

Water Demand Categories

Water Conservation Advisory Council



GPCD Break Down

- Workgroup agreed that it is desirable to have different gpcd calculations in addition to total or global gpcd.
- While total gpcd production figures come directly from wells or pumps, sub sets rely on billing data.
- We need to define categories of interest AND find out what can be reported.

Work Task - Define Sub Set GPCD & Data

- Desirable gpcd subsets:
 - Commercial
 - Industrial
 - Residential (single family)
 - Apartment
 - Municipal
- Discussion of these and potential others?
- All depend on availability of water demand by these categories.

Discussion Summary

- How to classify usage
 - What categories would we like to identify?
- Sample breakdown of specific customer classes
 - Lists to help utilities define where to place each customer.



Water Customer Water Usage Classes

- Typical breakdown of customer classes
 - Residential (single family)
 - Apartment
 - Commercial
 - Industrial/Manufacturing
 - Municipal
 - Institutional
 - Wholesale
 - Recycle

Water Customer Classes (Con't)

- SAWS breakdown
 - Residential (single family)
 - Apartment
 - Commercial
 - Industrial
 - Wholesale
 - Recycle

How to Divide Usage into Categories

- There are governmental coding systems that already exist
 - NAICS (North American Industry Classification System)
- Most utilities probably do not cross reference customers by NAICS coding.
- There would still be logic to following an existing coding system in the future.
- Proposed categories that follow are from NAICS coding.
- Need “common sense” descriptor as well.

Sample of Industrial/Manufacturing Class

- Oil and Gas Extraction
- Mining (except Oil and Gas)
- Utilities
- Food Manufacturing
- Beverage and Tobacco Product Manufacturing
- Textile Mills
- Apparel Manufacturing
- Leather and Allied Product Manufacturing
- Wood Product Manufacturing
- Printing and Related Support Activities
- Petroleum and Coal Products Manufacturing
- Chemical Manufacturing
- Plastics and Rubber Products Manufacturing
- Nonmetallic Mineral Product Manufacturing
- Primary Metal Manufacturing
- Fabricated Metal Product Manufacturing
- Machinery Manufacturing
- Computer and Electronic Product Manufacturing
- Electrical Equipment, Appliance, and Component Manufacturing
- Transportation Equipment Manufacturing
- Furniture and Related Product Manufacturing

Sample of Commercial/Institutional Class

(Medium to High Water Use)

- Crop Production
- Animal Production
- Heavy and Civil Engineering Construction
- Data Processing, Hosting and Related Services
- Amusement, Gambling, and Recreation Industries
- Personal and Laundry Services
- Transportation
- Pipeline Transportation
- Professional, Scientific, and Technical Services
- Waste Management and Remediation Services
- Space Research and Technology

Sample of Commercial/Institutional Class

(Low to Medium Water Use)

- Forestry and Logging
- Fishing, Hunting and Trapping
- Construction of Buildings
- Specialty Trade Contractors
- Merchant Wholesalers
- Motor Vehicle and Parts Dealers
- Furniture and Home Furnishings Stores
- Electronics and Appliance Stores
- Building Material and Garden Equipment and Supplies Dealers
- Food and Beverage Stores
- Health and Personal Care Stores
- Gasoline Stations
- Clothing and Clothing Accessories Stores
- Sporting Goods, Hobby, Book, and Music Stores
- General Merchandise Stores
- Nonstore Retailers
- Transit and Ground Passenger Transportation
- Scenic and Sightseeing Transportation
- Postal Service
- Couriers and Messengers
- Warehousing and Storage

Sample of Commercial/Institutional Class

(Low to Medium Water Use)

- Communications
- Banks
- Insurance Carriers and Related Activities
- Real Estate
- Rental and Leasing Services
- Management of Companies and Enterprises
- Administrative and Support Services
- Educational Services
- Ambulatory Health Care Services
- Hospitals
- Nursing and Residential Care Facilities
- Performing Arts, Spectator Sports, and Related Industries
- Museums, Historical Sites, and Similar Institutions
- Accommodation
- Food Services and Drinking Places
- Justice, Public Order, and Safety Activities
- National Security and International Affairs

Summary Task for Workgroup

- Review the lists to determine if these are appropriate break-downs.
- These could be future guidelines for water usage categories.
- Design survey for finance departments at utilities to ask if they can follow some version of the general categories.
- Determine from this what utilities can calculate subsets of gpcd.