

# White Bluff sewer system needs \$1.13M in upgrades

Josh Arntz, The Dickson Herald 2:59 p.m. CDT October 23, 2014

**The  
Dickson  
Herald**

*(Photo: DH)*

An engineering services firm estimated \$1.13 million in capital improvements is needed for White Bluff's municipal wastewater system over the next six years, including \$582,000 in 2015.

CH2M HILL, an engineering consultation and services company, studied White Bluff's sewer system last summer in preparation for the possible takeover by the local water authority.

CH2M HILL staff concluded the WADC takeover of the system was "not only viable but beneficial for both (parties)." The report recommended consolidating the White Bluff system with WADC's systems.

CH2M HILL staff prepared a report of the White Bluff sewer treatment and collection system for the town and the Water Authority of Dickson County in September. The report noted that WADC asked the firm in May to generate a review of the condition of the White Bluff facilities.

The report summarized the firm's observations and recommendations of the system. CH2M HILL reviewed operational data, visited the treatment plant, inspected lift stations and reviewed collection system maintenance records and regulatory information.

The report noted the process was influenced by WADC's experience with acquiring the Fairview system in 2007, which demonstrated the necessity of understanding the capital needs of a system for "appropriate" planning from financial, manpower and customer service standpoints.

The study found "some deficiencies" in the municipal system, including a needed "modernization" of the wastewater treatment plant.

The sewer collection system is in "average to below average condition," the report noted, and will require some rehabilitation in the next few years. The sewer pumping stations are in "average condition," and two need "immediate repair."

The report documented the deficiencies are "consistent" with the age of the wastewater system, and "not a reflection of the capabilities or efforts of the current (Sewer Department) staff, who have... maintained the system well."

## **Wastewater treatment plant**

The report found the wastewater treatment plant in "average condition," and estimated \$430,000 for capital improvements by 2020.

The report described "little redundancy" at the plant; difficulty meeting chlorine residual requirements; and a "great deal" of trash entering the treatment unit.

Immediate recommended improvements included an ultraviolet light disinfection unit to eliminate the chlorine violations (approximate, estimated cost \$110,000 in 2015); and determining a long-term option for biosolids disposal by studying whether to mix with other WADC plants or permit a new site (estimated cost \$10,000 in 2015; and \$50,000 between 2016-2020).

### **Sewer collection system**

The gravity portion of the sewer collection system facilities are in "average condition," but some locations, particularly near the force main connections are in "poor condition."

Some manholes show "extreme levels" of corrosion. The report recommended coating approximately 150 manholes for an estimated cost of \$30,000 in 2015, and \$160,000 between 2016-2020.

Rehabilitation of the collection system should include lining the "leakiest portions," assumed to be 50 percent, for an estimated cost of \$380,000 between 2016-2020.

The facilities in the Step/pressure portion of the system are in "average condition," but some areas, particularly near the septic tank effluent gravity system, have "major" odor issues.

The pumps appear to be in "good condition," but ownership and maintenance obligations will need to be clarified, the report stated.

The report recommended a transition of the STEG systems to grinder systems, and concentrating in the areas with highest odor complaints. A goal for improvement included reducing customer complaints about the odor by replacing the STEG systems with low pressure grinders (approximate cost \$30,000 in 2015; and \$60,000 between 2016-2020).

### **Sewer pumping stations**

Two sewer pumping stations are in "poor condition," but the rest are in "good condition." The Montgomery Bell State Park lift station needs to be replaced soon (approximate cost \$175,000 in 2015).

The Park Street station needs repaired or replaced (approximate cost \$180,000 between 2016-2020).

The report also suggested the amendment of White Bluff's municipal ordinances to comply with WADC practices, like programs for fats, oils and grease (FOG) and pretreatment.

The report estimated a \$12,000 expense in 2015 for WADC officials to meet with town officials and educate the public about the incorporation of WADC pretreatment and FOG requirements.

The report recommended the drafting of a grinder pump policy for White Bluff residential customers for the maintenance of private grinder pumps. WADC maintains residential grinder pumps, the report noted, and the policy should be uniform.

The report approximated a \$10,000 expense in 2015, and \$40,000 between 2016-2020 to institute a grinder pump policy.

The report suggested a "more complete" investigation, like WADC's Corrective Action Plan, as the next step in the municipal system transfer.

The feasibility of combining the two systems should be examined, the report noted, either as a separate study altogether or as part of a regional study of the Fairview/East Dickson sewershed.

### **Inter-local agreements**

In early October, the White Bluff Town Council and the WADC board of directors authorized their respective legal counsels to begin drafting an inter-local agreement between the two entities for the transfer of the town's wastewater system to WADC control and ownership, via a Memorandum of Understanding based on the engineering report findings.

The Memorandum of Understanding will serve as a "guide" for the inter-local agreement, and outlined six general terms for the transfer.

Among those terms, WADC shall take sole ownership and responsibility of the wastewater systems and operations on Jan. 1, 2015. And White Bluff sewer rates will remain the same until 2020 barring any "extraordinary circumstances."

Residential sewer rates inside town limits presently are \$28 for a minimum 2,000 gallons; and \$5.50 per thousand gallons over 2,000 gallons.

White Bluff and WADC officials entered discussions about the municipal wastewater system transfer earlier this year. WADC presently provides water service to the town.

In June, the town council unanimously approved a separate inter-local agreement with WADC to pay for the CH2M HILL review. Both entities split the bill for the assessment.

Read or Share this story: <http://tnne.ws/1tOF80i>

#### **MORE STORIES**



**East TN toddler gets stuck in toy machine**

</story/news/local/2014/10/23/toddler-stuck-toy->