

Presentation

Capacity Fee Study

Public Utilities
October 8, 2014

Hanover: People, Tradition & Spirit



Overview

- History
- Purpose of capacity fees
- Generally accepted methodologies
- Hanover's methodology
- Review major changes since last study
- Results of the study
- Recommendations



History

- Public Utilities previous capacity fee study was completed in March 2011
 - Between studies the ENR construction cost index is used
- During the FY15 Budget process the Board requested that Public Utilities update the study
- Public Utilities contracted with HDR Engineering
- On July 21, 2014 the Board's Finance Committee was briefed



Purpose of Capacity Fees

- Capacity fees are one-time charges new water and sewer customers pay to recover all or a part of the cost of system capacity constructed for their use
- Capacity fees are not used to fund operations
- Capacity fees are used to fund capital projects that increase the capacity of the system



Generally Accepted Methodologies

- There are three generally accepted methodologies for establishing cost-based capacity fees
 - Buy-In Method
 - Used when there is ample capacity to meet long term needs and new capacity is not required
 - Incremental Cost Method
 - Used when there is limited capacity to meet long term needs and new capacity is required
 - Combined Approach
 - Used when there is capacity available to meet immediate needs but capacity needs to be increased to meet long term needs



Hanover's Methodology

We use the “combined” methodology

- Both water and sewer systems have available capacity but we also plan to construct additional (future) capacity

System Value

- Valuation of existing assets
- Valuation of planned capacity related improvements

Existing and Future ERU's

- Planning horizon 30 years to 2044
- Future demand = existing ERU's grown at 2% rate annually
 - 2014 – 35,700 ERU's
 - 2044 – 64,700 ERU's



Hanover's Methodology

Calculation of cost per ERU

Buy-in component:

- Value of existing assets \div 2044 ERU's

Incremental Cost component:

- Cost of future capacity improvements \div Additional ERU's added or **ERU's served by improvement**, whichever is larger

Debt Service Credit

- Credit for debt service anticipated to be collected through user fees

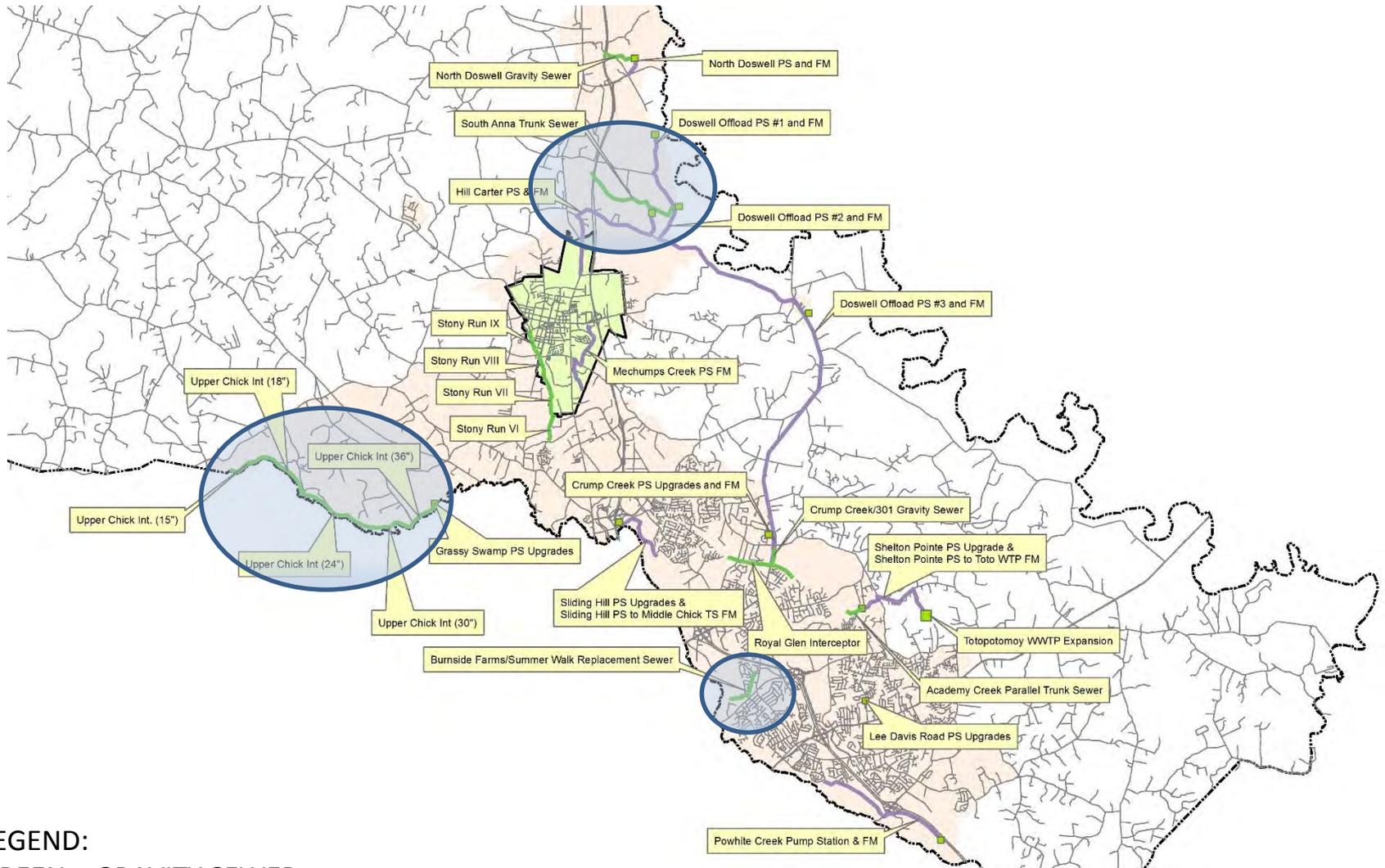


Major Changes

- Average Daily Use
 - Water 271 GPD/ERU to 187 GPD/ERU
 - Sewer 271 GPD/ERU to 234 GPD/ERU
- Updated growth projections
- Updated existing asset valuation
- Updated cost estimates
- **Modified the incremental cost methodology**
- Updated planned projects based on the current Comprehensive Plan and input from Economic Development



Future Wastewater Projects



LEGEND:

GREEN – GRAVITY SEWER

PURPLE – FORCE MAIN



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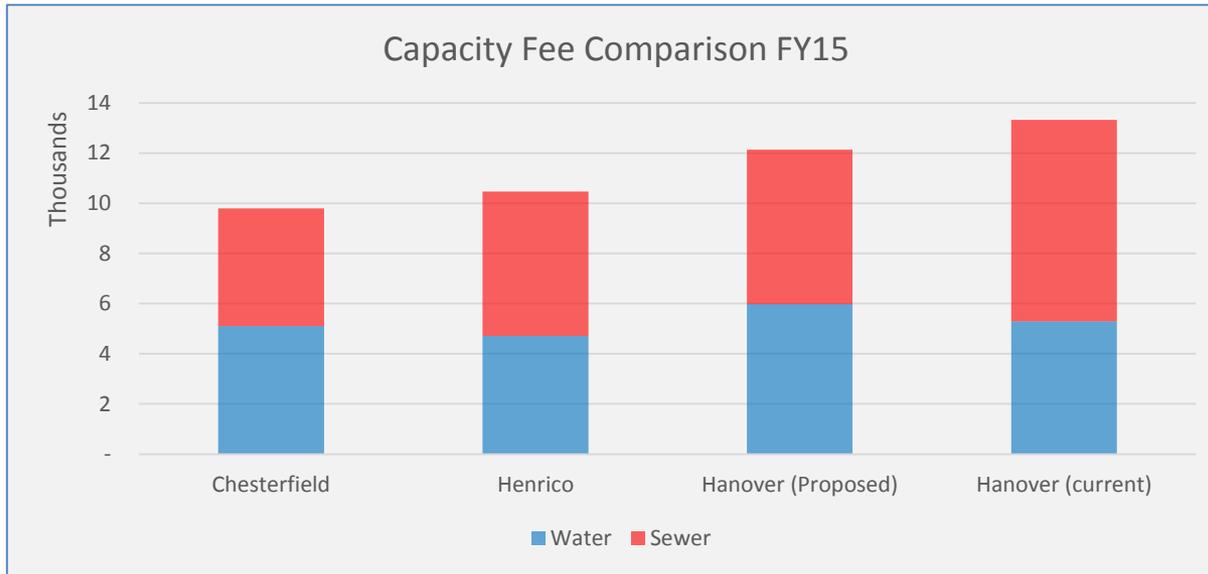
Results Of The Study

	Modified Incremental Cost	Traditional Incremental Cost	Current Capacity Fees
Water	\$5,982	\$7,947	\$5,290
Sewer	<u>\$6,149</u>	<u>\$6,168</u>	<u>\$8,034</u>
Combined	\$12,131	\$14,115	\$13,324



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Recommendation



Capacity Fees FY15			
	Water	Sewer	Total
Chesterfield	\$ 5,100	\$ 4,700	\$ 9,800
Henrico	\$ 4,710	\$ 5,755	\$ 10,465
Hanover (proposed)	\$ 5,982	\$ 6,150	\$ 12,131
Hanover (current)	\$ 5,290	\$ 8,034	\$ 13,324



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Recommendation

Combined Capacity Fees By Meter Size

Meter Size	Multiplier	Hanover Current	Hanover Proposed	Henrico	Chesterfield
5/8"	1	\$ 13,324	\$ 12,131	\$10,465	\$9,800
1"	2.5	\$ 33,309	\$ 30,327	\$39,280	\$24,500
1 1/2"	5	\$ 66,618	\$ 60,655	\$78,500	\$49,000
2"	8	\$ 106,588	\$ 97,047	\$155,520	\$78,400
3"	16	\$ 213,177	\$ 194,096	\$312,225	\$156,800



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Recommendation

- Authorize the advertisement of a Public Hearing for November 12, 2014 on Ordinance 14-08 amending Sections 20 and 23 of the Hanover County Code to revise the County's water and sewer capacity fees

