

Attachment 2A
MEETING SUMMARY
MEETING OF
Directors of Utilities Committee
April 2, 2014
Chesapeake

The meeting agenda was amended to allow discussion of items in the order listed below.

1. Summary of the March 5, 2014 Meeting of the Directors of Utilities Committee

The summary of the March 5, 2014 meeting of the Directors of Utilities Committee will be provided for review and approval with the June meeting agenda.

ACTION: No action.

2. Mission H2O Virginia Update

The HRPDC staff briefed the Committee on key points of the wastewater reclamation and reuse white paper prepared by Mission H2O Virginia (see Attachment 2C). The white paper recommends state leadership in developing reuse regulation and funding, as well as a feasibility study to assess the location and development of reuse projects to benefit the Eastern Virginia Groundwater Management Area.

The Committee agreed that state funding is most appropriate for developing reuse projects. The Committee reviewed maps showing groundwater users and HRSD's wastewater treatment facilities to identify potential reuse opportunities; it was noted that projects serving the paper mills appear to present the best opportunities for reuse. The concept would be to target areas with declining ground water levels and industrial ground water users with steady, large demands. Reclaimed water transmission lines to the paper mills could also serve irrigation users and other smaller users that are already located along the pipeline corridor. Reclaimed water transmission lines could also attract new users to locate along the corridor. Committee members shared the following comments:

- Reuse benefits local water quality.
- If used for irrigation instead of groundwater, reuse can reduce aquifer withdrawals during the growing season when municipal demands are also high.
- State investment in developing reuse projects could attract water intensive businesses to the area.
- Despite the quality of reclaimed water, some businesses have concerns that their products or manufacturing processes could be compromised. These businesses may leave the region if reclaimed water is their only supply option.
- It would be helpful to review a detailed proposal for a state-funded reuse feasibility study. Data quality and assumptions applied in the feasibility study

should be carefully managed to ensure thoughtful analysis and useful findings and conclusions.

The Committee agreed that VDH should be asked to speak at the June 4, 2014 Joint meeting with the Health Directors and Emergency Managers on the agency's requirements for reuse systems and aquifer recharge with reclaimed water.

Regarding the DEQ study being done by Virginia Tech, "An Investigation of the Economic Impacts of Coastal Plain Aquifer Depletion and Actions That May Be Needed to Maintain Long-Term Availability and Productivity," the Committee shared the following comments:

- The study needs to address reuse potential.
- The study team needs to understand that DEQ's groundwater permit policy and the emerging aquifer management policy are competing against each other. The permit policy creates an incentive for users to withdraw their entire allocation in order to justify permit renewals.
- The study team should be encouraged to look at the potential for more surface water use. The development of surface water sources and treatment infrastructure should also be funded by the state.

The HRPDC staff briefed the Committee on a draft policy proposal to manage the use of private wells and mitigate impacts to the Eastern Virginia Groundwater Management Area (see Attachment 2C). Maps of groundwater permits within public water service areas show private well allocations totaling approximately 10 million gallons per day within municipal water system service areas. The Committee directed staff to draft a white paper for the policy proposal in consideration of the following comments:

- A permit fee scale based on withdrawals could financial pressure on municipal permit holders.
- Annual reporting of water use to DEQ is desirable.
- Elements from permitting programs in other states should be reviewed and included as appropriate.

ACTION: The Committee's comments on the reuse white paper will be conveyed to Mission H2O Virginia. HRPDC staff will draft a white paper on policy proposals for management of private wells.

3. H2O – Help to Others –Program Planning

The HRPDC staff provided an update on the H2O – Help to Others – Program, including donations received, assistance distributed, and budget items (see Attachment 2D). Staff is completing the administrative requirements for having the program's non-profit status reinstated.

ACTION: No action.

4. Regional Sanitary Sewer System MOA

The Committee discussed the next steps related to the federal Consent Decree (CD) and the state Special Order by Consent (SOC). HRSD briefed the Committee on the key points of the proposed draft modification of the federal CD and the anticipated timeline for amending the CD and the Virginia SOC. Two issues that are being negotiated: the deadline for completion of the Regional Wet Weather Management Plan and the level of service. HRSD anticipates meeting the May 31, 2014 deadline for filing the amended CD with the federal district court. The modification or rescinding of the state SOC needs to be completed by December 31, 2014.

ACTION: No action.

5. Fats, Oils, and Grease

Following up on the March Committee discussion, the HRPDC staff presented a summary of Sanitary Sewer Overflow Reporting System (SSORS) data on Fats, Oils, and Grease (FOG) related wastewater overflows by locality (see Attachment 2E). The data does not illustrate a trend across localities illustrating the impact of FOG ordinances and preventative maintenance activities.

The Committee discussed how the frequency of FOG-related wastewater overflows shown in SSORS data may be influenced by differences in locality reporting conventions, variations in field staff assessments, and cleaning program schedules. HRPDC staff will distribute the analysis worksheets to the Committee.

ACTION: No action.

6. Staff Reports

- **Affordability Analysis:** The HRPDC staff provided an update on efforts to refine the affordability analysis for wastewater utilities. Norfolk public utilities completed their voluntary test run of the analysis worksheets and provided comments and suggestions to HRPDC staff. During the discussion, it was clarified that regional costs should be allocated across localities by the number of residential accounts. Also, economic data for the entire locality should be used in cases where service areas are smaller than the jurisdiction's area.
- **Joint Meeting of the Directors of Utilities Committee, Health Directors, and Emergency Managers:** The Committee agreed to cancel the May 7, 2014 Committee Meeting. Suggestions for agenda topics for the June 5, 2013 joint meeting included the following:
 - VDH presentation on reuse issues;
 - VDH presentation on the current and future beach sampling program.

- Emergency Management presentation on regional programs and the status of sustainment and funding for the Hampton Roads Urban Areas Security Initiative (UASI) Program.

ACTION: No action.

7. **Other Business**

- The APWA Mid-Atlantic Chapter will be having its annual conference in Newport News from May 7 to 9, 2014.

Committee Meeting Sign-In Sheet
 April 2, 2014

Attachment 2B

Locality/Agency	Representative	Representative	Representative	Representative
HRSD	Ted Henifin			
Chesapeake	David Jurgens	Ted Garty		
Franklin				
Gloucester	Martin Schlesinger	Arnie Francis		
Hampton	Tony Reyes	Jason Mitchell		
Isle of Wight				
James City County	Doug Powell			
Newport News	Reed Fowler			
Newport News	Kofi Boateng			
Newport News				
Norfolk	Kristen Lentz			
Poquoson	Ellen Roberts			
Portsmouth				
Smithfield	Bill Hopkins			
Southampton				
Suffolk	Craig Zieseemer			
Surry				
Virginia Beach	Bob Montague			
Virginia Beach				
Williamsburg				
Windsor				
York	Brian Woodward			
HRPDC	Randy Keaton	Julia Hillegass	Katie Cullipher	Rebekah Eastep
HRPDC	Whitney Katchmark	Jennifer Tribo	Tiffany Smith	
New Kent				
DEQ				
EPA				
USGS				
VDH				
VDH				
VDH				
AECOM				
AquaLaw				
Brown & Caldwell				
CH2M-Hill				
Christian Barton				
CNA				
HDR				
Hurt & Proffitt, Inc.				
McGuire Woods				
Rice Associates				
REMSA				
Troutman Sanders				
Virginia Fusion Center				
Virginia WARN				
URS				
Wiley Wilson				
Whitman Requardt				
Private citizens				

Mission H2O: Groundwater Permits

April 2, 2014
Directors of Utilities Committee
Whitney S. Katchmark

Next Step: identify reuse customers

Reuse option was popular with Mission H2O members.

- New Kent County strong advocate – they are getting requests for water but don't have enough to meet all the requests.
 - Long-term solution for groundwater and reducing Chesapeake Bay wastewater loads.
- Propose a map with potential reuse customers.
 - Finalize whitepaper.

Reuse Whitepaper – Major Points

Why State should lead, not wastewater:

Existing treatment works are already permitted to discharge their effluent directly to receiving waters, and water reuse represents additional costs and regulatory hurdles.

The suggestion has been made that HRSD run a reuse pipeline to one or both of the paper mills. What is lacking is a feasibility study to fully address the technical, environmental and financial aspects of the concept. Finally, the project must be viewed as a project “for the aquifer”, not “for the paper mills”.

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Reuse Whitepaper – Major Points

Challenges & Obstacles:

If discharges from HRSD’s treatment plants were used to supplement the public water system demands, the **localities would lose revenue associated with the reduced drinking water sales.**

Regulations allow DEQ to require reuse systems to distribute reuse water under contract with the end user. For a municipal utility, this **allows the cost to be negotiated by the user**, rather than at a rate set by the controlling board.

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Reuse Whitepaper – VDH

The Virginia Health Department requirements impose onerous restrictions on the ability to implement dual water systems in buildings. [elaborate]

Aquifer recharge is currently regulated by the EPA through the Underground Injection Control (UIC) program. Regulations say “**no owner or operator shall construct, operate, maintain, ...or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water**, if the presence of the contaminant may cause a violation of any primary drinking water regulation.

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Reuse: Maps – real opportunity?

Peninsula:

- West Point Mill is more than 35 miles from HRSD’s treatment plants.
- Several golf courses and industrial facilities are located within 10 miles of HRSD’s Williamsburg Treatment Plant.
- Most groundwater permits are located along I-64 which could serve as a reuse corridor.

Southside:

- Less density of groundwater users
- Golf courses in Virginia Beach are relatively spread out.
- Industrial users in Norfolk, Portsmouth and Chesapeake are 5-15 miles from HRSD’s Virginia Initiative Treatment Plant & require water crossings.

Western Tidewater:

- Cluster of large groundwater users around Franklin including the International Paper Mill and Hercules Inc. more than 30 miles from HRSD’s Nansmond Treatment Plant.

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Reuse: Recommendation

Individual utility providers are currently not incentivized to promote regional water reuse. For wastewater providers, reuse represents an additional layer of operation & regulation which is not financially self-sustaining. For water providers, reuse represents a low-cost competitor.

For these reasons, the Commonwealth must take the lead in the reuse regulation and funding arenas to get these programs off the ground.

The initial step that is needed is a feasibility study to assess where and how the reuse projects with the greatest benefit to the Eastern Virginia Groundwater Management Area could be located and developed. The Commonwealth can and should take the lead in this effort.

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**HRPDC proposal to
address private wells**
April 2, 2014
Directors of Utilities Committee
Whitney S. Katchmark

Problem with Status Quo

Legal framework and low costs will likely lead to increased use of groundwater by homeowners & businesses with private wells.

DEQ has determined that existing use is roughly equal to sustainable use. Additional use by private wells will stress the groundwater resources.

No metering or accurate accounting for the number of private wells and the amount of groundwater withdrawn.

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Why groundwater is overused

Virginia's riparian water law grants property owners "reasonable use" of groundwater. "reasonable use" is not defined.

No limit below 300,000 gallons per month. Household typically uses less than 5,000 gallons per month.

Well water is inexpensive compared to public water:

- Installation =
- Operation = \$10/month for water softener salt and electricity
- 5,000 gallons per month from a public system in Hampton Roads = \$17 to \$57/month

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Policy Objectives

Maximize use of surface water instead of groundwater

Promote groundwater conservation

Improve long term planning and management of water supply resources.

Properly finance public water systems and account for the value of water infrastructure locked into fixed costs.

Reserve groundwater for remote locations that would be the most expensive to serve by extending public water systems.

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Policy Proposal

Require permit to operate all wells (potable & irrigation).

Meter all wells and require annual reporting to DEQ.

Charge nominal fee for wells withdrawing less than 10,000 gallons per month. Scale fee up based on withdrawals or auction rights to withdraw.

Fine well owners for not reporting withdrawals.

Strengthen state and local authority to require hook ups to public systems.

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Options for Next Steps

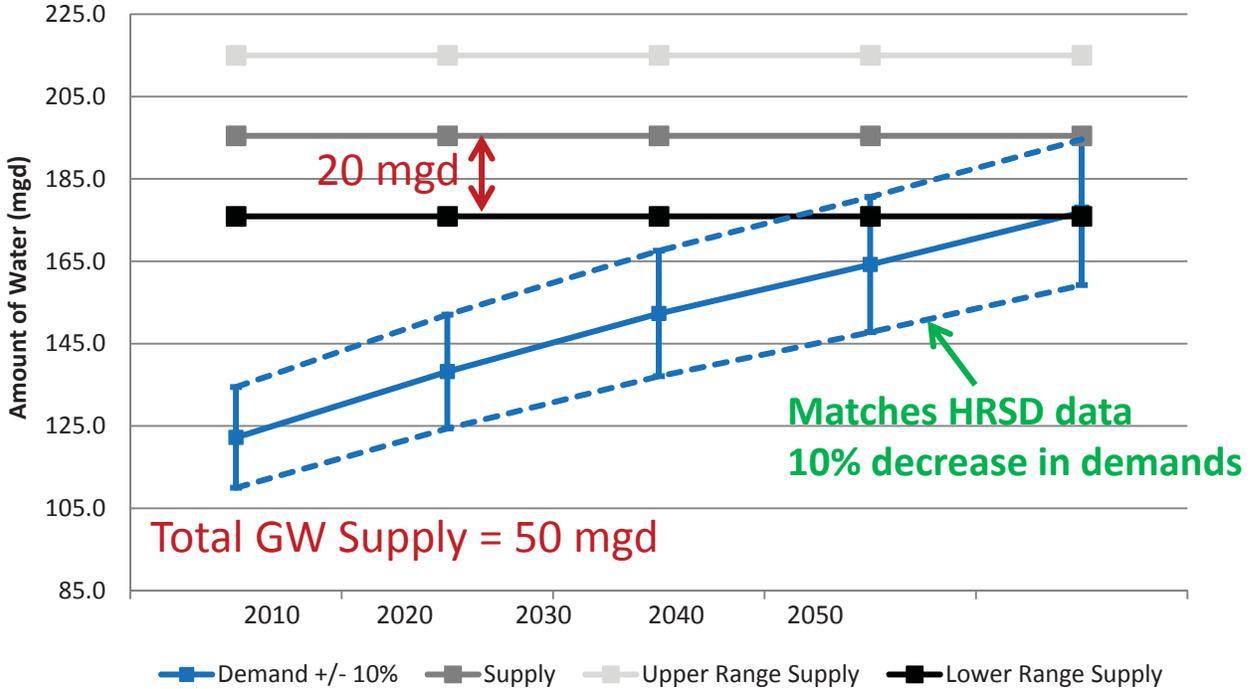
- Write a short paper based on presentation
- Informally share concept and pros/cons with DEQ
- Revise or abandon policy proposal

If opt to write paper, consider:

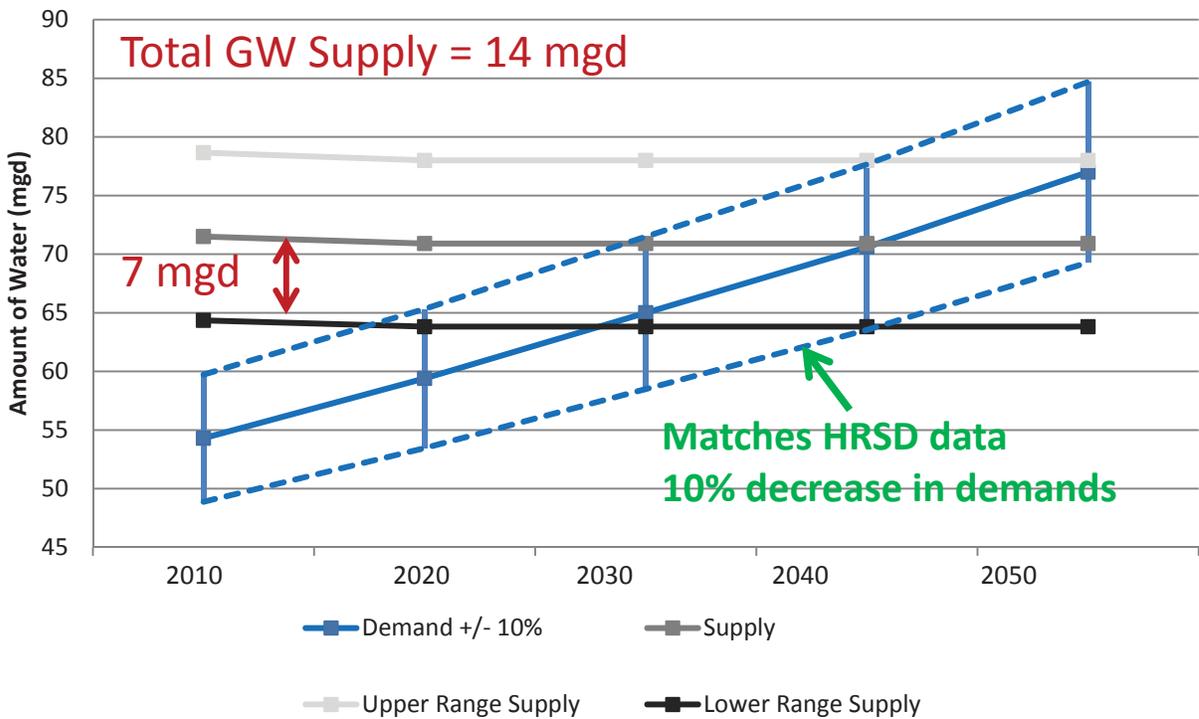
- Send paper to DEQ as policy recommendation
from Directors of Utility Committee
from HRPDC (brief and vote)
- Ask Mission H2O to review & support paper and
share with DEQ.

From Regional Water Supply Plan

Water Supply Compared to Projected Demands for Southside and Western Tidewater Sub-Regions



Water Supply Compared to Projected Demands for the York-James Peninsula



Help 2 Others Program Update

April 2, 2014



Donations

Calendar Year 2012			
	Donations	Amount	Average
Envelopes*	1644	\$55,182.03	\$33.57
Online	4953	\$24,205.12	\$4.89
Total	6597	\$79,387.15	\$12.03

**includes one-time transfer of \$20,000 from envelope fund*

Calendar Year 2013			
	Donations	Amount	Average
Envelopes	1267	\$27,957.84	\$22.07
Online	5663	\$22,040.56	\$3.89
Total	6930	\$49,998.40	\$7.21

Calendar Year 2014			
	Donations	Amount	Average
Envelopes	229	\$4,755.86	\$20.77
Online	1426	\$5,885.05	\$4.13
Total	1655	\$10,640.91	\$6.43

WHEN ONE PERSON
DONATES, ANOTHER
IS HELPED.



HELP TO OTHERS

WHEN ONE PERSON DONATES, ANOTHER IS HELPED.

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Assistance

Calendar Year 2012				Calendar Year 2013			
	Customers	Assistance	Average		Customers	Assistance	Average
Gloucester	9	\$1,840.64	\$204.52	Gloucester	3	\$410.61	\$136.87
Hampton	28	\$3,538.66	\$126.38	Hampton	29	\$6,469.61	\$223.09
Chesapeake	33	\$7,602.54	\$230.38	Chesapeake	36	\$7,850.37	\$218.07
James City	10	\$1,696.53	\$169.65	James City	10	\$2,081.27	\$208.13
Newport News	23	\$4,675.10	\$203.27	Newport News	35	\$7,776.19	\$222.18
Norfolk	51	\$10,148.80	\$199.00	Norfolk	64	\$11,747.11	\$183.55
Portsmouth	3	\$436.92	\$145.64	Portsmouth	4	\$720.36	\$180.09
Suffolk	36	\$4,814.08	\$133.72	Suffolk	30	\$4,855.30	\$161.84
Virginia Beach	131	\$15,907.68	\$121.43	Virginia Beach	96	\$19,362.64	\$201.69
Williamsburg	2	\$167.80	\$83.90	Williamsburg	1	\$140.96	\$140.96
York County	3	\$353.83	\$117.94	York County	1	\$179.05	\$179.05
Southampton County	1	\$250.00	\$250.00	Southampton County	1	\$250.00	\$250.00
Isle of Wight	0	\$0.00	\$0.00	Isle of Wight	12	\$1,773.24	\$147.77
Windsor	0	\$0.00	\$0.00	Windsor	0	\$0.00	\$0.00
Smithfield	0	\$0.00	\$0.00	Smithfield	1	\$250.00	\$250.00
Poquoson	0	\$0.00	\$0.00	Poquoson	0	\$0.00	\$0.00
Total	330	\$51,432.58	\$155.86	Total	323	\$63,866.71	\$197.73

CY14 1st Quarter Totals:

Customers: 67 Assistance: \$13,863.10 Average: \$206.91

Budget

FY14 H2O Promotions and Materials Budget	
	\$ 148,762.00
YTD Expenses	
Envelopes (Printing & Storage)*	\$ 26,527.50
Envelope Freight	\$ 398.00
Website	\$ -
Conference Calling	\$ -
SCC Reporting	\$ 25.00
Advertising	\$ -
Printing	\$ -
Postage	\$ 0.92
Total Expenses	\$ 26,951.42
Projected FY15 Carryover	\$ 121,810.58
Projected FY15 Budget	\$ 141,810.58

*printed 675,000 envelopes

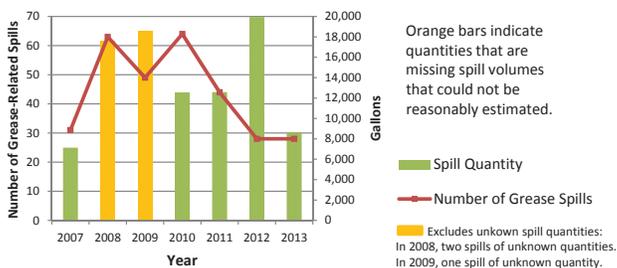


Summary of Reported Grease-Related SSOs

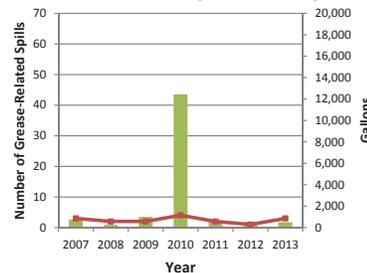
(Data Source: 2007-2013 SSORS reports on record)

- In 2008, SSO spill classification capability was added to SSORS to comply with consent order requirements.
- This analysis summarizes "Maintenance - Grease" SSOs, as well as "Other" and "Unclassified" SSOs that have been determined by HRPDC staff as grease-related through review of event description and comments.
- In the following charts, years with spill events of unknown quantities are noted. (DEQ's convention: if a quantity is truly unknown, and cannot be reasonably estimated, a value of negative one (-1) should be entered for the spill quantity in SSORS. This should only be used in extreme situations where the quantity is truly unknown. DEQ strongly prefers a reasonable guess.)
- Locality statistics shown in this analysis exclude:
 - In Hampton, 1 grease spill where HRSD is listed as the responsible party and 1 grease spill where private entity is listed as responsible party.
 - In Newport News, 1 grease spill where HRSD is listed as the responsible party.

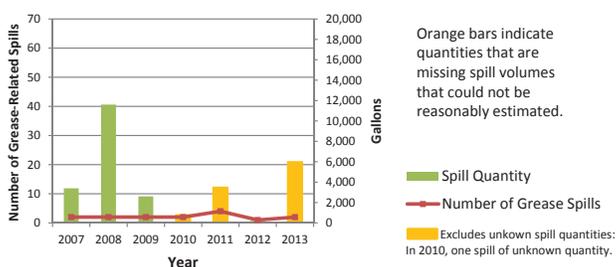
Chesapeake - Grease Spill Summary



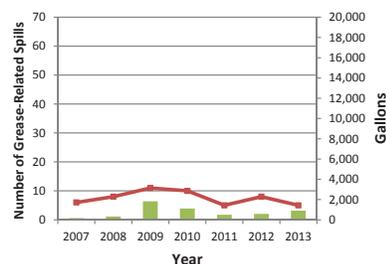
Franklin - Grease Spill Summary



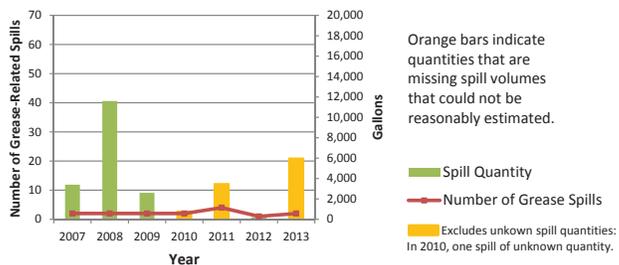
James City - Grease Spill Summary



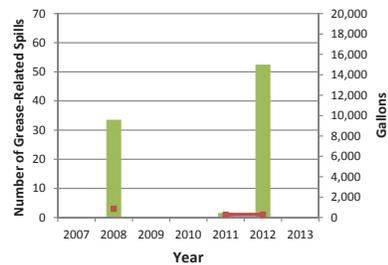
Hampton - Grease Spill Summary



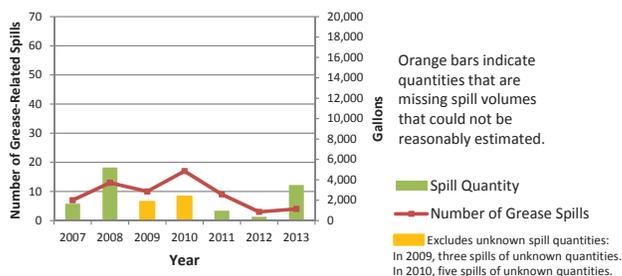
James City - Grease Spill Summary



Newport News - Grease Spill Summary

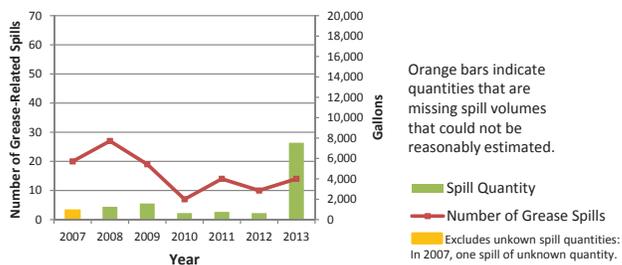


Norfolk - Grease Spill Summary

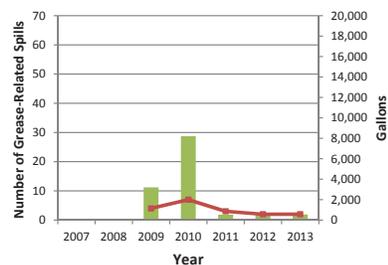


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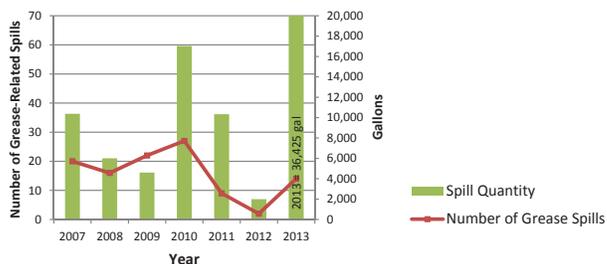
Portsmouth - Grease Spill Summary



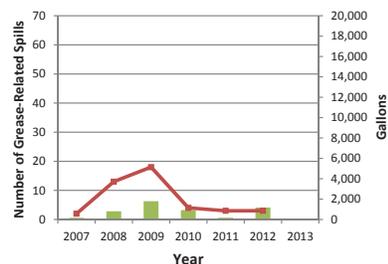
Smithfield - Grease Spill Summary



Suffolk - Grease Spill Summary

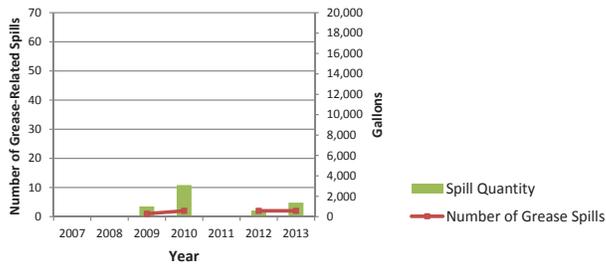


Virginia Beach - Grease Spill Summary

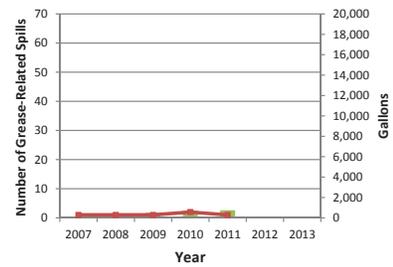


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Williamsburg - Grease Spill Summary



York - Grease Spill Summary



Data not charted:

Locality	Year	Grease Spills	Quantity (gal)
Gloucester	2012	1	1500
Isle of Wight	2010	2	9000
Poquoson	2012-2013	2	1000

Locality	FOG Ordinance Adoption*	Cleaning Program
Chesapeake	Not adopted	Yes
Franklin	2000-2003	
Gloucester	2011	Yes
Hampton	2010	Yes
Isle of Wight	2010	
JCSA	Not adopted	Yes
Newport News	2010	Yes
Norfolk	2012	Yes
Poquoson	Not adopted	
Portsmouth	Not adopted	Yes
Smithfield	2009	
Suffolk	Not adopted	Yes
Virginia Beach	2009	Yes
Williamsburg	Not adopted	
York	2012	

*FOG ordinance status as of 2012 data call.