



Date of Council Work Session: August 11, 2014

**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 July 2013 and January 2014 and July 2013 reports. The key points for this capacity report are as follows:

- The Water Treatment Plant (WTP maximum (max) day demand from January 1, 2014 until June 30, 2104 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 (10.3 mgd) from January 1, 2014 until June 30, 2104.
- The Water Pollution Control Facility (WPCF) average day flow from January 1, 2014 until June 30, 2104 was 4.6 mgd which represents 61% of the permitted capacity of 7.5 mgd.
- The WPCF reported five (5) days of flow greater than 7.1 mgd which is above the 95% permitted capacity during January 1, 2014 until June 30, 2104.

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 <http://www.leesburgva.gov/index.aspx?page=1752>.

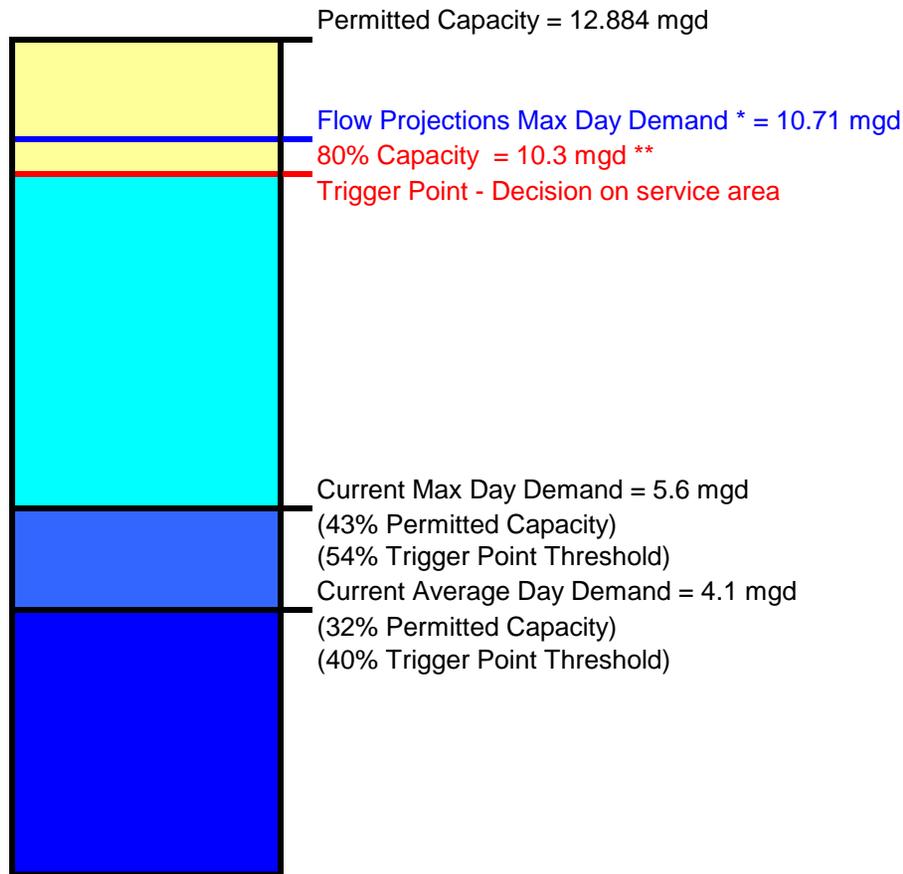
The flow projections spreadsheet is also posted to the Town's webpage. The projected flow data is updated on a semi-annual basis, and posted unless there is a significant proposed project or application submitted that warrants an immediate update and posting. The spreadsheet includes all known developed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

The actual daily flows, the daily flow capacity percentages, the average monthly flows, and any days that exceed 80% capacity for water treatment plant or 95% for water pollution control facility are tracked on a spreadsheet. This data is posted on the Town's webpage and updated on a monthly basis.

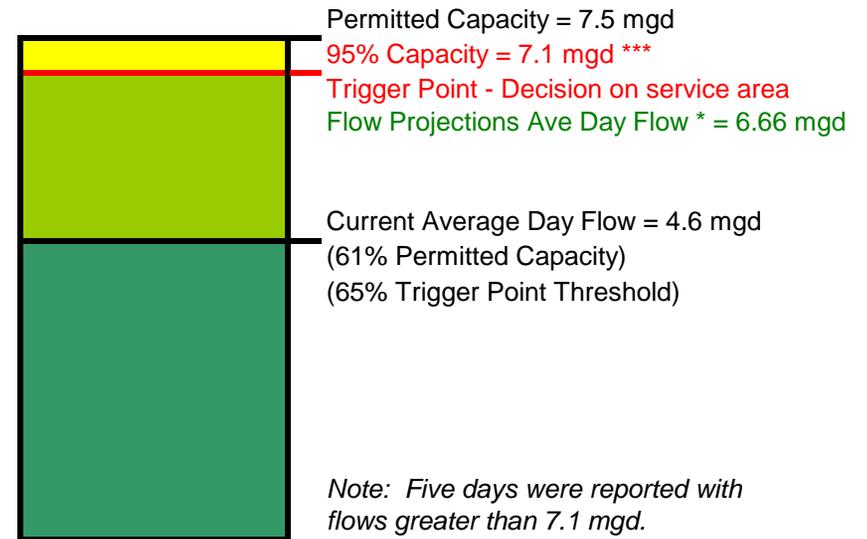
Attachment (1) Current Status of the Utility Plants

Current Status of the Utility Plants
as of June 30, 2014 based on To Date CY 2014 Flows (6 Months)

Water Treatment Plant



Water Pollution Control Facility



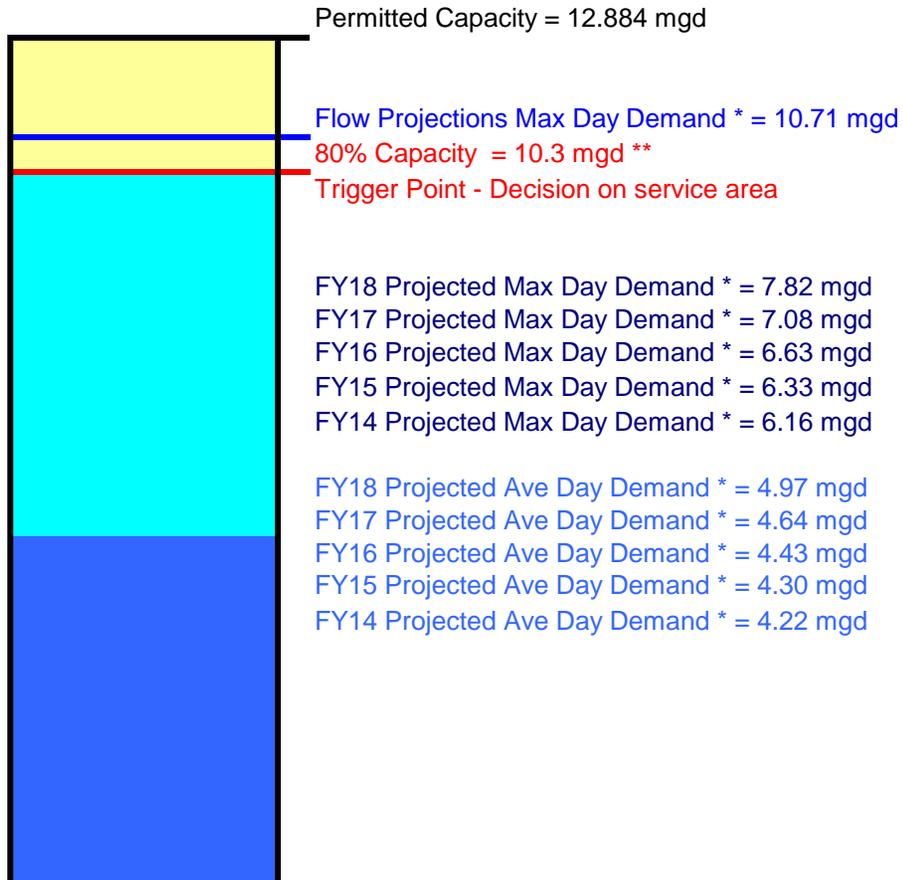
* Based on flow projections for current, proposed and future land development within Town's service area.

**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.

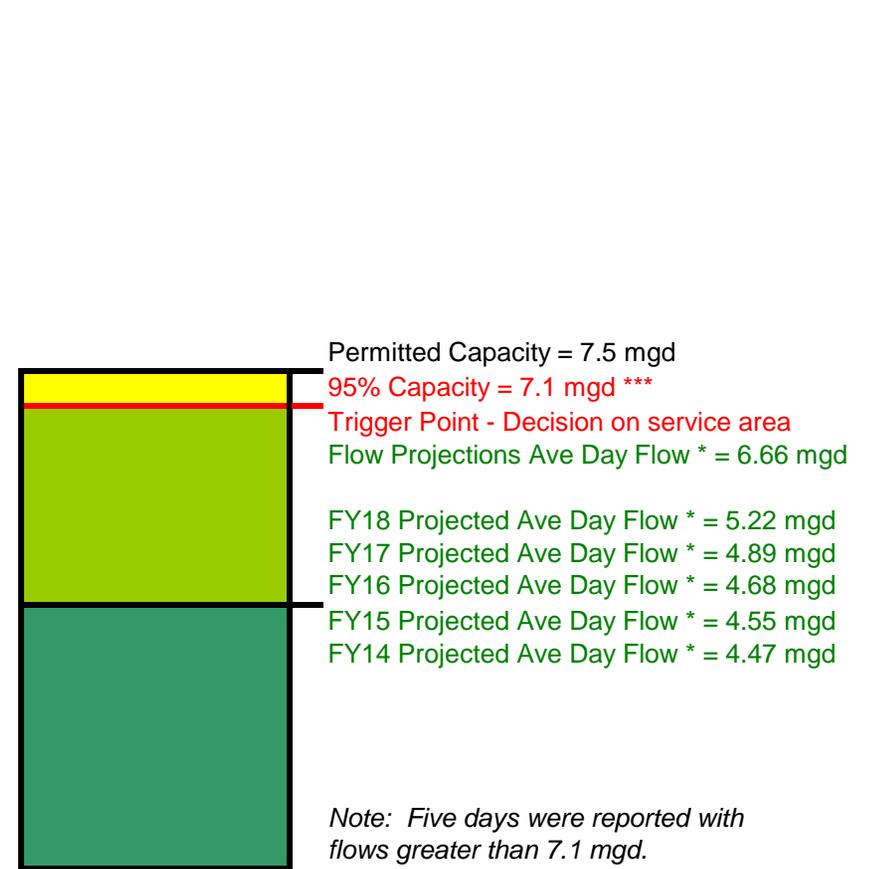
*** Nutrient loading of pounds of nitrogen and phosphorus are monitored with the Town's Virginia Department of Quality (DEQ) discharge permit. The DEQ section 9VAC25-31-200.B4 of the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation states the following about notification:
When the monthly average flow influent to a POTW or P.VOTW reaches 95% of the design capacity authorized by the VPDES permit for each month of any three-month period, the owner shall within 30 days notify the department in writing and within 90 days submit a plan of action for ensuring continued compliance with the terms of the permit.

Current Status of the Utility Plants
as of June 30, 2014 based on To Date CY 2014 Flows (6 Months)

Water Treatment Plant



Water Pollution Control Facility



Note: Five days were reported with flows greater than 7.1 mgd.

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

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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.

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