TOWN OF CAPE CHARLES
PUBLIC INFORMATION SESSION
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WATER AND WASTEWATER IMPROVEMENTS

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- Future Demand
- Water Capacity
- Wastewater Overflow
- Wastewater Treatment
- Regional System
- Annexation Agreement

Future Demand, Dec. 2007

YEAR	**ERC**	**Peak**	**Average**
2008	1,313	271,000	135,500
2010	1,993	498,250	249,125
2015	3,805	951,250	475,625
2020	4,707	1,176,750	588,375
2026	5,647	1,411,750	705,875

WATER CAPACITY

- Rehabilitated existing plant; 360K gallons per day (GPD) capacity with existing wells.
- Fixed leaks and unmetered use in distribution system.
- New well (EW3) on line to replace deteriorated well.
- Preliminary Engineering Report (PER) to connect two new wells (EW2 & TW2) installed by Bay Creek under review by VDH. Should be on line by next spring.
- Plant capacity will then be maximized at about 500K GPD. Additional capacity will be achieved by expansion on site or by regional facility. More wells will be needed.
- Demand peaked at about 271K GPD Independence Day.

WASTEWATER OVERFLOW

- DEQ order to correct overflow problem at Mason Ave. pump station.
- Main cause is inflow and infiltration of fresh water into the sanitary sewer system.
- Accomplished so far: fixed broken cleanouts, disconnected illegal downspout and sump pumps, commercial grease traps, raised manhole covers and installed nylon inserts.
- Remaining work: repair and upgrade Historic District pump stations, re-route Fig St. pump station force main to WWTP, inspect and rehabilitate lateral connections along Mason Ave.

WASTEWATER TREATMENT

- Completed minor short term improvements to existing plant.
- New plant must be on line by January 2011 to meet new environmental regulations.
- New plant will be 500K GPD, vice 250K GPD for existing plant. Expandable to 1M GPD.
- PER under review by DEQ.
- Stearns & Wheler preparing final design and construction contract bid documentation.

WASTEWATER TREATMENT

- Scope of project – headworks facility for screening and grit removal, flow equalization tanks, biological reactor, membrane filtration, UV disinfection, sludge storage and dewatering, Class A bio-solids composting, process control & laboratory building, provisions for future effluent reuse, extension of influent & effluent lines to new site, decommissioning of existing plant.
- To be located on Parcel 14, east of the tower.
- Start of construction planned for June 2009.

REGIONAL SYSTEM

- Dual track approach to providing future capacity projected to be needed.
- Memorandum of Understanding among Cape Charles, Cheriton and Webster Investors, LLC to evaluate feasibility of a regional system under the Public-Private Education Facilities and Infrastructure Act (PPEA).
- Existing WTP would remain in operation.
- New WWTP and WTP would be built on old Webster site east of Cheriton; railroad ROW would be used for piping.
- Effluent reuse instead of discharge into bay.

REGIONAL SYSTEM

- Same type of WWTP would be built. Planning and engineering to date is applicable.
- Modeling of capital and operational costs done by Webster. Now under review.
- A proposal must be submitted by Webster and evaluated by the public entity under the PPEA.
- A public partnership must be formed by Cape Charles and Cheriton to contract with the private partner and manage the system.
- Memorandum of Agreement has been drafted.

Annexation Agreement

- Town has been in discussions with Bay Creek on financial obligations related to water and wastewater capacity expansion. General methodology developed.
- Bay Creek rejected proposal for a lump sum settlement.
- Town billed Bay Creek approximately $42,000 (34%) of costs incurred to date for WWTP design. Not paid.
- Town will continue to bill as design and engineering of the new WWTP progresses.
- Town will need to consider alternative revenue sources and other actions if payment is not forthcoming.