

Preliminary Report

**Table of Equivalent Dwelling Units
Advisory Committee**

**Findings and Recommendations
for Preliminary Review**

October 9, 2008

History

The Table of Equivalent Dwelling Units had remained unchanged since 1977 until recent updates in 2007. Management felt it was necessary to perform an informal study in an effort to modernize the Table of Equivalent Dwelling Units and verify if new water saving technology has decreased demand on the public water and/or sewer systems. Therefore, the Table of Equivalent Dwelling Units Committee was established and met regularly from February 11, 2008 to June 6, 2008.

Purpose:

The committee's objective was to confirm the adequacy of the recently adopted Table of Equivalent Dwelling Units and either support it or recommend changes. In order to do this, it is necessary to understand the history of the previous and current EDU Tables, compare Tables from other Jurisdictions and compare actual water usage for some non-residential customers.

Table of Equivalent Dwelling Units Advisory Committee:

This committee includes representatives from MetCom staff, members of the Engineering and Development, and Business community. The committee is comprised of the following members:

Deborah Settle, Chairperson – MetCom Engineering Department

Mike Sullivan – MetCom Operations and Maintenance Department

Diane Reed – MetCom Billing Department

Dave Chapman – Department of Land Use and Growth Management Planning Division

Harry Knight - Department of Land Use and Growth Management Permits Division

Marc Cohen - MNCBIA; Pat Mudd – Chamber of Commerce

Dave Kelsey – Water Policy Task Force

Hayden Hammett (for Billy Higgs) – Development Review Team

Committee Discussions

The committee reviewed the average daily flow for many of our non-residential customers. When the committee compared the current Table of Equivalent Dwelling Units to other jurisdictions, it found that most jurisdictions used the MDE design table. It is important to understand that the MDE table is for design of private septic systems and that private septic systems operate differently than public systems. Prior to the committee meetings, Staff met with representatives from Anne Arundel County and discussed, among other things, their EDU Table. We found that Anne Arundel County was the exception; they had only used MDE as their basis, and had created additional categories or adjusted the basis according to their own findings. Although they had not compared their table to flow data from their customers as we have recently done, they were not aware of any discrepancies with their current EDU Table. This is the reason the committee used this jurisdiction to compare to in its study.

The committee discussed if it recommended using two tables for water and sewer design based on 300 GPD for water and 250 GPD for sewer and a separate table for billing purposes. It was considered a way to prevent over allocation of capacity in the water and sewer systems. The committee feels strongly that this would be very confusing and complicated, and unanimously recommends against this. They also unanimously recommend that the GPD for water and sewer design remain unchanged.

The Table of Equivalent Dwelling Units shows “EDUs” for some categories and “GPD” for others. Other jurisdictions only use GPD on their EDU Tables. The committee recommends the Table be converted completely to GPD for all categories. As you read the committees recommendations in the following sections, you will note that this conversion is included.

The committee discussed residential and commercial irrigation; and if it was necessary to have separate water meters for irrigation purposes. Residential bills are based on a non-metered sewer rate; therefore, all water being used by the property can be charged to a single water meter without it affecting the sewer charge. Commercial accounts are the only ones charged a metered sewer rate based on water usage and a separate irrigation meter is or will soon be installed for these customers. The committee recommends that there be no changes to the current policy.

The following is a summary the results of the committees review and discussion of the various categories in the Table of Equivalent Dwelling Units. Attached are the worksheets that show the information in further detail and comparison.

Categories Researched and/or Flow Data Discussed:

Apartment Complexes: The committee recommends that apartments, residential condominiums, and “homes for the aged” (senior housing projects) be based on 200 gpd versus 250 gpd for design purposes; and that they are billed charges and fees based on 1 EDU/unit. Commercial Condominiums will be designed based on Gross Sq. Ft. X 0.03 (same as Office Buildings), and billed charges and fees based on 1 EDU/unit.

Auto Dealership:

The committee recommends that this category remain at Gross Sq. Ft. X 0.08 gpd.

Bakery:

The committee recommends that this category be changed to Bakery/Food Retail Store (no seating) based on Gross Sq. Ft. X 0.15 gpd. It also recommends that another category be created for Food Carryout (w/ no indoor seating) based on Gross Sq. Ft. X 1 gpd, to include donut, ice cream, and fast food stores that do not have inside seating such as Checkers. Those with inside seating will be classified as Restaurant based on 13 gpd/seat. Although the usage is higher for Checkers, a good amount is used to hose down the outdoor eating facility; which will be billed at the overage rate and is not going through the sewer system.

Bank:

The committee recommends that this category remain at Gross Sq. Ft. X 0.04 gpd.

Bar:

The committee recommends that Bars be defined as those establishments whose primary service is alcohol beverages, are not required to have a Food Permit with the Health Department and do not have a Hall or Meeting Room; and that they be based on 5 gpd/seat. Those establishments who are required to have a Food Permit will be in the Restaurant category based on 13 gpd/seat; and establishments having a Hall or Meeting Rooms intended to be rented will be in the Social Hall category based on Gross Sq. Ft. X 0.07 gpd.

Barber Shop:

The committee recommends that this category remain at Gross Sq. Ft. X 0.20 gpd.

Beauty Salon:

The committee recommends that this category remain at Gross Sq. Ft. X 0.35 gpd.

Car Wash:

The committee recommends that this category be adjusted as follows: 250 gpd/Self Serve Bay; 2500 gpd/Recycled Bay; 4,000 gpd/Non-recycled Bay.

Child Day Care:

The committee recommends that the table be converted to gpd/person versus 1 EDU (each 40 people or fraction thereof); and be based on 6 gpd/person; and that the category be changed to Child Day Care/Nursery School.

Church:

The committee recommends that the table be converted to gpd/person versus 1 EDU (each 40 people or fraction thereof); and be based on 6 gpd/person; and that the category be changed to Child Day Care/Nursery School.

Department Store (without Lunch Counter):

The committee recommends that this be treated as Retail/Mixed Use, combining EDUs for each use within the store. It is recommended that Retail Stores greater than 12,000 sq. ft. be based on 0.02 gpd/sq. ft., or less than 12,000 sq. ft. based on 0.03 gpd/sq. ft; and the square footage of accessory uses be subtracted, and assigned EDUs based on the type of use. This category should be eliminated and covered under Retail/Mixed Use. Strip Malls should remain as Gross Sq. Ft. X 0.18 gpd for design purposes, and EDUs assigned based on the retail use.

Department Store (with Lunch Counter):

The committee recommends that this be treated as Retail/Mixed Use, combining EDUs for each use within the store. It is recommended that Retail Stores greater than 12,000 sq. ft. be based on 0.02 gpd/sq. ft., or less than 12,000 sq. ft. based on 0.03 gpd/sq. ft; and the square footage of accessory uses be subtracted, and assigned EDUs based on the type of use. This category should be eliminated and covered under Retail/Mixed Use. Strip Malls should remain as Gross Sq. Ft. X 0.18 gpd for design purposes, and EDUs assigned based on the retail use.

Drug Store:

The committee recommends that this category remain as Gross Sq. Ft. X 0.13 gpd, with a maximum of 2 EDUs.

Food Carryout:

The committee recommends that a category be created for Food Carryout (w/ no indoor seating) based on Gross Sq. Ft. X 1 gpd, to include donut, ice cream, and fast food stores that do not have inside seating such as Checkers. Those with inside seating will be classified as Restaurant based on 13 gpd/seat. Although the usage is higher for Checkers, a good amount is used to hose down the outdoor eating facility; which will be billed at the overage rate and is not going through the sewer system. See Bakery/Food Retail Store (no seating), which is recommended to be based on Gross Sq. Ft. X 0.15 gpd for stores that sell a product such as Cakes and Pastries with no seating.

Funeral Home:

The committee recommends that this category be separated into two uses; 1) with embalming services on site based on Gross Sq. Ft. X 0.31 gpd; and 2) with-out embalming services on site based on Gross Sq. Ft. X 0.02 gpd.

Garage:

The committee recommends that this category be increased to Gross Sq. Ft. X 0.04, that this category include service stations without food service, and it be called Garage/Service Station (without food).

Gas Station/Convenience Store:

The committee recommends that based on flow data, a category for Gas Station/Convenience Store (with Food Service) be created based on Gross Sq. Ft. X 0.35 gpd; and that those without food service would be under Gas/Service Station based on Gross Sq. Ft. X 0.04 gpd.

Hotel/Motel Units (with and without Kitchens):

The committee recommends that this category be converted to gpd/unit, but the rate not be changed.

Laundries & Cleaners (Professional Services):

The committee recommends that this category remain as Gross Sq. Ft. X 0.31 gpd for Professional Service facilities. See also Laundromats for Self Service facilities.

Laundromats (Non-professional Services):

The committee recommends that based on flow data, this category be reduced to Gross Sq. Ft. X 2.00 for self serve facilities. See also Laundries & Cleaners for Professional Service facilities.

Library:

The committee recommends that based on flow data, this category be reduced from Gross Sq. Ft. X 0.10 gpd to Gross Sq. Ft. X 0.03gpd.

Marinas:

The committee recommends that this category not be changed. There were no customer accounts that also had metered public water, to be reviewed.

Medical Offices:

The committee recommends that based on flow data, this category remain at Gross Sq. Ft. X 0.13 gpd; that this category not be separated into Medical Office Complex and Doctor/Dental/Veterinary Offices as in AA County. Considering the accounts using higher flows will be charged overages and those using significantly less water would be penalized by having a higher rate applied, the committee does not recommend creating a separate category for Doctor/Dental/Veterinary Offices.

Office Buildings:

The committee recommends that based on Flow Data, this category be increased from Gross Sq. Ft. X 0.02 gpd to Gross Sq. Ft. X 0.03 gpd. This category, along with others, was decreased on October 11, 2007 from Gross Sq. Ft. X 0.09 to Gross Sq. Ft. X 0.02 gpd based on preliminary calculations.

Post Office:

The committee recommends that this category remain as Gross Sq. Ft. X 0.09 gpd.

Recreational:

The committee recommends that Theatres based on 1 EDU each 100 seats or fraction thereof, and Sports Arena (per Seat) (add for food service) based on 5 gpd/seat, and Recreational Facilities based on 1 EDU each 20 people or fraction thereof, all be converted to gpd/seat or person. The committee recommends that Theatres and Sports Arena be combined into one category; and that Theatres/Sports Arena and Recreational Facility be changed to 1 gpd/seat or person without food and 5 gpd/seat or person with food (or concessions). The committee recommends that a category be established for Health Club, and Public Parks based on fixtures as follows: Showers:400 gpd; Toilets: 98 gpd; Urinals: 65 gpd; Sinks: 33 gpd.

Restaurant:

The committee recommends that the current Table be converted to 13 gpd/seat, which is equivalent to the current each 20 seats or fraction thereof; and that based on flow data, this category remain at 13 gpd/seat.

Retail:

The committee recommends that Retail Stores greater than 12,000 sq. ft. be based on 0.02 gpd/sq. ft., or less than 12,000 sq. ft. based on 0.03 gpd/sq. ft. Strip Malls should remain as Gross Sq. Ft. X 0.18 gpd for design purposes, and EDUs assigned based on the retail use.

Schools:

The committee recommends that the table be converted to gpd/person versus 1 EDU (each 40 or 20 people or fraction thereof). The committee recommends that based on flow data Child Day Care (See: Child Day Care/Nursery School) be reduced from 6.25 gpd/person to 6 gpd/person; Elementary School be reduced from 6.25 gpd/person to 4 gpd/person; Middle School be reduced from 12.5 gpd/person to 6 gpd/person; and High School be reduced from 12.5 gpd/person to 8 gpd/person.

Service Station:

The committee recommends that this category be combined with Garage as Garage/Service Station (without Food) to Gross Sq. Ft. X 0.04gpd. Those with food service will be in the Gas Station/Convenience Store category based on Gross Sq. Ft. X0.35 gpd.

Social Hall:

The committee recommends that establishments having a Hall, or Meeting Rooms intended to be rented, will be in the Social Hall category based on Gross Sq. Ft. X 0.07 gpd; and accessory uses (such as pools) will be treated as mixed use. See also Bar and Restaurant categories. (This would include most Elks, Knights of Columbus, etc.)

Supermarkets:

The committee recommends that based on flow data, this category be increased from Gross Sq. Ft. X 0.04 to Gross Sq. Ft. X 0.05 gpd.

Swimming Pools:

The committee recommends that based on flow data, this category be changed to 500 gpd/pool, plus fixtures as follows: Showers: 400 gpd; Toilets: 98 gpd; Urinals: 65 gpd; Sinks: 33 gpd

Warehouse:

The committee recommends that this category be decreased (not rounded up) from Gross Sq. Ft. X 0.02 to Gross Sq. Ft. X 0.015 gpd.