336
CFO	1,631	618	2,249	163	31	194
Grand Total	14,578	10,574	25,152	1,457	529	1,986
IUlai	14,570	10,574	23,132	1,437	329	1,900

Agency Monthly Average = 110 hours/month











What we found

- 60% of keyed samples came from 9 labs
- This is 61% of the keying hours
- The 9 top labs: average of 67 hours/month
- Average of 110 hours per month keying



Nine top labs

- 00015-AQUA-AIR LABORATORY INC.
- 00116-ENVIRONMENTAL ENGINEERING LABORATORY INC.
- 00180-JENNINGS LABORATORIES, INC.
- 00281-REI CONSULTANTS, INC. BEAVER
- 460013-JAMES R. REED & ASSOCIATES
- 460021-AIR, WATER & SOIL LABORATORIES, INC.
- 460025-PACE ANALYTICAL LABORATORIES, INC.
- 460033-E M S, INC.
- 460160-ANALYTICS CORPORATION



Way Forward - Now

- Laboratory Liaison will reach out to the top nine laboratories and encourage electronic reporting.
- Field Office Staff will reach out:
 - Encourage electronic reporting with labs
 - Encourage electronic reporting with waterworks



Way Forward

CMDP

- Test environment target by December 2019
- Production target by July 2020
- Coordinate notification and sunset date with standing up CMDP Production.
- Notify laboratories and waterworks of electronic reporting requirement and sunset date.



Way Forward

12VAC5-590-330. Monitoring, Records, and Reporting. "...Test results shall be recorded, compiled, and reported to the field office in a format approved by the division."

 Letter to State Laboratory stating electronic reporting is required, asking to add this as a requirement for certification.



Questions?



Waterworks Operation Fees

Office of Drinking Water/VDH

July 31, 2019





Purpose of this Presentation

- Describe current authority for the waterworks operation fee.
- Review sources of fees and fee structure.
- Options to increase fee revenue.
- Answer questions, anything else?





Authority (Code of Virginia)

§ 32.1-171.1. Waterworks operation fee required. (1992)

- A. Every owner of a waterworks shall pay a fee to the Department based on the Board's regulations, 12VAC5-600.
- B. The fee may be based upon the number of persons served, the number of connections, or the classification of the waterworks ... may exempt classes and sizes.
- C. The income and principal used only for technical assistance (training for operator certification, engineering evaluation/advice, sample collection, and educational seminars)



Authority (Virginia Administrative Code)

12VAC5-600-50. Community Waterworks (CWW) Operation Fee.

- A fee <u>not to exceed</u> \$160,000 is charged on July 1 each year to each community waterworks.
 - The number of customer accounts multiplied by no more than \$3.00.
 (Currently \$2.95)
 - The number of customer accounts is based on best available data six months prior to the close of business on June 30 each year.

12VAC5-600-60. Nontransient Non-community (NTNC) Waterworks Operation Fee.

* A fee of no more than \$90 per NTNC waterworks is due November 1.

Currently, there is no charge for Transient Non-community (TNC) Systems



Authority (Virginia Administrative Code)

12VAC5-600-20. Purpose of the Regulation.

• "...nor is it the intent that an owner be charged this fee on water transferred to another waterworks."

12VAC5-600-90. Exemptions.

 "Customer accounts through which water is sold or delivered to another waterworks are exempted from the fee calculated in 12VAC5-600-50."



Authority (Virginia Register, amending 12VAC5-600))

Last amended following 2012 GA session:

The State Board of Health is claiming an exemption from the Administrative Process Act in accordance with (i) § 2.2-4006 A 4 a of the Code of Virginia, which excludes regulations that are necessary to conform to changes in Virginia statutory law where no agency discretion is involved.

(Effective November 22, 2012)



Authority (Virginia Administrative Code)

Last amended following 2012 GA session:

Item 298 of Chapter 3 of the 2012 Acts of Assembly, Special Session I, (Budget Bill) reduces the Drinking Water Regulation (50801) line item from \$9,393,590 to \$8,293,590.

To allow the Department of Health to recover the diminished funds, Item 298 B of the act allows for the increase of the Waterworks Technical Assistance Program Fee from the existing \$2.05 per connection to a maximum level of \$3.00 per connection for community waterworks. Calculations by Department of Health staff indicate a fee of \$2.95 per connection for community waterworks is necessary to recover the required funds.



FY19 Sources of Funds for Operations

1. EPA Grants*:

- DWSRF: (10+2%) of the DWSRF Grant \$2.2m
- PWSS: (100%) \$2.0m

2. State Funds:

- \$0.7m for PWSS state match
- \$0.6m General Funds
- 3. Operation Fees from waterworks \$4.7m

Total Revenue for Operations = \$10.2m

*Note: Does not include Cap Dev (15%) or DWSRF Admin (4%)



Sources of Funds for Operations (\$M)

Funding by Source (\$10.2m total)

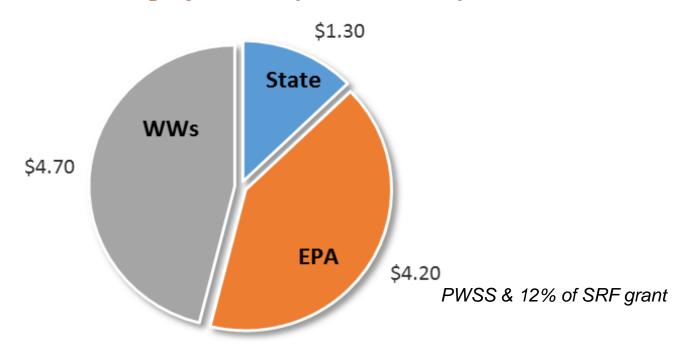
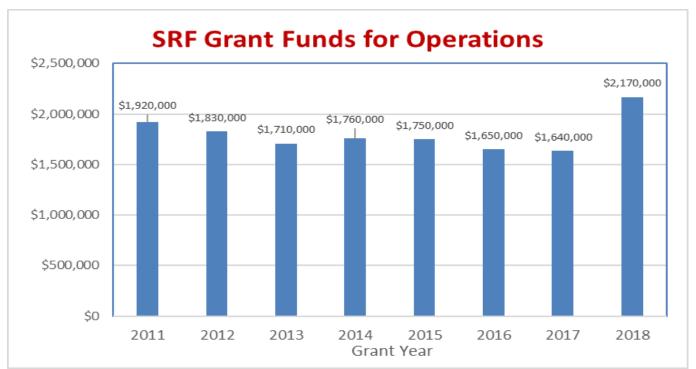


Figure does not include:

- \$2.7m reserved for Cap Dev/direct tech assist only.
- \$0.7m for DWSRF Admin and \$3.62m for DWSRF state match (for construction)
- \$15.9m EPA funds reserved for construction only.

SRF Grant challenges



Challenges related to federal funding:

- ODW does not know the amount of the SRF grant until after we apply.
- Fluctuations! Accurate forecasting is impossible, which can create cash flow issues.
- The grant amount requires a minimum state match.



Current Fee Structure

CWWs: 12 paying the max fee of \$160,000.

1,085 paying less than \$160,000.

NTNCs: 519 paying \$90

TNCs: 1,187 not paying a fee.





WWs by numbers and type

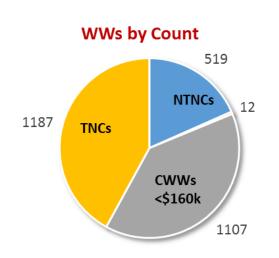
CWWs (12): 12 serving a pop. of 3.2 million

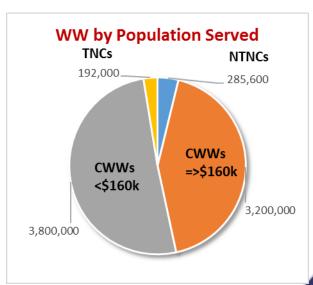
CWWs (not 12): 1,107 serving a pop. of 3.8 million

NTNCs: 519 serving a pop. of 285,600

TNCs: <u>1,187</u> serving a pop. of 192,000

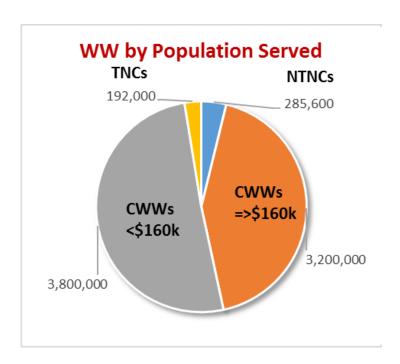
Grand Total: 2,825

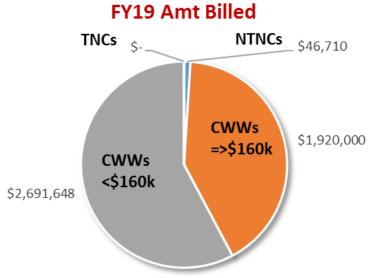




WWs by numbers and type









Options Under Current Authority

1. Increase the \$2.95 fee to:

\$ 3.00	\$ 3.05	\$ 3.10	\$ 3.15	\$ 3.20	\$ 3.25
\$ 45,621	\$ 91,242	\$ 136,863	\$ 182,485	\$ 228,106	\$ 273,727

Limited by the current Operation Fee Regulations to \$3.00 per "customer account"

"Customer account" means (i) a metered or unmetered potable water service connection to the customer that is billed in any way by the waterworks owner or (ii) where any community waterworks sends no billing, the customer accounts shall be defined as equal to the population served divided by four.





Stakeholder Workgroup Options

1. Establish minimum operation fees:

mimimum Fee ->		\$ 90.00	\$ 100.00	\$ 110.00	\$ 120.00
TNCs		\$ 106,830	\$ 118,700	\$ 130,570	\$ 142,440
NTNCs		\$ -	\$ 5,190	\$ 10,380	\$ 15,570
CWWs (less than min. Fee)		\$ 10,610	\$ 13,750	\$ 17,207	\$ 20,952
	Total	\$ 117,440	\$ 137,640	\$ 158,157	\$ 178,962

- 2. Raise the statutory minimum
- 3. Increase the per connection fee
 - Budget change followed by rulemaking process
 - Rulemaking process
- 4. Base the fee on persons served





The Largest CWWs

	Connections	Bill amount	Bill amt @ \$2.95 for ea. connection, no cap	Difference over \$160k
1 Fairfax Water	286,395	\$160,000	\$844,865	\$684,865
2 Virginia Beach	157,281	\$160,000	\$463,979	\$303,979
3 Newport News	128,957	\$160,000	\$380,423	\$220,423
4 Chesterfield County	121,610	\$160,000	\$358,750	\$198,750
5 Henrico County	95,816	\$160,000	\$282,657	\$122,657
6 Prince William County	89,126	\$160,000	\$262,922	\$102,922
7 Loudoun Water	74,367	\$160,000	\$219,383	\$59,383
8 Norfolk	69,308	\$160,000	\$204,459	\$44,459
9 Chesapeake	66,249	\$160,000	\$195,435	\$35,435
10 Western Va. Water Authority	66,194	\$160,000	\$195,272	\$35,272
11 Richmond	62,346	\$160,000	\$183,921	\$23,921
12 Virginia American Water	58,860	\$160,000	\$173,637	\$13,637
13 Arlington County	37,462	\$110,513		
TOTAL	1,313,971	\$2,030,513	\$3,765,702	\$1,845,702



160,000/2.95 = 54,237 connections



The Largest CWWs

	Connections	Bill amount	Bill amt @ \$3.00 for ea. connection, no cap	Difference over \$200k
1 Fairfax Water	286,395	\$200,000	\$859,185	\$659,185
2 Virginia Beach	157,281	\$200,000	\$471,843	\$271,843
3 Newport News	128,957	\$200,000	\$386,871	\$186,871
4 Chesterfield County	121,610	\$200,000	\$364,830	\$164,830
5 Henrico County	95,816	\$200,000	\$287,448	\$87,448
6 Prince William County	89,126	\$200,000	\$267,378	\$67,378
7 Loudoun Water	74,367	\$200,000	\$223,101	\$23,101
8 Norfolk	69,308	\$200,000	\$207,924	\$7,924
9 Chesapeake	66,249	\$198,747		
10 Western Va. Water Authority	66,194	\$198,582		
11 Richmond	62,346	\$187,038		
12 Virginia American Water	58,860	\$176,580		
13 Arlington County	37,462	\$112,386		
TOTAL	1,313,971	\$2,473,333	\$3,068,580	\$1,468,580



\$160,000 cap @ \$2,030,513



Next Step: Stakeholder Workgroup

VDH ODW **WAC Representatives** Large Community Waterworks Mission H2O Medium Community Waterworks **Small Community Waterworks** Wholesale Waterworks NTNC Waterworks

TNC Waterworks



BYLAWS OF

THE WATERWORKS ADVISORY COMMITTEE

ARTICLE I – NAME

This Committee shall be known as the "Waterworks Advisory Committee."

ARTICLE II - PURPOSE

Pursuant to Section 12VAC5-590-40 of the Waterworks Regulations, the State Health Commissioner (Commissioner) establishes the Waterworks Advisory Committee (Advisory Committee). The purpose of the Advisory Committee is to make recommendations to the Commissioner regarding waterworks and water supply policies, procedures, and programs of the Virginia Department of Health Office of Drinking Water.

ARTICLE III - COMMITTEE MEMBERSHIP

The Advisory Committee shall consist of thirteen (13) appointed members and six ex officio members representing the following entities:

- (1) Member of the Virginia Section American Water Works Association
- (1) Member of the Virginia Society of Professional Engineers
- (1) Member of the Virginia Water Well Association, Inc.
- (1) Member of the Consulting Engineers Council
- (1) Water treatment plant operator having a valid license of the highest classification in waterworks issued by the State Board for Waterworks and Wastewater Works Operators [and Onsite Sewage System Professionals]
- (1) Faculty member of a state university or college whose principal field of teaching is Environmental Engineering
- (1) Community waterworks owner
- (1) Nontransient noncommunity (NTNC) representative
- (1) Representative from Virginia Rural Water Association
- (1) Representative from Southeast Rural Community Assistance Project, formally known as "Virginia Water Projects, Inc."
- (1) Representative from the Virginia Municipal League
- (1) Representative from the Virginia Association of Counties
- (1) Citizen representative

Ex officio members shall consist of the Director, Office of Drinking Water, formally known as the "Office of Water Programs", who shall act as chairperson; and the Director, Division of Consolidated Laboratory Services, or a designee. Section 12VAC5-590-40 names the "Director,

Division of Water Supply Engineering" as a third ex officio member. The Virginia Department of Health organizational structure has changed since 12VAC5-590-40 became effective and the Division of Water Supply Engineering is now the Office of Drinking Water.

In order to maintain broad stakeholder representation on the Advisory Committee, the Commissioner may appoint additional ex officio members, including the Director, Virginia Water Environmental Association, or a designee, the Director, Virginia Department of Environmental Quality, or a designee, the Director, Virginia Department of Housing & Community Development, or a designee, and a representative from the State Corporation Commission.

The Advisory Committee may establish one or more subcommittees to assist in performing its tasks.

ARTICLE IV – QUALIFICATION TO SERVE

Membership on the Advisory Committee shall be by appointment by the Commissioner.

ARTICLE V – TERM OF APPOINTMENT

All terms shall be for a period of three years. A member in good standing may, upon recommendation by the designated entity, be re-appointed for an additional term. There is no limit on the number of additional terms. Except when filling vacancies, appointments shall be made in the months of December or January to be effective with the first regular meeting of the new year.

ARTICLE VI - OFFICERS AND DIRECTORS

The Director of the Office of Drinking Water shall act as chairperson for the Advisory Committee. The Advisory Committee shall elect from the appointed members a Vice Chairperson to serve for a term of one year. The Vice Chairperson shall be limited to three successive one-year term limits. The Vice Chairperson shall be elected by a majority vote of at least a quorum of the Advisory Committee members present. A staff member from the Office of Drinking Water who is not a member of the Advisory Committee will serve as Secretary.

The Chairperson shall preside at all meetings except that in his/her absence, the Vice Chairperson shall preside. The Secretary shall be responsible for recording the actions of the Advisory Committee and posting an agenda prior to each meeting. Minutes of the meetings shall be approved by the majority vote of the Advisory Committee at the subsequent meeting. No other officers and directors shall be appointed, except that the Chairperson may from time to time appoint members to head subcommittees.

ARTICLE VII – REMOVAL

Any appointed member of the Advisory Committee may resign, be removed at any time by the Commissioner, or be removed by majority vote of the Committee and the concurrence of the Commissioner. A member may be removed for failure to attend two-thirds (66 percent) of the scheduled meetings during the member's three-year term, actions not consistent with the Public Water Supplies Law, or changes in employment which remove the person from his/her position with the entity he/she was appointed to represent.

ARTICLE VIII - VACANCIES

Any vacancy occurring on the Advisory Committee shall be filled as soon as practical by appointment by the Commissioner. Should a list of candidates for the position be unavailable, the Commissioner may appoint a person to fill the vacancy based on a recommendation by the remaining Advisory Committee members and consistent with Article III of these bylaws. The term of such appointment shall be for three years.

ARTICLE IX - COMPENSATION

Members of the Advisory Committee and any subcommittee members shall serve without compensation. Nothing contained in this section shall be construed to prevent any sponsoring organization from compensating their representative for salary, expenses, or other compensation considered as a condition of their employment.

ARTICLE X – MEETINGS

Regular meetings of the Advisory Committee shall be held quarterly within the Commonwealth at a time and place selected by majority vote of members present. Unless suspended by the Chairperson, the regular meetings will be held on the third Wednesday of February, May, August, and November unless that day is a State or Federal holiday. In such cases, the meeting shall be the next regular workday or a day agreed upon by the majority of the Advisory Committee. If a scheduled meeting is cancelled due to weather or other reasons, the meeting may be rescheduled or combined with the next regularly scheduled meeting. Meetings of the Advisory Committee shall be open to the public; however, those attending that are not members or have not been called by the Committee shall be allowed to speak only at the discretion of the Chairperson.

The rules contained in the current edition of Robert's Rules of Order shall govern the Advisory Committee in all cases to which they are applicable and in which they are not inconsistent with these bylaws and any special rules the Committee may adopt and any laws or regulations applicable to the Committee.

ARTICLE XI – SPECIAL MEETINGS

The Commissioner or the Chairperson may, upon notice to the Committee members, call special meetings of the Advisory Committee. Such notice shall be as far in advance as practical, but not less than three working days. Such meetings may be held at a time and place established by the notice. Special meetings may be by conference call or by other telecommunications means approved by the Committee, subject to the requirements in the Virginia Freedom of Information Act, Code of Virginia §§ 2.2-3700 through 2.2-3714.

ARTICLE XII - ATTENDANCE

The Secretary shall maintain a record of those members in attendance at each meeting of the Advisory Committee. To remain in good standing, a member must attend two-thirds (66 percent) of all meetings conducted during the member's three-year term. On a limited basis, members may send a designee to attend a meeting in his/her place.

ARTICLE XIII - AMENDMENTS

These bylaws may be amended by a two-thirds (2/3) majority vote of the members of the Advisory Committee present at any regular meeting, if such amendment is first read and approved by a two-thirds (2/3) vote of the members present at the prior regular meeting of the Advisory Committee.

ARTICLE XIV – QUORUM

At any meeting of the Advisory Committee, nine members present shall constitute a quorum for the transaction of business. Actions by a quorum shall be deemed to represent the actions of the entire Advisory Committee.

ARTICLE XV – GENERAL TASKS

The Advisory Committee shall be responsible for identifying public policy trends relating to waterworks which are likely to have significant impacts upon state and local efforts to provide a safe and high-quality supply of water that is fairly priced to all persons who live in and visit the Commonwealth and consume water from a waterworks.

The Advisory Committee will review regulatory programs administered by different state and federal agencies that impact the ability of local waterworks to provide a safe, reliable, and high quality supply of drinking water that is fairly priced to its consumers.

The Advisory Committee shall consider, discuss and recommend to the Commissioner any regulatory or statutory changes that may be needed to improve the ability of local waterworks to provide water to all persons who live in and visit the Commonwealth and consume water from a waterworks.

In addition, the Advisory Committee shall prepare a specific work plan with goals and objectives for adoption at the November meeting each year. No later than June 1 of each year, the Committee shall prepare and submit a written report to the Commissioner. The written report shall identify issues and recommend actions for the Commissioner's consideration.

ARTICLE XIV - APPROVAL

	time and approved by the Waterworks Advis		members present at the	e,
	east 2/3 of the member	rs present the Wate	rworks Advisory Com	nmittee on the
day of	. 2019.			