**AGENDA TITLE:** Sugar Hollow Pipeline Assessment Update  
**STAFF CONTACT(S)/PREPARER:** Gary O’Connell, Executive Director  
**AGENDA DATE:** March 17, 2016  
**ACTION:** Informational  
**ATTACHMENTS:** No

**BACKGROUND:** At the February Board meeting a discussion ensued regarding the conditions of the current pipeline from the Sugar Hollow Reservoir that is used to fill the Ragged Mountain Reservoir. Such an assessment is not planned by the RWSA for this pipeline, but is planned in the RWSA CIP for a condition assessment in FY ’20 of the Ragged Mountain Reservoir to Observatory Treatment Plant pipeline. The “condition assessment” would use non-destructive acoustic technology to identify existing leaks and the remaining pipe wall thickness to determine the remaining service life of the pipeline.

At the February 18th meeting the Executive Director was requested to raise with the RWSA Board, at their next meeting, the issue of performing a condition assessment on the Sugar Hollow pipeline, given the concerns of the ACSA Board on a pipeline that is “100 years old and in a very remote area.” At the February 23rd RWSA meeting this issue was discussed in the context of adding the pipeline condition assessment to the CIP. The RWSA staff expressed the following concerns about including the Sugar Hollow pipeline in a condition assessment project:

1. The technology is new; RWSA staff wanted to start with one water line to test its effectiveness in characterizing remaining useful life estimates before spending money on multiple pipes;
2. For the RWSA CIP the RWSA staff was pushing a financial objective to reduce the overall size of the plan by 5% to 10%. They only achieved 3% and had to make some cuts to get there;
3. They chose the two water lines located between Ragged Mountain and Observatory as top priority in part because an effective water line between these two facilities will be critical to the long-term future even after the South Fork water line replaces the Sugar Hollow water line. If the pipe condition proves to allow us to postpone a new water line between these facilities it will be a big benefit to future CIP planning;
4. RWSA staff was persuaded that the Sugar Hollow water line is less critical to service resiliency because there is now a large reservoir (Ragged Mountain) between Sugar Hollow and Observatory that will
supply water to the urban area even should the Sugar Hollow water line be down for extended repairs;

5. If funding were available to do more condition assessments, RWSA staff would rank higher criticality to several other water lines before Sugar Hollow, to include the western leg of the Southern Loop between Observatory and Avon Street, the water line in Route 29 between Proffit Road and the Piney Mountain tank, the single water line under the South Fork Rivanna River at Route 29, and the urban water lines between the South Fork Plant and both Pantops and the Seminole/Hydraulic area. If any of those pipes failed, repair would be an emergency due to the vulnerability that falling pressure over several hours could cause the need for a boil water notice.

One point of discussion during the meeting was cost allocation, but no conclusion was made.

The conclusion at the Board meeting was that the RWSA staff gather additional information on the technology and cost for an assessment of the Sugar Hollow pipeline.

BOARD ACTION REQUESTED: Information; the Board can consider to reiterate the position that “there should be an assessment of the Sugar Hollow pipeline because it is a critical piece of the infrastructure.”