



**Date of Council Work Session: July 22, 2013**

**TOWN OF LEESBURG  
TOWN COUNCIL WORK SESSION**

**Subject:** Capacity of Utility Plants – Semi Annual Report

**Staff Contact:** Amy Wyks, Director of Utilities

There are no material differences in water usage (demand), wastewater flow or flow projections as compared to our previous January 2013 report. The key points for this capacity report are as follows:

- The Water Treatment Plant (WTP maximum (max) day demand from January 1, 2013 until June 30, 2013 was 5.6 million gallons per day (mgd) which represents 43% of the permitted capacity of 12.884 mgd.
- The WTP did not have any days where the demand was above the 80% rated capacity from January 1, 2013 until June 30, 2013.
- The Water Pollution Control Facility (WPCF) average day flow from January 1, 2013 until June 30, 2013 was 4.7 mgd which represents 63% of the permitted capacity of 7.5 mgd.
- The WPCF reported five days of flow greater than 6.0 mgd which is the above the 80% rate capacity during January 1, 2013 until June 30, 2013.

The Semi-Annual Capacity report has been posted to the Town's webpage on the Department of Utilities Maps and Reports Page regarding Utilities Capacity. These graphics include both actual flows and forecasted flows based on known approved projects and future applications. The web link for the Utilities Capacity documents is [www.leesburgva.gov/index.aspx?page=238](http://www.leesburgva.gov/index.aspx?page=238).

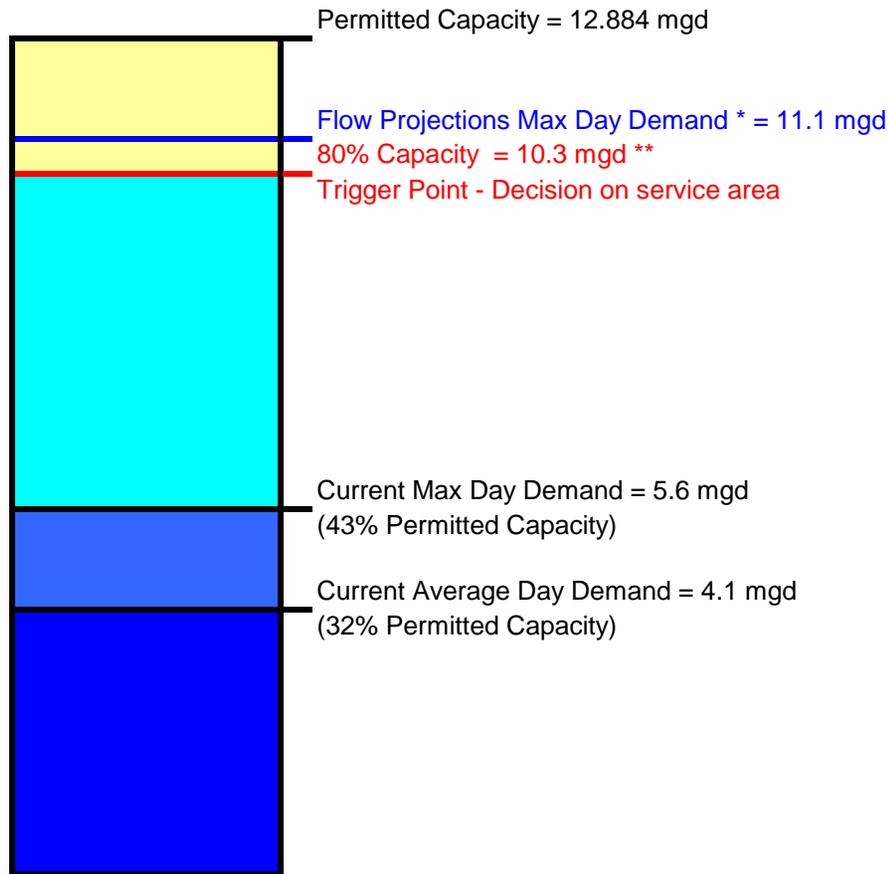
The flow projections spreadsheet is also posted to the Town's webpage. The projected flow data is updated on a semi-annual basis, and posted unless there is a significant proposed project or application submitted. The spreadsheet includes all known developed parcels based on densities per the current zoning.

The actual daily monthly flow, the monthly capacity percentage, the average monthly flow, and any days that exceeded 80% capacity for both facilities are tracked on a spreadsheet. This data is posted on the Town's webpage and updated on a monthly basis.

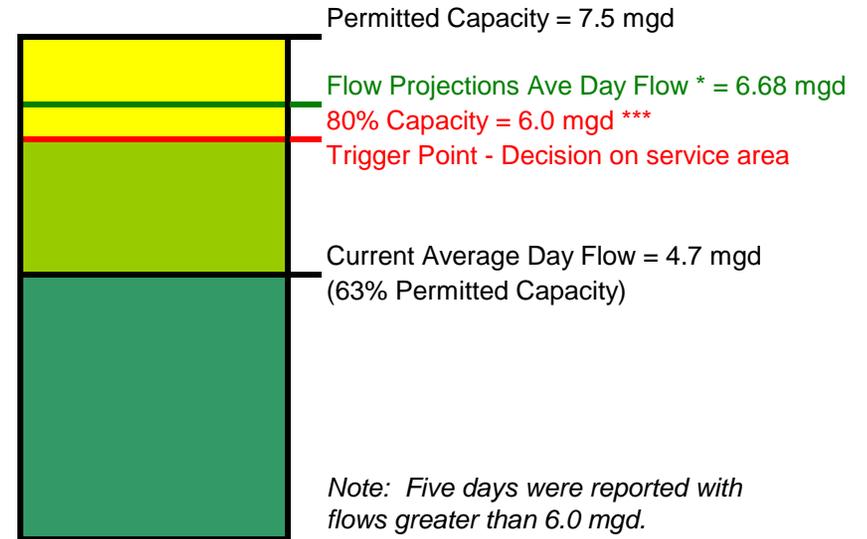
Attachment (1)      Current Status of the Utility Plants

Current Status of the Utility Plants  
as of June 30, 2013  
based on To Date CY 2013 Flows

**Water Treatment Plant**



**Water Pollution Control Facility**



\* Based on flow projections for current, proposed and future land development within Town's service area.

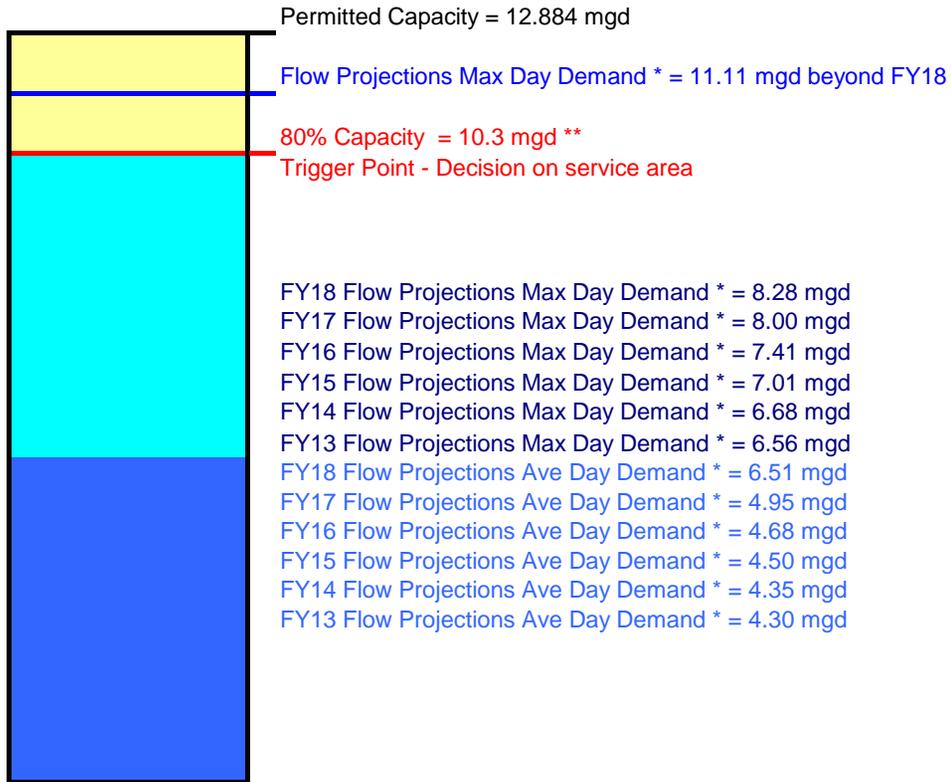
\*\*The Virginia Department of Health section 12VAC5-590-520 of the Waterworks Regulations states the following about Waterworks expansion:

At such time as the water production of a community waterworks reaches 80% of the rated capacity of the waterworks for any consecutive three-month period, the owner shall cause plans and specifications to be developed for expansion of the waterworks to include a schedule for construction; however, if it can be shown by the owner that growth within the service area is limited and will not exceed the rated capacity of the waterworks or if unusual transient conditions caused production to reach the 80% level, preparation of plans and specifications for expansion will no longer be required.

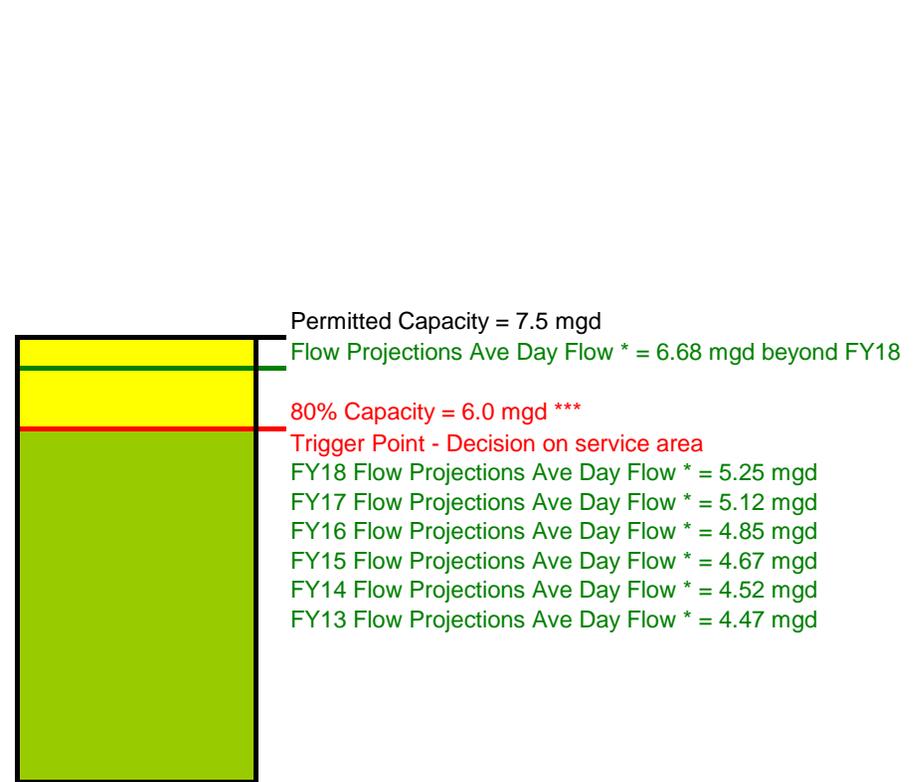
\*\*\* Nutrient loading of pounds of nitrogen and phosphorus are also monitored with the Town's discharge permit.

Projected Flows at Utility Plants  
based on Flow Projections  
as of June 30, 2013

**Water Treatment Plant**



**Water Pollution Control Facility**



\* Based on flow projections for current, proposed and future land development within Town's service area.

\*\*The Virginia Department of Health section 12VAC5-590-520 of the Waterworks Regulations states the following about Waterworks expansion:

At such time as the water production of a community waterworks reaches 80% of the rated capacity of the waterworks for any consecutive three-month period, the owner shall cause plans and specifications to be developed for expansion of the waterworks to include a schedule for construction; however, if it can be shown by the owner that growth within the service area is limited and will not exceed the rated capacity of the waterworks or if unusual transient conditions caused production to reach the 80% level, preparation of plans and specifications for expansion will no longer be required.

\*\*\* Nutrient loading of pounds of nitrogen and phosphorus are also monitored with the Town's discharge permit.