



A-NPDC

ACCOMACK-NORTHAMPTON PLANNING DISTRICT COMMISSION
P.O. BOX 417 • 23372 FRONT STREET • ACCOMAC, VIRGINIA 23301
(757) 787-2936 • TOLL FREE (866) 787-3001 • FAX: (757) 787-4221
WEBSITE: www.a-npdc.org

Eastern Shore of Virginia Ground Water Committee
September 20, 2022 10:00a.m.
ESVA Chamber of Commerce
19056 Parkway, Melfa VA



The committee's mandate is to "assist local governments and residents of the Eastern Shore in understanding, protecting and managing ground water resources, to maintain a ground water resources protection and management plan, to serve as an educational and informational resource to local governments and residents of the Eastern Shore, and to initiate special studies concerning the protection and management of the Eastern Shore ground water resource.

Virtual Attendance:

For Joining via Computer:

1. Click this link: <https://zoom.us/j/7577872936?pwd=QTNJdmhCc3pWdVNUZ0ZWYnVjdWpWUT09>
2. If prompted, enter the Meeting ID: 757 787 2936
3. If prompted, enter the Passcode: 7577872936

For joining via Phone (calling in):

1. Dial 1-646-558-8656
2. When prompted for meeting code enter 7577872936#
3. When prompted to identify as host or participant, enter #
4. When prompted for password, enter 7577872936#

Translation services available: Call 1-718-838-9317... #6980900. Press 1 for Spanish. Press 2 for Haitian Creole.

Servicios de traducción disponibles: Llame al 1-718-838-9317 ... # 6980900. Presione 1 para español.

Sèvis Tradiksyon Disponib: Rele 1-718-838-9317 ... # 6980900. Peze 2 pou kreyòl ayisyen.



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Meeting Agenda

1. Call to Order
2. Public Participation

3. Minutes of the August 16, 2022 Meeting..... 3
4. August 2022 Financial Status Report..... 7
5. FY 2022 and 2023 Proposed Annual Budgets..... 9
6. September 20, 2022 Staff Report..... 12
7. Historical Salinity (Chloride) Monitoring – Randy McFarland, USGS..... 15
8. Electromagnetic Borehole Logging - Sam Caldwell, USGS..... 16
9. September 20, 2022 Ground Water Consultant Report..... 17
10. September 20, 2022 Committee Attendance Record..... 20

11. Schedule Next Meeting (October 18, 2022 @ 10am; Board Room, Eastern Shore COC)
12. Adjourn



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Minutes of the August 16th, 2022 Meeting

Eastern Shore of Virginia Ground Water Committee

The meeting of the Eastern Shore of Virginia Ground Water Committee was held at 10:00 AM on Tuesday, August 16st, 2022 in the hybrid format – virtually on the Zoom Platform and in person – in the conference room of the Eastern Shore Chamber of Commerce in Melfa, VA.

<u>Members Present</u>	<u>Members Absent</u>	<u>Others Present</u>
Paul Muhly, Chairman	Mike Mason	Kellen Singleton, A-NPDC
John Coker, Vice Chairman	Charles Kolakowski	Britt McMillan, ARCADIS
Grayson Chesser		Bill Leslie, Captains Cove*
Daniel Hershey		John Richardson
Sue Mastyl		Joseph Betit, Earth Systems Management, LLC *
Paul Grossman		Joe Grist, VDEQ*
Roberta Kellam*		
Elaine Meil, Secretary		

**signifies Zoom participant*

1. Call to Order

Chairman Muhly called the meeting to order at 10:05 AM.

2. Public Participation

None.

3. Minutes of June 21st, 2022 Meeting

The draft minutes of the June 21st, 2022 Meeting were presented. It was noted to correct “Bill Meyers” to “Bob Meyers” in the minutes.

Mem. Grossman moved to approve the minutes of the June 21, 2022 Meeting. Seconded by Mem. Coker, the motion carried by unanimous vote.



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4. Financial Report

The FY 2022 Financial Status Report for June 2022 was presented.

Total Bills Payable equaled \$15,407.14; total revenues received equaled \$0.00.

The FY 2022 Financial Status Report for July 2022 was presented.

Total Bills Payable equaled \$0.00; total revenues received equaled \$26,906.75.

Commission approval of the Bills Payable and current Financial Statements was requested.

Mem. Coker moved to approve the financial status report as presented. Seconded by Mem. Hershey, the motion carried.

The Eastern Shore of Virginia Ground Water Committee Proposed FY2023 Annual Budget was presented.

Commission approval of the Proposed FY2023 Annual Budget was requested.

The Commission directed Staff to present the FY22 and the proposed FY23 Annual Budgets at the next Commission meeting.

5. August 16, 2022 Staff Report

Staff updated the Committee on new Environmental Reviews and Permits of the VA Pollutant Discharge Elimination System Program.

Staff informed the Committee on Individual Permit, VA0027537. A Notice Purpose was issued from applicant HRSD, 1434 Air Rail Ave., Va. Beach, VA. 23455 concerning the Nassawadox Riverside Wastewater Treatment Plant, 9507 Hospital Ave., Nassawadox, VA 23413 facility in order to seek public comment on a draft permit that will allow the release of treated municipal wastewater into a water body in Nassawadox, VA. The Public Comment Period is from August 10, 2022 to September 12, 2022

Mem. Coker clarified permit details. Sec. Meil advised that HRSD intends to maintain permit. Mem. Mastyl noted the permit language details permit end by 2026.

GWC Advisor McMillan noted that a fact sheet FOYA request may be helpful to clarify details. Mem. Coker inquired on how long the permit will be in effect and requested staff look onto the issue.



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6. Chesapeake Bay Landscape Professional Certification Program

Staff familiarized the Committee on the Chesapeake Bay Landscape Professional Certification Program. Mem. Coker expounded GWC relevance to BMP practices noting recent Roundup well contamination. Mem. Mastyl explicated noting the GWC's responsibilities to aquifer recharge supply, quality, and retention. Chmn. Muhly inquired on certifying agency. Mem. Mastyl will work with Staff on the subject.

7. 2021 Drinking Water Quality Report: Cape Charles Waterwork

Mem. Mastyl requested clarification on the 2021 Drinking Water Quality Report: Cape Charles Waterwork. GWC Advisor McMillan explained that for the general population, Sodium levels are a "grayscale" and increased sodium levels overtime should be the key concern of the GWC. Current groundwater models predicted a sodium level increase overtime.

Sec. Meil inquired as to whether we were consistent with current models. Mem. Grossman underscored the need to increase Cape Charles water production before Ground Water Model Update. Mem. Kellam inquired as to whether withdrawal impacts surrounding water supply. Mitigation, request is possible for local jurisdiction.

Lead levels were also discussed. GWC Advisor McMillan clarified that lead levels are well below MCL and that any abnormal occurrence would be a pipe issue.

8. Planning Ahead: Increased Growth and Capacity

HRSD Phase 1 to Accomack and Phase 2 to New Church (with a potential New Church extension to Chincoteague) and their impact to development on the Eastern Shore where discussed. It was noted that the population of the Eastern Shore is remaining consistent and aging and HRSD use is unlikely to cap with a 200k population capacity to the system. GWC Advisor McMillan noted that there will be an impact of water not being returned through septic.

9. Statement of Principle: Use and Adoption

Old business was discussed concerning well development by Somerset Drilling for the new Knox Landing Road chicken hatchery and standard practices of the Eastern Shore Groundwater Management Area. It was noted by Staff that the Groundwater Committee's Proposed Statement of Principles was never adopted.

Mem. Grossman made motion to formally adopt the Groundwater Committee's Statement of Principles. with Mem. Coker second. The motion carried.

Staff will post the Groundwater Committee's Statement of Principles to the A-NPDC website at esvaplan.org.

10. Captain's Cove Water Use

Chmn. Muhly updated the Committee on the Captain's Cove Residential Water Supply Report. Staff will reach out to Dixon Tucker, VDH for analysis and proposals.



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11. Ground Water Consultant Report

GWC Advisor McMillan updated the Committee on saltwater intrusion and the USGS EM Logging Program.

Mr. Pope and Staff will reach out to Sam Caldwell, USGS for potential sampling and costs estimates. Mr. Caldwell is willing to speak to the committee at the next scheduled committee meeting.



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MEMORANDUM

TO: Eastern Shore of Virginia Ground Water Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: September 20, 2022

SUBJECT: **August 2022 Financial Expenditure Statement**

The August FY2023 Financial Expenditure Statement is attached

TOTAL BILLS PAYABLE	\$0.00
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Revenues Received:	Accomack County	\$0.00
	Northampton County	\$0.00

TOTAL REVENUES RECIEVED	\$0.00
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Staff requests the Committee review and consider approving the August 2022 Financial Status Reports.

Final Report pending completion of Annual Audit.



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Eastern Shore of Virginia Ground Water Committee

Expenditure Statement

August 31, 2022

	<u>BUDGET</u>	<u>Current Period</u> <u>Activity</u>	<u>Year to Date</u> <u>Activity</u>	<u>Balance</u>
Expenditures				
Ground Water Consultant	\$ 23,500.00	\$ -	\$ 5,250.00	\$ 18,250.00
Ground Water Modeling Run	\$ 12,000.00	\$ -	\$ -	\$ 12,000.00
Member Fees	\$ 5,400.00	\$ -	\$ -	\$ 5,280.00
Ground Water Committee Staff Support	\$ 18,440.00	Waiting for close-out		\$ 20,000.00
Comprehensive Well Testing	\$ 42,766.00	\$ -	\$ -	\$ 44,276.00
USGS Ground Water Model	\$ 14,000.00	\$ -	\$ -	\$ 14,000.00
				\$ -
TOTAL	\$ 114,606.00	\$ -	\$ 5,250.00	\$ 109,356.00

Bills Payable as of August 31, 2022

<u>DUE TO</u>	<u>Date</u>	<u>Description</u>	<u>Amount</u>
Arcadis			\$ -
Total Bills Payable			\$ -



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MEMORANDUM

TO: Eastern Shore of Virginia Ground Water Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: September 20, 2022

SUBJECT: **FY 2022 and FY 2023 Proposed Annual Budget**

The FY2022 and 2023 Proposed Annual Budget is attached.

Staff requests the Committee review and consider approving the FY 2023 Proposed Annual Budget.



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EASTERN SHORE OF VIRGINIA GROUND WATER COMMITTEE

PROPOSED ANNUAL BUDGET

FY 22

Annual

REVENUES:

Budget

Ground Water Consultant Appropriations:

Accomack County	\$ 14,251.00
Northampton County	7,415.00
Subtotal	<u>\$ 21,666.00</u>

Ground Water Modeling Run Appropriations:

Accomack County	\$ 1,500.00
Northampton County	1,500.00
Remaining Balance	9,000.00
Subtotal	<u>\$ 12,000.00</u>

Ground Water Committee Staff Support:

Accomack County	\$ 6,770.00
Northampton County	6,191.00
Subtotal	<u>\$ 12,961.00</u>

USGS Ground Water Model

Accomack County	\$ 7,500.00
Northampton County	7,500.00
Subtotal	<u>\$ 15,000.00</u>

Household Hazardous Waste Collection:

Accomack County	\$ 0.00
Northampton County	0.00
VDH Regional HHW Collection Grant (pending)	0.00
Subtotal	<u>\$ 0.00</u>

Total Revenues	<u><u>\$ 61,627.00</u></u>
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EXPENDITURES:

Ground Water Consultant	\$ 21,000.00
Ground Water Modeling Run	6,000.00
Ground Water Committee Staff Support	15,627.00
USGS Ground Water Model	14,000.00
Household Hazardous Waste Collection	0.00
	<u>0.00</u>

Total Expenditures	<u>\$ 56,627.00</u>
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NET SURPLUS OR (DEFICIT) OF REVENUES LESS EXPENDITURES	<u>\$ 5,000.00</u>
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EASTERN SHORE OF VIRGINIA GROUND WATER COMMITTEE

PROPOSED ANNUAL BUDGET

FY23

Annual

REVENUES:

Budget

Ground Water Consultant Appropriations:

Accomack County	\$14,251.00
Northampton County	<u>7,415.00</u>
Subtotal	\$21,666.00

Ground Water Modeling Run Appropriations:

Accomack County	\$ 1,500.00
Northampton County	1,500.00
Remaining Balance	<u>12,000.00</u>
Subtotal	\$15,000.00

Ground Water Committee Staff Support:

Accomack County	\$10,970.00
Northampton County	<u>7,470.00</u>
Subtotal	\$18,440.00

USGS Ground Water Model

Accomack County	\$ 7,500.00
Northampton County	<u>\$ 7,500.00</u>
Subtotal	\$15,000.00

Comprehensive Well Testing Proggm

Accomack County	\$28,000.00
Northampton County	16,500.00
Subtotal	\$44,500.00

Total Revenues	\$ 114,606.00
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EXPENDITURES:

Ground Water Consultant	\$22,000.00
Ground Water Modeling Run	12,000.00
Ground Water Committee Staff Support	18,440.00
USGS Ground Water Model	14,000.00
Committee Member Fees	5,400.00
Comprehensice Well Testing	<u>42,766.00</u>

Total Expenditures	\$ 114,606.00
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NET SURPLUS OR (DEFICIT) OF REVENUES LESS EXPENDITURES	\$ 0.00
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MEMORANDUM

TO: Eastern Shore of Virginia Ground Water Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: September 20, 2022

SUBJECT: **September 20, 2022 Staff Report**

Environmental Reviews and Permits

VA Pollutant Discharge Elimination System Program –
None.

VA Pollution Abatement Program –
None.

Consent Orders –
None.

Groundwater Withdrawal Permits –
None.

Upcoming Events/Meetings

REGULAR MEETINGS OF STATEWIDE AUTHORITIES, BOARDS, COMMISSIONS, AND COMMITTEES –



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- 9/22/22 Stormwater Construction General Permit (CGP) Reissuance TAC Meeting #1
 - A meeting of the Technical Advisory Committee for the reissuance of the Stormwater Construction General Permit (CGP). The NOIRA for the reissuance of this permit was published in the Virginia Register on 3/28/2022.
 - Meeting Agenda
 - https://townhall.virginia.gov/l/GetFile.cfm?File=meeting\103\36727\Agenda_DEQ_36727_v1.pdf
- 9/26/2022 Technical Advisory Committee Meeting - MS4 VPDES General Permit Regulation (9VAC25-890)
 - A meeting of the technical advisory committee established to assist the Department of Environmental Quality in the reissuance, and amendment, if necessary, of the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems. The notice of intended regulatory action was published in the Virginia Register of Regulations on September 27, 2021.
- 9/23/2022 2023 Virginia Stormwater Handbook Stakeholder Advisory Group (SAG) Mtg #3
 - A meeting of the 2023 Virginia Stormwater Handbook Stakeholder Advisory Group (SAG) to assist with the development of a stormwater handbook.
- 10/6/2022 Mitigation Bank/In Lieu Fee (ILF) Sponsor's Meeting
 - The U.S. Army Corps of Engineers, Norfolk District Regulatory Branch (USACE) and the Virginia Department of Environmental Quality (DEQ) are hosting a Mitigation Bank/In Lieu Fee (ILF) Meeting (Meeting) for Bank/ILF Sponsors and environmental consultants working within the Commonwealth of Virginia. Meeting topics will include a draft Mitigation Monitoring Report template, and any suggestions from meeting attendees on topics for future meetings. If you have any questions or would like to reserve a spot at the table, please contact Sarah Woodford by September 29, 2022.



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Other Items

- Concerns brought forth by Captain's Cove resident William Leslie concerning Aqua Virginia Captain's Cove Public Water System Groundwater Withdrawal Permit Application.

10/15/22 Electronic Message from Bill Leslie, Captain's Cove Resident

I have highlighted items that are very concerning as to what CCG NOTE and Aqua are planning (Please See Supporting Documents and Highlighted Items). It appears that they want to try to rezoning all of sections 12 through 18 as multi-family dwellings and or commercial properties which is totally against our governing documents and would potentially cause Aqua, CCG NOTE and CCGYC to over use our resources. Thank you for your attention to CCGYC.

- **New Member Needed from Northampton -- Staff asks that Northampton nominate or assign a member to fill the vacancy.**



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MEMORANDUM

TO: Eastern Shore of Virginia Ground Water Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Norhampton Planning District Commission

DATE: September 20, 2022

SUBJECT: **Historical Salinity (Chloride) Monitoring**

Randy McFarland (USGS) will present an assessment of historical salinity (chloride) monitoring in Eastern Shore groundwater followed with comments and questions about chloride sampling and monitoring.



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MEMORANDUM

TO: Eastern Shore of Virginia Ground Water Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Norhampton Planning District Commission

DATE: September 20, 2022

SUBJECT: **Electromagnetic Borehole Logging**

Sam Caldwell (USGS) will summarize the results of his work on the use of electromagnetic induction logging to improve understanding of the saltwater transition zone in the Eastern Shore aquifer system followed by Committee comments and questions.



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MEMORANDUM

TO: Eastern Shore of Virginia Ground Water Committee

FROM: Britt McMillan
Principal Hydrogeologist
Arcadis

DATE: September 20, 2022

SUBJECT: **September 20, 2022 Ground Water Consultant Report**

Technical/Regulatory/Educational Items

1. Groundwater Resource Protection and wastewater treatment and disposal to land versus surface water. With the possible expansion of wastewater discharge to surface water, and a possible reduction in land-based wastewater discharges (through septic fields, mass drain fields, and land application) the potential impacts to the groundwater resource on the Shore will be discussed. Two principal concerns that have been expressed are:
 - a. Impacts from reduced groundwater recharge resulting from discharge of the treated wastewater to surface water and
 - b. Increased groundwater use resulting from barriers removed to development

Pros-and cons of land applied wastewater discharge versus surface water discharge related to water balance and water quality specific to the Shore will be discussed.

The capacity for an increase in groundwater use on the Shore will be discussed in the context of:

- 1) Restrictions (and limitations) of the DEQ Groundwater Withdrawal Regulations
- 2) Previous experience in the Eastern Virginia Groundwater Management area
2. Captains Cove Utility System Summary. The Captains Cove Utility System was reviewed earlier in 2022 as part of an overall evaluation of a potential expansion of the utility service area to include an adjacent proposed 24.41 acre mixed use development. Status of the Captains Cove Utility, including past, current, and proposed future use was reviewed. As additional information has become available, the review has been periodically updated. Information recently obtained has been incorporated in the review includes:
 - a. A 2019 Groundwater Withdrawal Application to increase the current permitted withdrawal and modify the source wells.
 - b. Comparison of the 2019 Application to the 2021 DEQ Technical Evaluation of the proposed modifications to the withdrawal permit.
3. **USGS Circular 1486 – Nitrogen in the Chesapeake Bay Watershed – A Century of Change – 1950-2050 (December 2021):**
 - a. Available at: <https://pubs.er.usgs.gov/publication/cir1486>



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- b. A compilation of research presented by various authors providing a comprehensive presentation of the state of the knowledge for nitrogen in the Chesapeake Bay Watershed. Of particular interest for groundwater resources on the Eastern Shore are:
 - i. Chapter 2 – Nitrogen in Streams and Groundwater
 - ii. Chapter 5 – Changes in Hydrology
 - iii. Chapter 6 – Changes in Land Use
 - iv. Chapter 7 – Changes in Agricultural Water Quality Management
 - v. Chapter 9 – Modeling the Effect of Nitrogen Loads from Multiple Changes in the Watershed
- c. A summary presentation will be provided

Other Items:

- i. Additional FY2021 Groundwater Committee activities. Continue update of the Eastern Shore Groundwater Protection Plan.



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MEMORANDUM

TO: Eastern Shore of Virginia Ground Water Committee

FROM: Kellen J. Singleton
Interdisciplinary Planner
Accomack-Northampton Planning District Commission

DATE: September 20, 2022

SUBJECT: **September 20, 2022 Committee Attendance Record**

Committee Attendance Record

The FY2023 Committee Attendance Records are attached.



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EASTERN SHORE OF VIRGINIA GROUND WATER COMMITTEE FY 2023 ATTENDANCE RECORD

Member	Term Exp.	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
ACCOMACK COUNTY													
Paul Muhly	<i>Chair; Next vote: July 2023</i>	*	X										
Dan Hershey	<i>June 2025</i>	*	X										
Grayson Chesser	<i>June 2023</i>	*	X										
Sue Mastyl	<i>April 2025</i>	*	X										
NORTHAMPTON COUNTY													
John Coker	<i>Vice Chair; Next Vote: July 2023</i>	*	X										
Paul Grossman	<i>March 2024</i>	*	X										
Roberta Kellam	<i>March 2024</i>	*	X										
Vacant		*											
NON-VOTING EX-OFFICIO MEMBERS													
Charles Kolakowski	<i>NA</i>	*											
Mike Mason	<i>NA</i>	*											
Elaine Meil	<i>NA</i>	*	X										
-	Not a Member			X		Member Present			()		Alternate Present		
*	No Meeting Held			NA		Not Applicable							

