

# **Water Resources Technical Committee**

## **Regional Wastewater Treatment Plant Data & Sewer Service Areas Updates**

(as of 9/7/07)

### **RWFFM/Cooperative Forecast Model Background**

The Regional Wastewater Flow Forecast Model (RWFFM) calculates wastewater flow projections for the major wastewater treatment plants in the metropolitan Washington area. These flow projections are based on demographic projections (employment, population and households) done over a 25-30 year period, at 5-year increments, that are derived from COG's Cooperative Forecast process and ultimately approved by COG's Board of Directors. For more information [http://www.mwcog.org/store/item.asp?PUBLICATION\\_ID=279](http://www.mwcog.org/store/item.asp?PUBLICATION_ID=279)

The intermediate series of demographic projections are aggregated into Transportation Analysis Zones (TAZs), which form the basis for allocating the demographic data to each WWTP's service area (i.e., sewersheds and subsewersheds). The RWFFM calculates incremental flows for each interval by applying an area ratio via GIS to convert the TAZ data to the various sewersheds and subsewersheds. In order to properly attribute the demographic data to the proper sewersheds we need to update/verify our WWTP service area GIS data to ensure the accuracy of the boundaries used in the calculations.

### **Purpose**

As part of our FY 2008 Regional Water Resources Work Program, COG's Department of Environmental Program is updating the non-Blue Plains service areas while simultaneously updating our regional WWTP database information. (Note: The Blue Plains Service Area updates were previously done.)

### **Process and Schedule**

Over the next two months, each jurisdiction/agency will receive a pdf format map (highlighting the service areas and plants that provide wastewater treatment to that particular area), GIS spatial data files (with the latest data that we have), and a WWTP information and process summary sheet. We ask that the appropriate staff carefully review and:

- Confirm septic areas;
- Verify that the sewersheds are being attributed to the proper WWTP;
- Identify existing/planned flow management schemes;
- Identify sewersheds that have billing meters for flows going to Blue Plains (Blue Plains users only); and
- Update the WWTP information and process summary sheet.

Once COG staff has received all updates and information from the jurisdictions/agencies we will compile the information, make any necessary corrections to our data files/GIS layers, and prepare regional summaries.

### **Status**

#### **WWTP Service Area Updates**

We sent out a 'test' package for update and information to Fairfax County in August. Other plant packages will be issued over the next two months.

#### **Cooperative Forecast Update**

Currently, the Round 7.0a intermediate series (approved last year) is still the region's official forecast. Round 7.1 is still in the draft stages and is not expected to be presented to the COG Board for formal approval until December 2007. The updated demographic data can then be utilized in the RWFFM along with the updated sewershed data to calculate regional wastewater flow projections. COG staff will need to work with our members to confirm base year flow assumptions that the RWFFM applies the incremental flow projections to.

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