

Town of Cape Charles Planning Commission

June 30, 2014

MEETING AGENDA

1. Call to Order
 - a. Roll Call
 - b. Establish quorum.
2. Invocation and Pledge of Allegiance
3. Staff Update

Criteria of Public Need

A-NPDC staff provided web links to the Virginia Department of Health's Criteria of Public Need for medical services to Robert Testerman and Chairman McCoy. A copy of the email is attached.

4. Emergency Services

Text Addition

The following language has already been approved in previous Commission edits for Section III-D.5 Public Services and Programs. The factual items have been added.

Hospital and urgent care facilities are provided across the Chesapeake Bay Bridge and Tunnel at a distance of 39 miles. Riverside Shore Memorial Hospital is relocating from Nassawadox to the Onley/Onancock area in Accomack County at a distance of 35 miles. However, medical services are available in Town from Drs. Dallesio and Clarke, and Bayside Medical Center, part of the Eastern Shore Rural Health System, on Business Route 13 near Cheriton, three miles from Town. The Cape Charles Police Department has paramedic training and responds to calls within Town. The Town is committed to expanding health care options, therefore, the Town plans include:

- Continued paramedic training of Cape Charles Police Officers
- Work with Northampton County, and other partners to provide an emergency department significantly closer to the Town
- Pursuit of every opportunity to increase medical and emergency services in the vicinity of the Town

Approval is requested.

5. Parking Reform

Staff has provided language in two sections to be incorporated into the update that addresses Mason and Bay Avenue street improvements.

Text Revision

Add the following language to Section II.8 Transportation

"Other features of the local transportation system may also require improvements. Alley ownership in the Historic District needs to be clarified so that a plan for improvements and maintenance can be created. The availability of public parking during peak usage hours and special events needs to be examined. Mason Avenue and Bay Avenue street improvements should be evaluated and include the addition of bicycle lanes, reverse angle parking and aesthetic improvements to promote safety and increase parking spaces. Improvements to the Town's sidewalks and multi-use paths are also needed to support alternative means of transportation such as walking, biking, and golf cart usage, which are expected to be used more frequently as the population increases."

Text Addition

Add the following section and language to Section III-C Transportation and Utilities where x will become the correct number designation.

"Section III-C.x Street Improvements

The Town has identified Mason Avenue and Bay Avenue for future street improvements. These improvements should be designed to promote safety, increase parking, improve bicycle, pedestrian and disabled person access, and create an attractive and desirable environment for residents and visitors. Identified Mason Avenue street improvements include conversion of parallel parking to reverse angle parking, two bicycle lanes, reduction in lane width to calm traffic, provision of accessible parking and aesthetic improvements that promote pedestrian safety. Bay Avenue is the Town's second priority for street improvements and should be evaluated after a study of the Mason Avenue improvements can be completed."

Approval is requested.

6. Cape Charles Harbor Environs

a. Harbor Access Road & Harbor Master Plan

Address the following language from the February 4, 2014 Planning Commission Minutes. "Subsection needs to be added for the Cape Charles Town Harbor with language regarding harbor dredging and water transportation businesses."

Text Revision

Revise the following to Section III-C - Transportation and Utilities

"Implementation of the Cape Charles Harbor Master Plan continues. Maintenance dredging of the Harbor to 18 feet in depth will commence around January 2015 and is scheduled to be complete by April 2015. ~~New developments around the Harbor have sparked interest in A new, more direct road, from the industrial area near Bayshore Concrete to Old Cape Charles Road~~ Route 184 is planned and construction is scheduled to begin in 2022. ~~This is under consideration by private land owners and has had favorable reviews."~~

Approval is requested.

Text Addition

Add the following language to Section III-B.5.3 - Goal: Facilitate Business Start-Up, Expansions and Relocations

- Capitalize on the existing and planned maritime industry cluster
- Promote the dredging of the Harbor to 35 feet
- Attract new and / or additional major maritime, high technology, hospitality and small conference center business uses to Cape Charles

Approval is requested.

b. Bayshore Concrete Products

Text Revision

Add the following language to Section III.6.3 Future Land Use Recommendations - Long Term or Strategic

“Bayshore Concrete Products is an important economic anchor for both the town and the county. The plant is in the process of expanding and capital improvements of \$4 million are planned. In December 2013, the company successfully applied for the Cape Charles Technology Zone which gives a tax benefit for a maximum of five years. All properties adjacent to the harbor have an alternative future land use of Harbor Mixed Use designation.”

Approval is requested.

c. Mason Avenue Harbor Connection

Text Addition

Add the following language to Section III.2.1.2 Harbor Mixed Use (Harbor)

“The **Cape Charles Harbor Area Conceptual Master Plan and Design Guidelines** serve as an overall guide to the future development and redevelopment of this area. In the future as redevelopment occurs and land uses shift, the Town intends to pursue a connection of Mason Avenue to the Harbor and increase parking in the area.”

Approval is requested.

7. Great Place to Raise a Family

Development of this section is underway and below is a draft text addition. Additional materials are attached for the Commission’s consideration.

Text Addition

Add the following Section III-B.5.7 Goal: Attract Families with Children

“Section III-B.5.7 Goal: Attract Families with Children

The Town offers a very unique and safe environment to raise children. The parent friendly amenities include a coffee house, restaurant options and numerous community organizations where parents can quickly become part of the community. The child friendly amenities include a public beach, leafy quiet streets, a central park, a library, fitness center, a theatre and numerous special events and festivals such as Tall Ships at Cape Charles and the Blessing of the Fleet. There is

also a private academy and the Town is a great place to homeschool. A short trip away over the 17.6 mile long Chesapeake Bay Bridge Tunnel, an amazing engineering feat, are the amenities of the Hampton Roads area. The former High School is in the process of being converted into seventeen apartments with rents in the range of \$600-700 per month. Housing is available in most price ranges.

Strategy

- Pursue the creation of a Chesapeake Bay Bolide Impact Museum in Town.
- Pursue job creation opportunities that use the existing Broadband Network Loop to provide additional year-round jobs.
- Market the Town in national publications to attract technology savvy young families to the Town.
- Market the Town in national homeschool publications to attract families with a strong interest in the education of their children.”

Guidance is requested.

8. Water

Town Water Facilities and water resource research and materials are attached. Staff will present a summary of the Town water facilities. Staff reviewed the Comprehensive Plan and found that it still accurately describes the conditions in Town but does not include a great deal of detail regarding the facilities. Staff requests the Town consider whether they want additional details included in Section II.6 Public Utilities or if the existing language is sufficient. Staff also requests the Commission consider the saltwater intrusion research and determine whether to include some information regarding long range planning of the Town's drinking water resources.

Discussion is requested.

9. Wastewater

Wastewater Facilities details are attached.

- a. Staff recommends the Commission consider Town priorities regarding options to handle wastewater over 300,000 gallons per day and determine if there should be additional language in the comprehensive plan to guide future decision making regarding the proper disposal of wastewater.

Discussion is requested.

- b. Staff recommends the Commission consider the new expansion project proposed and determine if any changes are needed in the comprehensive plan.

Discussion is requested.

10. Town Facilities

Resources and materials are attached.

- a. Staff recommends the Commission consider adding language to the comprehensive plan that provides accessibility for disabled and senior residents.

Discussion is requested.

- b. Staff recommends the Commission consider prioritizing or add language to create a Committee to address and prioritize space needs for the administration of the Town.

Discussion is requested.

11. Port Research

Resources and materials are attached. A short presentation is planned. Several programs will be presented and staff recommends the Commission consider whether to pursue any of the presented programs.

Discussion is requested.

12. Other Matters

13. Public Participation

14. Schedule Next Meeting (July 28, 2014) & Adjournment



Elaine K. N. Meil

Subject: FW: ANPDC/CCPC meeting feedback

From: Elaine K. N. Meil [mailto:emeil@a-npdc.org]
Sent: Wednesday, June 04, 2014 3:29 PM
To: 'Robert Testerman'
Cc: 'Dennis McCoy'
Subject: ANPDC/CCPC meeting feedback

Hello,

The links are below.

Homepage of the VDH program
<http://www.vdh.virginia.gov/OLC/copn/>

Criteria for Determining Public Need (This is the one that addresses the decision criteria.)
<http://www.vdh.state.va.us/OLC/COPN/documents/2010/pdfs/Criteria%20for%20determining%20need.pdf>

Monthly Activities sheet with decisions from 1996 (This is an excel sheet that may prompt a warning for your computer.)
<http://www.vdh.virginia.gov/OLC/COPN/documents/monthlyactivitiesreport/COPNActivityProtected.xls>

Elaine

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Town of Cape Charles Comprehensive Plan Update

Staff Briefing #2

June 30, 2014

Water

Wastewater

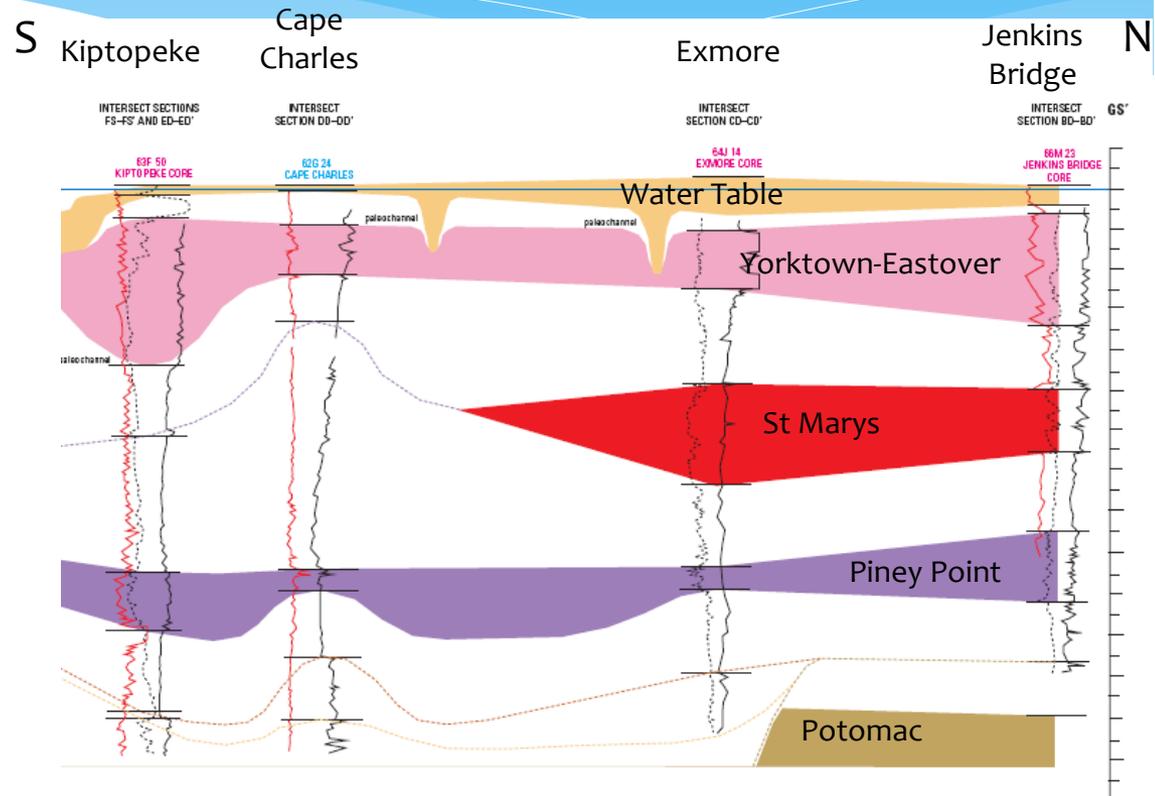
Town Facilities

Port Research

Water

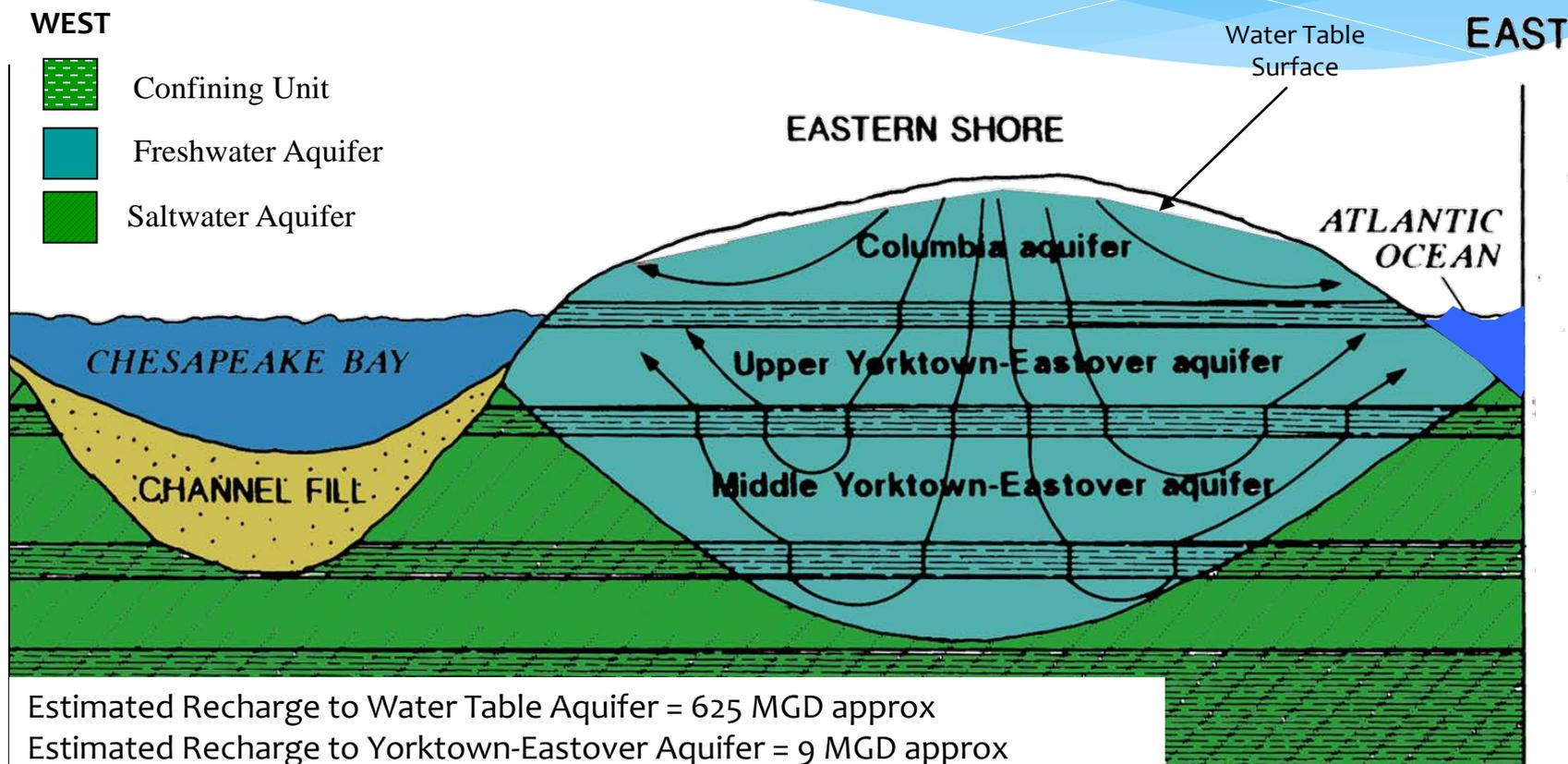
All Groundwater Aquifers on the Eastern Shore

- ❖ The Town of Cape Charles depends on the Yorktown-Eastover Aquifer.
- ❖ Fresh Groundwater is restricted to the Columbia (Water Table) aquifer and significant portions of the Yorktown-Eastover aquifer
- ❖ Brackish groundwater is found in portions of the Yorktown-Eastover, all of the St. Marys Aquifer, Piney Point, and Potomac aquifers. In Cape Charles, these are mostly absent due to the Chesapeake Bay Bolide Impact Crater.



Source: McFarland and Bruce, 2006

Detail of the Sole Source Aquifer



Estimated Recharge to Water Table Aquifer = 625 MGD approx
Estimated Recharge to Yorktown-Eastover Aquifer = 9 MGD approx
(based on USGS Eastern Shore Model)

Water Facilities Background 1

- * The water plant has been refurbished and addressed past issues such as the backwash of the filters and leaks in the distribution system. Since the refurbishment, the users have increased but the groundwater withdrawal rate is flat.
- * Town staff has applied to renew the 10-year DEQ Groundwater Withdrawal Permit at 68 million gallons per year a reduction from 252 million gallons per year. The current use is just under 40 million gallons per year.

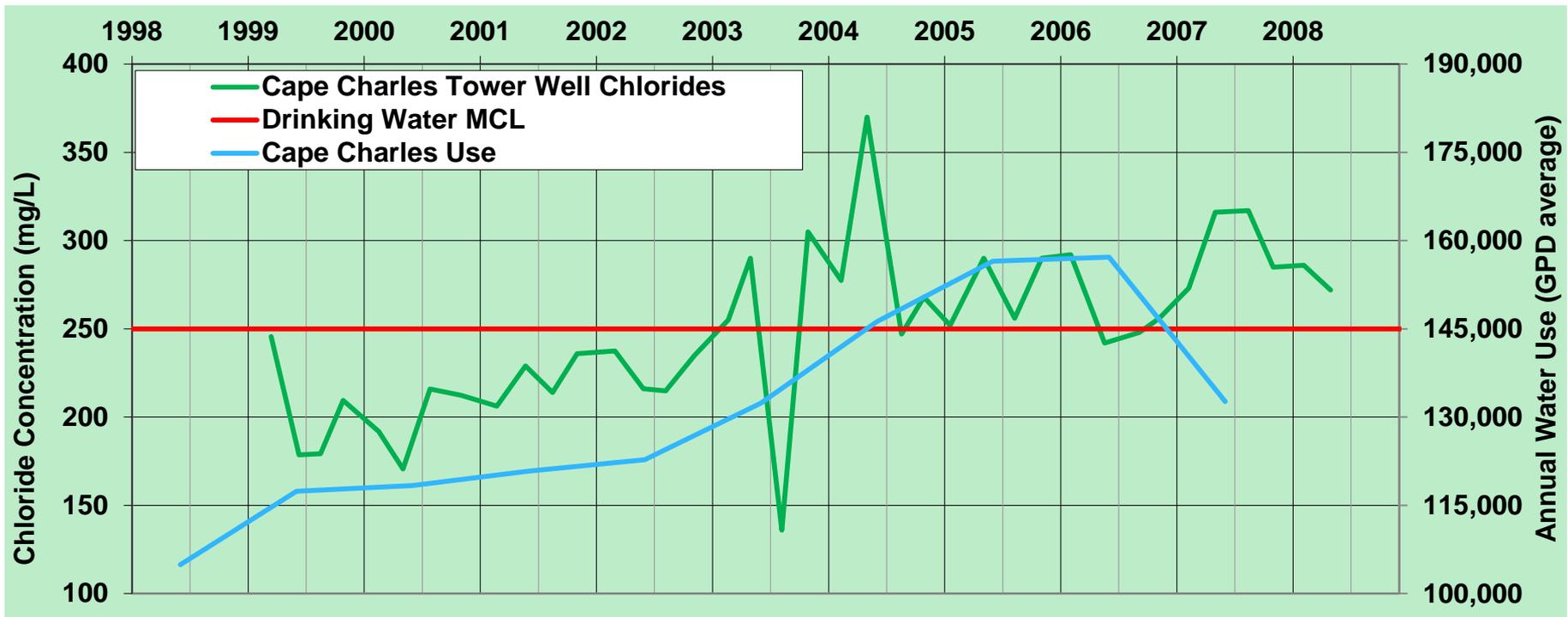
Water Facilities Background II

- * The design capacity of the water plant is 500,000 gallons per day. However, the flow rate of the two wells in use limit the capacity of the plant to approximately 360,000 gallons per day.
- * The Town is currently using two wells:
 - * Tower Well I (1996, 210' Depth), screened across the Upper and Middle Yorktown Aquifers
 - * East Well 3 (2008, 220' Depth), screened across the Upper and Middle Yorktown
- * The Town has completed construction of two new wells on the Town's Keck property (approximately 16 acres). These two wells are screened in the Upper Yorktown aquifer and the pipeline to supply the water plant is in the design stage. The pipeline is expected to be constructed by FY2016.
 - * Keck Well I (2010, 122' Depth), screened in the Upper Yorktown
 - * Keck Well II (2010, 122' Depth), screened in the Upper Yorktown
- * The Town also has a 5th well that is screened in the Lower Yorktown aquifer. It will only be brought online when the monthly withdrawal exceeds 5.8 million gallons. This permit condition may be needed as soon as the summer of 2014.
 - * Tower Well 2 (2006, 300' Depth), screened in the Lower Yorktown.
- * The Town's 6th well has poor water quality and poor volume and there are no plans nor is it's use included in the draft withdrawal permit.
 - * East Well 2 (2006, 225' Depth), screened in the Middle Yorktown.

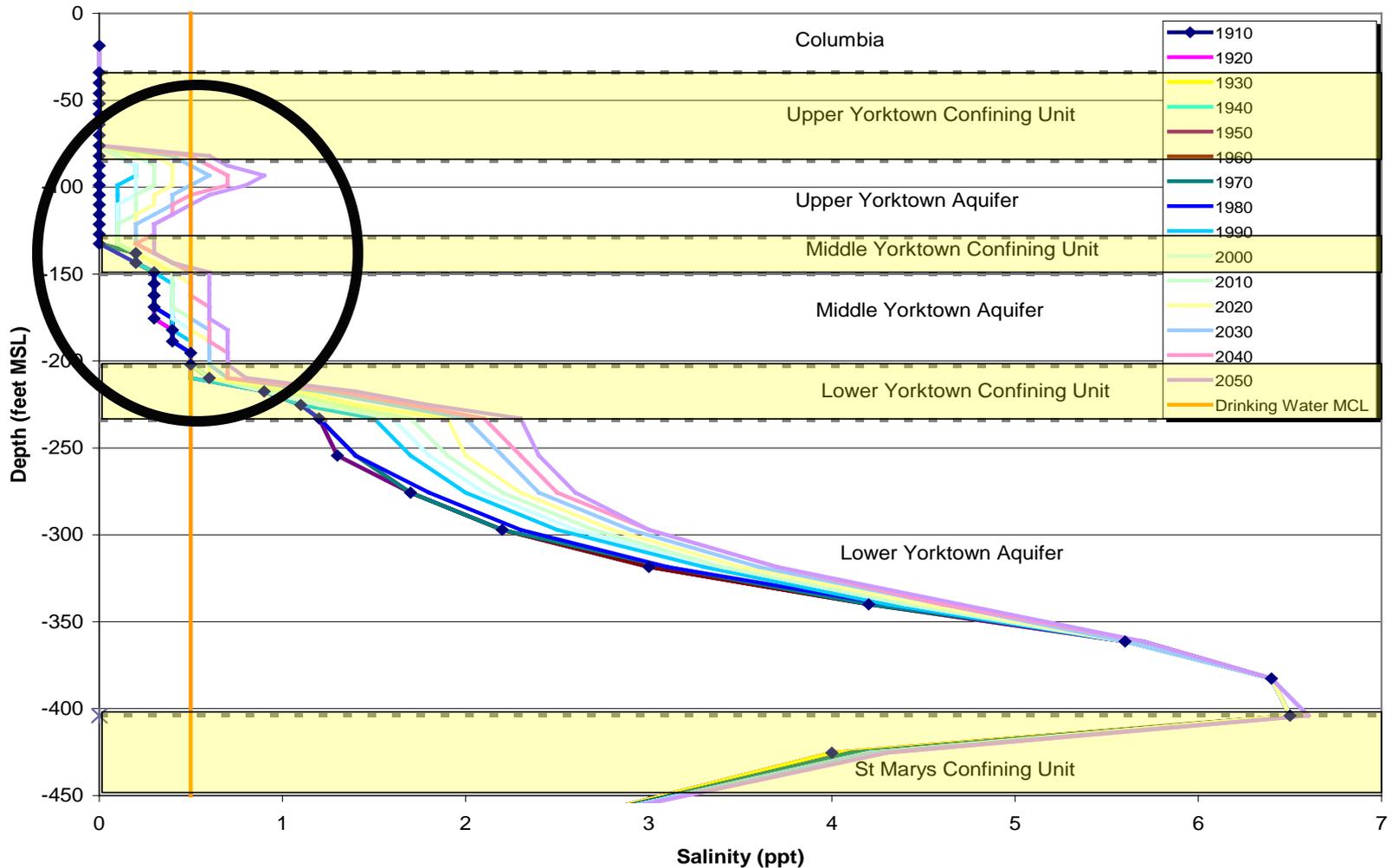
Saltwater Intrusion Long Range Planning

- * Groundwater studies have shown that there is limited groundwater in the Cape Charles vicinity. This is a natural feature of the area.
- * The Eastern Shore of Virginia Ground Water Committee works extensively on groundwater issues and they have funded the USGS to develop a groundwater model. This model is the best source of information regarding changes to groundwater in the Cape Charles area.
- * This model shows that saltwater intrusion can be expected in the Town wells over time.
- * Long term, the Town may need to change water treatment technologies or obtain water from the Eastville area of Northampton County or possibly from the southern tip.

Observed Chloride Increase from Upconing in Tower Well 1 (1996)



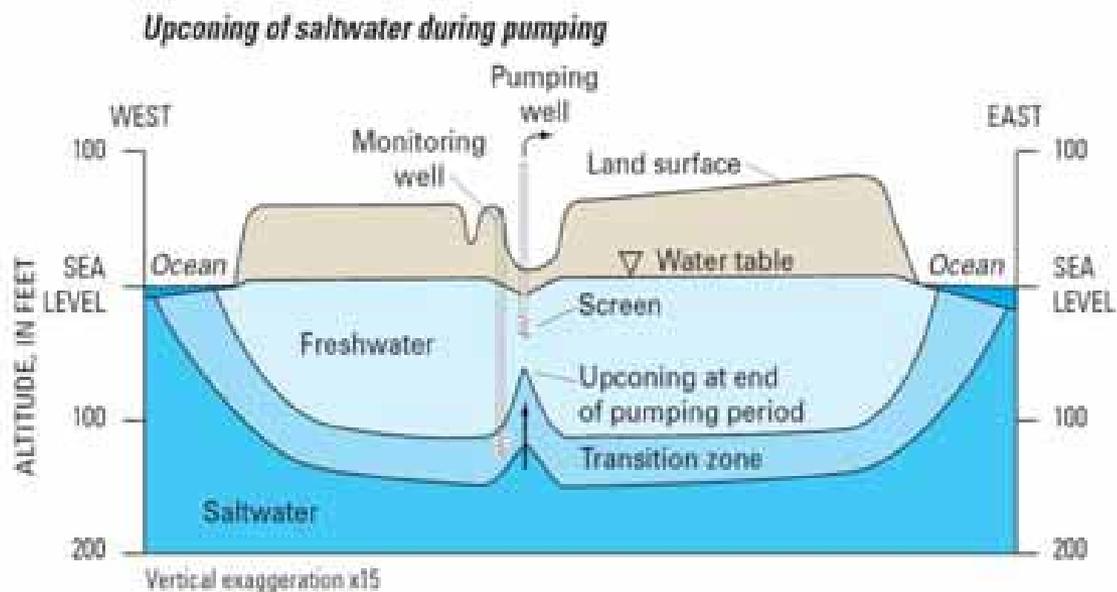
Town of Cape Charles Model Predicted Water Quality



Upconing Description

According to the Groundwater Protection Plan, upconing is the most commonly observed saltwater intrusion on the Eastern Shore. It is the result of groundwater pumping that causes localized upward movement of underlying brackish and salty water to move up.

In Cape Charles, brackish Lower Yorktown-Eastover water moves up into the Middle and Upper Yorktown-Eastover.



Unsustainable 3MGD Withdrawals Effects, Saltwater Intrusion in Yorktown-Eastover



- * The Groundwater Committee ran a hypothetical scenario that showed an unsustainable **3 million gallons per day** groundwater withdrawal in the vicinity of Cape Charles.
- * **DEQ would not issue this permit** but it demonstrates the Town's vulnerability to saltwater intrusion relative to the area.

Summary

- * The Town has limited groundwater resources.
- * The Town water facilities are updated and water use has decreased due to the updates made to the plant.
- * The Town has drilled new wells that will increase the water flow enough to use the full capacity of the water treatment facilities as the Town grows.
- * In the future, saltwater intrusion may necessitate the Town update water treatment technologies or possibly obtain water from a different location.

Wastewater

Wastewater Use

- * Current Wastewater Treatment Plant (WWTP) Capacity is 250,000 gallons per day. The average use is 150,000 gallons per day and the peak use (around July 4th weekend) is 200,000 gallons per day.
- * Due to seasonal units, part time residents and modern residential water conservation measures, the equivalent residential connection (ERC) is under 125 gallons per day. This is much lower than the VDH design standard for full time residential housing. **If the mix of part time and seasonal to full time changes, this ERC will increase.**
- * According to town staff and using an ERC of 125 gallons per day, the Town's full build out will require 750,000 gallons per day. No date on this has been projected.

Existing Wastewater Facilities

- * The Town built the WWTP to be scaled up to 500,000 gallons per day incrementally in two steps, one to 375,000 gallons per day and the other to 500,000 gallons per day. Infrastructure, such as piping and electricity, have been installed for expansion.
- * The DEQ Discharge Permit has concentration limits that allow up to 300,000 gallons per day discharge without changes in technology needed at the WWTP.
- * A pipeline has been installed to the WWTP property line for the purpose of providing treated wastewater to the lake system at the golf course.

Options for the Town to Dispose of Treated Wastewater Above 300,000 Gallons Per Day

- * There are several options the Town will need to consider once treated wastewater approaches the permitted concentration limits (at ~300,000 gallons per day).
 - * Option One – Request Virginia increase the concentration limits on Phosphorus and Nitrogen in the Discharge Permit. The current regulatory environment suggests it may be difficult to increase these limits.
 - * Option Two – Treat wastewater to the higher limits required for a reuse permit and discharge treated wastewater to the lake system for irrigation of the golf course. (While limited, irrigation season corresponds to the Town’s peak wastewater use. A very preliminary estimate is that this system could use 500,000 gallons per day for limited periods of time.)
 - * Option Three – Construct a rapid infiltration basin, mass drainfield or other VDH permitted land based wastewater disposal system.

Proposed Cheriton Crossroads Project

- * The Northampton County Public Service Authority (PSA) has proposed a potential project on U.S. Route 13 that would provide 70 parcels (30 operating businesses) with wastewater treatment.
- * The estimates of wastewater flow of the current businesses located there is 15,000 gallons per day. The majority of the operating businesses are low use having just a bathroom. There are restaurants that have higher use.
- * The Town is negotiating with the PSA on costs. No agreement has been reached yet.
- * The current plan (Section III-E.2) has language that the Town is actively working with other political subdivisions and private partners on regional water and wastewater projects.

Town Facilities

Existing Plans

- * The existing Comprehensive Plan in Section II.7 identifies shortfalls in space for the town offices and library. Other shortfalls identified include a need for a permanent Harbormaster building, harbor improvements (slips, pilings, a new system to block westerly swells) and a Community Center.
- * Pursuit of a new Chesapeake Bay Bolide Impact Museum is being investigated.
- * Others?

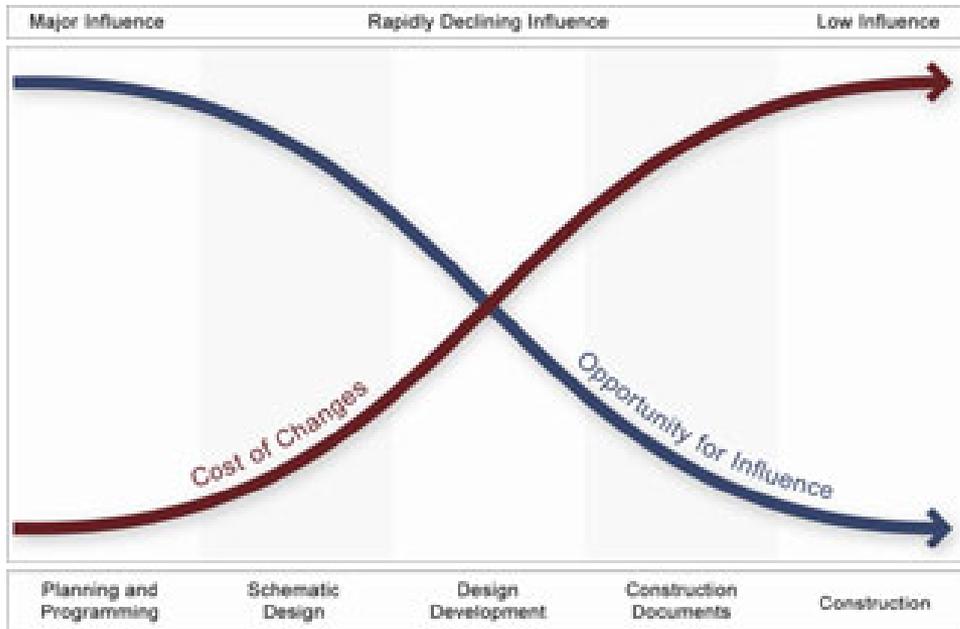
Accessibility of Town Facilities

- * There is a current disconnect between existing plans, existing amenities and existing Town facilities. Access to the town administration is not optimal for disabled and senior residents.
- * The Center for Universal Design at North Carolina State University defines [Universal Design principles](#) to include:
 - * Equitable Use
 - * Flexibility in Use
 - * Simple and Intuitive
 - * Perceptible Information
 - * Tolerance for Error
 - * Low Physical Effort
 - * Size and Space for Approach and Use

©1997 NC State University, The Center for Universal Design

- * **As Town facilities are improved and in agreement with the comprehensive plan goals, staff recommends the Planning Commission consider stronger language in the comprehensive plan calling for accessibility to be a major consideration.**

Resource – National Institute of Building Sciences, Whole Building Design Guide



“The "whole building" design approach is intended "to create a successful high-performance building." To achieve that goal, we must apply the integrated design approach to the project during the planning and programming phases. People involved in the building design should interact closely throughout the design process. The owner, building occupants, and operation and maintenance personnel should be involved to contribute their understanding of how the building and its systems will work for them once they occupy it. The fundamental challenge of "whole building" design is to understand that all building systems are interdependent.” (Source: WBDG Web site, www.wbdg.org/design/index.php).

First Step:

Prioritize or Organize a Master Planning Committee to Prioritize Space Needs



Organizing for the Programming Effort

Design programming should involve the parties that are affected by the design solution.

Prior to the beginning of the process of programming a project, the programmer and the client-owner develop a list of the stakeholders to be involved. One organizational method is to form a Project Programming Committee with representatives from the stakeholder groups.

For example, if the project is to be an office/classroom building for the humanities department at an institution of higher education, the Project Programming Committee could include representatives from the involved academic department(s), faculty, students, and building operations and facility maintenance departments.

Lines of communication must be established to determine how and when meetings will be called, what the agenda will be, how contacts will be made, and how records of the meetings will be kept. The authority of the committee must be made clear. In the example above, the committee's authority will be to make recommendations to the college authorities. Within that framework, the committee must decide how it will make decisions as a committee (by consensus? majority rule? other means?).

Port Research

Short Sea Shipping/Small Cargo Background

- * Coastal trade that does not cross an ocean.
- * Vessels generally are shallow draft (~9' – 18')
- * Generally carry dry and wet bulk materials such as grain, salt, and oil products.

I-95 Corridor Coalition Academy - Freight

“The Academy is open to any public sector staff whose responsibilities may impact goods movements or who may require a better understanding of goods movement to enhance performance of their duties. Past participants have come from various transportation related agencies – including DOTs, MPOs, Ports, Toll and Economic Development – at the Federal, state and local level, from throughout the United States and several Canadian provinces.

The I-95 Corridor Coalition Freight Academy is an immersion program designed to efficiently train public sector agency staff whose planning, operational, and/or management work impact goods movement decisions, investments, and interactions. The Freight Academy program consists of three components: pre-program review and assignment, a one-week immersion program, and a group Capstone project which is continued after the academy to further promote peer exchange. The program complements FHWA's Freight Professional Development Program. A limited number of I-95 Coalition Scholarships are available for I-95 Coalition Members.” (retrieved 6/23/14)

www.freightacademy.org.

Appears to be held every two years and the last academy was April-May 2014.

M-95 Marine Highway Corridor



- * The Town lies in close proximity to the federally designated M-95 Marine Highway Corridor.
- * “The Corridor is home to 15 of the largest 50 marine ports in the United States (as ranked by total throughput). These ports handle approximately 582 million short tons of cargo, or 26 percent of the national total. Much of this freight begins or ends its journey with an I-95 transit. Fortunately, the East Coast also possesses a host of waterways, bays, rivers, and the Atlantic coast itself. The Corridor is also lined with less congested, smaller niche ports that could play a vital part in the developing marine highway service network. While several Marine Highway operations already serve this corridor, there is significant opportunity for expansion to help address growing congestion, reduce greenhouse gas emissions, conserve energy, and lower landside infrastructure maintenance costs.” (Retrieved 6-23-14, www.marad.dot.gov/documents/MHI_Route_Designation_Description_Page.pdf)
- * The Mid-Atlantic Gateway Office (Norfolk, Virginia) is listed for the Town’s area. (757-322-5800). The Marine Highway Open Season “Call for Projects” is open and will be reviewed on a rolling six month basis until June 30, 2016. (www.marad.dot.gov/ships_shipping_landing_page/mhi_home/mhi_home.htm).

U.S. Cargo Preference

- * Identify potential U.S. Flag Carriers partners.
(<http://www.marad.dot.gov/documents/MAR730.US.Flag.Carriers.pdf>)
- * These partners can carry “Government-impelled cargo”
- * What percent of cargo is required to be carried on U.S.-flag vessels?

Military Cargo = 100% (governed by Military Cargo Preference Act of 1904)

Export Import Bank = 100% (governed by Public Resolution 17);

Civilian Agencies Cargo = at least 50% (governed by Cargo Preference Act of 1954)

Agricultural Cargo = at least 50% (governed by the Cargo Preference Act of 1954)

StrongPorts Program

- * The U.S. Department of Transportation, Maritime Administration has the StrongPorts program.
- * In late 2014, a Port Planning and Investment Toolkit is expected to be released.
- * Staff called and requested details. Information provided will be presented at the meeting. A short presentation on the program is also planned.

Chesapeake Bay Cruises

- * Most of the large Cruise Ships have drafts of 25-30'.
- * Town may want to contact and promote the Town as a stop on the various smaller cruise lines that cruise the Chesapeake Bay.
 - * American Cruise Lines
 - * Baltimore/Annapolis based small cruise lines
 - * Norfolk based small cruise lines