

Attachment C
Information Pertaining to Inquiries Regarding Orange
County Providing Water Service to Wedgefield

(This information was compiled by Orange County staff)

Additional Engineering Information Regarding TTHMs

1. How are TTHM's formed in a water system?

The source of most drinking water in Central Florida, the Floridan Aquifer, contains very low levels of naturally occurring organic material. When this source water is disinfected using chlorine, TTHM's are formed as a byproduct.

2. What factors affect the levels of TTHM's in water?

Three factors affect the level of TTHMs that are formed in treated water: 1) the level of organic materials in the water, 2) the amount of chlorine required for disinfection and to maintain regulatory required levels of chlorine in the distribution pipes, and 3) the amount of time that water stays in the pipes after it is treated (water age).

3. What methods do utilities typically use to reduce the levels of TTHM in water?

Many methods are available to reduce the levels of TTHMs in the water. Each method focuses on reducing one of the three factors discussed above. At the water treatment plant, utilities use a variety of treatment technologies to reduce organic materials (i.e. filtration systems, membrane systems, MIEEX). Utilities may also elect to reduce chlorine demand by changing where and how chlorine is injected or selecting alternative disinfection methods such as ozone or chloramines. Finally, utilities use operational techniques such as increased flushing of water mains to reduce the water age.

4. How far is the County centralized water system from Wedgefield?

The County's closest water mains are approximately 6 miles from Wedgefield and the County's regional water supply facility is a total of 18 miles from Wedgefield.

5. Is it feasible for the County to serve Wedgefield from its existing central water system?

Connecting Wedgefield to the County's existing central water system is not advisable due to the distance resulting in the high water age at the time the water would reach Wedgefield. These conditions create a high potential for additional TTHM formation.

Cost and Financial Considerations for Acquiring Pluris Wedgefield

1. How much did Pluris pay to acquire the Wedgefield water system and how much additional capital have they invested since acquiring the Pluris water system?

In 2009, Pluris acquired the Wedgefield utility for \$7.3 million from Wedgefield Utilities, Inc. The water system value was estimated at over \$4.5 million and the wastewater system value was estimated at over \$2.5 million. The total net utility plant value noted in the December 31, 2015 Annual Report to the Public Service Commission was over \$9.4 million.

2. How much money is required for someone to purchase the Wedgefield water system from Pluris?

The cost for acquiring a private utility is similar to any transaction where the cost of the purchase is subject to negotiations and settling upon an agreeable purchase price. While it is difficult to determine at this time, it is estimated that the purchase price for Pluris Wedgefield could range from \$9 to \$16 million for both the water and wastewater systems. This range represents a preliminary estimate that is not based upon the detailed on-site inspection, engineering review, financial analysis, and negotiations associated with an acquisition of this nature.

3. Other than the purchase cost, what other capital costs might be associated with acquiring the Wedgefield water system from Pluris?

Post-purchase costs include any improvements to existing infrastructure as required to meet the needs/priorities of the new owners. These costs vary widely from site to site and depend upon the system condition at the time of acquisition. However, it is not unusual to spend 20 to 30% beyond acquisition costs for various system improvements.

Issues Related to Providing County Water Service to Wedgefield

1. What is the County's water and wastewater utility retrofit policy?

The County water, wastewater, and reclaimed water utility operates as an enterprise fund. As an enterprise fund, all revenue required to operate the utility comes from water rates, fees, and charges. No funding is provided by tax dollars. As a result, the County's retrofit policy requires that new customers bear the costs of connecting to existing central utilities. This policy ensures equity with existing customers who have paid both capital charges and contributed infrastructure to the County's piping network as part of the development process.

Prior to any acquisition, the County's policy is to poll the affected residents through a ballot process stating the assets to be purchased or constructed, the benefits to the residents, and the associated costs. If at least 67% of the residents respond positively, the project would move forward after approval by the BCC.

Per the retrofit policy, the acquisition costs would be paid by the customers in Wedgefield, and could be financed over a typical period of 10 years.

2. Can Orange County provide water service to Wedgefield from its existing central system?

In addition to the acquisition price and post-acquisition capital improvements of the existing Wedgefield system, connecting to the County's system would require extension of utility lines (water, sewer, reclaimed water), construction of a master wastewater pump station, and payment of the County's capital charges. The additional cost of these items is estimated to be approximately \$20 million.

In addition to this extra expense, connecting Wedgefield to the County's existing central water system is not advisable due to the distance resulting in the high water age at the time the water would reach Wedgefield. These conditions create a high potential for additional TTHM formation.

If the County were to acquire the Wedgefield system, the County would anticipate operating the existing Wedgefield water and wastewater treatment plants. However, operation of these remote plants would not deliver the economies of scale created by the County's larger centralized systems. The increased operation and maintenance cost associated with these operations would need to be recovered via a special rate district applied to Wedgefield. The County is not able to estimate the rate at this time.

3. Why is this different than Hillsborough County's acquisition of Pluris utilities in that area?

The Pluris systems acquired by Hillsborough County were located in reasonably close proximity to centralized utility infrastructure. The reasonable potential to connect to the centralized infrastructure allowed Hillsborough to take advantage of the economies of scale associated with operating a larger utility.

4. What would the role of the Wedgefield Home Owners Association (HOA) be in requesting Orange County to acquire Pluris?

The Wedgefield HOA serves as a logical representative of the community affected by this decision. If the community desires to further pursue this option, the Wedgefield HOA should make a formal request of the County.

5. Who will pay the cost of Wedgefield getting water service from the County?

Per the retrofit policy, the acquisition costs would be paid by the customers in Wedgefield. The acquisition and post-acquisition costs are estimated to range from \$11 million to \$21 million. Based upon a total of approximately 1,600 homes served by the utility, this equates to a cost of \$7,000 to \$13,000 per household.

The operating and maintenance costs specific to operating these plants would be evaluated and serve as the basis for determining utility rates in a Wedgefield special rate district.