

GLOBAL WATER RESOURCES (GWR)**CODE OF PRACTICE****GWR-CP-EX-006****DETERMINATION OF CAPACITY IMPACT
FROM COMMERCIAL UNITS****APPLICATION**

This Code of Practice defines the methodology employed to determine the impact of commercial customers on the water supply, distribution, and wastewater collection, treatment and disposal operations.

The Code of Practice applies to any non-residential customer and to other establishments or uses where the GWR Engineer has determined the impact will be greater than a residential customer.

METHODOLOGY

In order to assess the impact of a commercial operation on the Utility's supply and treatment infrastructures, GWR employs a fixture unit (FU) review as compared to a typical residential unit. This analysis ensures that the peak water and wastewater demands are accounted for, and a proper allocation of resources. Fixture unit allocations are developed from the Unified Plumbing Code (UPC). In cases where no direct FU allocation exists in the UPC, the GWR Engineer will assign a value.

The total FU count is compared to the typical residential fixture unit counts to determine the Equivalent Development Unit (EDU) value, which is used for determining capacity fees, hook-up fees and other impact related metrics used by the Utility in maintaining its Capacity Management and Operations Management Plan.

For the purposes of this Code of Practice, the following Residential Fixture Unit values are employed:

Residential Water Use 46 FUs

Residential Sewer Use 44 FUs

An example of this calculation is shown in the accompanying table:

Item	FU's	COMMERCIAL WATER		COMMERCIAL SEWER	
		Number	Total (Water)	Number	Total Sewer
Urinals	Stall/Wall	4		2	8
	Pedestal/Siphon	12			
Sinks					
	Bar	2			
	Industrial Wash-Up	6	0	0	0
	Kitchen	4	2	8	8
	Lavatory	2	6	12	12
Showers		4			
Floor Drains		4			
	Grease & Solids	6			
Dishwashers					
	Conveyor	100			
	Under Counter	10	1	10	10
	Residential	8			
Disposals		50			
Clothes Washer					
	Residential	4			
	Automatic 8 lb	16			
	Automatic 12-19 lb	20			
	Automatic 20-39 lb	22			
	Automatic 40-50 lb	24			
Drinking Fountains		2	2	4	4
Water Closet					
	Tank	8			
	Flush Valve	12	6	72	72
Hose Bibs		2	2	4	
Landscaping		12 /1000 sq ft	250	3	
Swimming Pool		5 /100 sq ft	6550	327.5	
Swimming Pool Filter Backwash		10			10
Cooling Water		15 /ton			
	TOTAL		<u><u>448.5</u></u>	<u><u>136</u></u>	<u><u>136</u></u>
	Factor		9.75		3.09

In this case, the impact of the Commercial Customer is equivalent to 9.75 residential units with respect to water, and 3.09 residential units with respect to sewer.

COMMERCIAL APPLICANT REQUIREMENTS

Prior to applying for water service, a Non-Residential Customer shall provide plans of the proposed structure in sufficient detail for GWR to analyze the impact.

