

06/12/08

Time Start: 01:35 pm

Time Stop: 02:40 pm

Teleconference Call:

*Work Group 2 Metrics & Trends*

*~ Monitor Trends in Water Conservation Implementation & Monitor Target & Goal Guidelines*

**Council Members , Alternates & Interested Parties**

Greg Carter

Wayne Halbert

Gene Montgomery

Comer Tuck

Dan Opdyke

Denise Hickey

Steve Densmore

**TWDB Staff**

Laila Johnston

Vanessa Escobar

Bridget Cameron

Aung Hla

Kevin Kluge

The meeting was called to order at 1:35 pm and roll call was taken.

The workgroup recapped their targets and goals for the legislative report and then began discussing the water categories flow chart that Karen had originally provided to Council members ( Appendix A). Gene Montgomery was asked to explain his category matrix that he had provided to the workgroup (Appendix B). Some highlights of his version of categories are:

- The three main categories are *Municipal, Agricultural, and Industrial.*
- There is no *Unaccounted/Unmetered* category nor a *Non- Agricultural* main category.
- There is no irrigation sub category within the municipal main category because in a municipal setting, irrigation would be considered a commercial application or even fall into public/ recreation.
- Some categories will use a GPCD metric, and other categories will use a production per unit type of metric.

A question was asked if there was a need or desire to further breakdown the residential category into indoor and outdoor. It was explained that this would most likely be an estimate based on the knowledge about winter standard usage versus increase in standard usage over the summer months.

A comment was made that according to TCEQ if a municipality provides raw/untreated water to a golf course type of application it would fall under the primary category of *Irrigation*. However, if the municipality provides treated water it falls into the primary category of *Municipal* as the subcategory *Irrigation*.

Steve Densmore with TCEQ, was asked to explain their category flowchart that they had provided to the workgroup (Appendix C). Some highlights of their version of categories are:

- The five main categories are *Municipal, Reuse, Irrigation, Industrial, and Unaccounted*.
- The flowchart was based on the TCEQ rules for billing and conservation plans. In a conservation plan it calls for accounting by *residential, commercial, public & institutional, industrial, and wholesale*.
- There is no main *Agricultural* category, but rather *agricultural* and *non agricultural* are sub categories of the main *Irrigation* category.

A comment was made that most larger cities have rates that are separated out according to tap size with the cutoff point being 2.5 inches. It was suggested that limiting GPCD to nothing more than a 2.5 inch tap would help alleviate the accounting of population influx. It was stated that the topic of population estimation & water service provider areas is something that the workgroup needs to take into account.

Greg Carter was asked to explain his flowchart that he provided to the workgroup (Appendix D). Some highlights of his version of categories are:

- The four main categories are *Municipal, Agricultural, Industrial, and Unmetered / Unaccounted*.
- There is a more detailed division or separation of *industrial* categories than any previous flowcharts proposed.
- There is more division or separation of agricultural categories as well.

Karl Fennessey was unavailable, however he had also provided some suggestions to the workgroup on the definitions of categories.

There was some discussion as to how and who will provide the production water usage information in the industrial sector. It was stated that in some form the information is being accounted for by the industries, it's just not being collected nor reported to a certain agency or entity.

There was also some discussion that accounting for water usage may be more difficult in agricultural settings. Issues with the capability of metering surface water and groundwater usage was discussed. Issues with measuring units of production and crop irrigation usage were also brought up.

A question was asked about any recommendations that this workgroup will be including in their legislative report. It was stated that at the 6/25/08 meeting, that there would be some preliminary discussion on recommendations. Most likely at the July meeting there will be more specific language for the recommendations.

The workgroup decided to turnover today's discussed suggestions to the sub workgroup and allow them to compile another version of a category flowchart. There was some question as to which workgroup members are on the sub workgroup. It was suggested that anyone interested in being involved in that sub workgroup should contact Karen Guz directly.

The meeting adjourned at 2:40 pm.

<b>Immediate Actions</b>	<b>Long Term Actions</b>
Sub workgroup will work in further detail on merging the flow chart suggestions.	

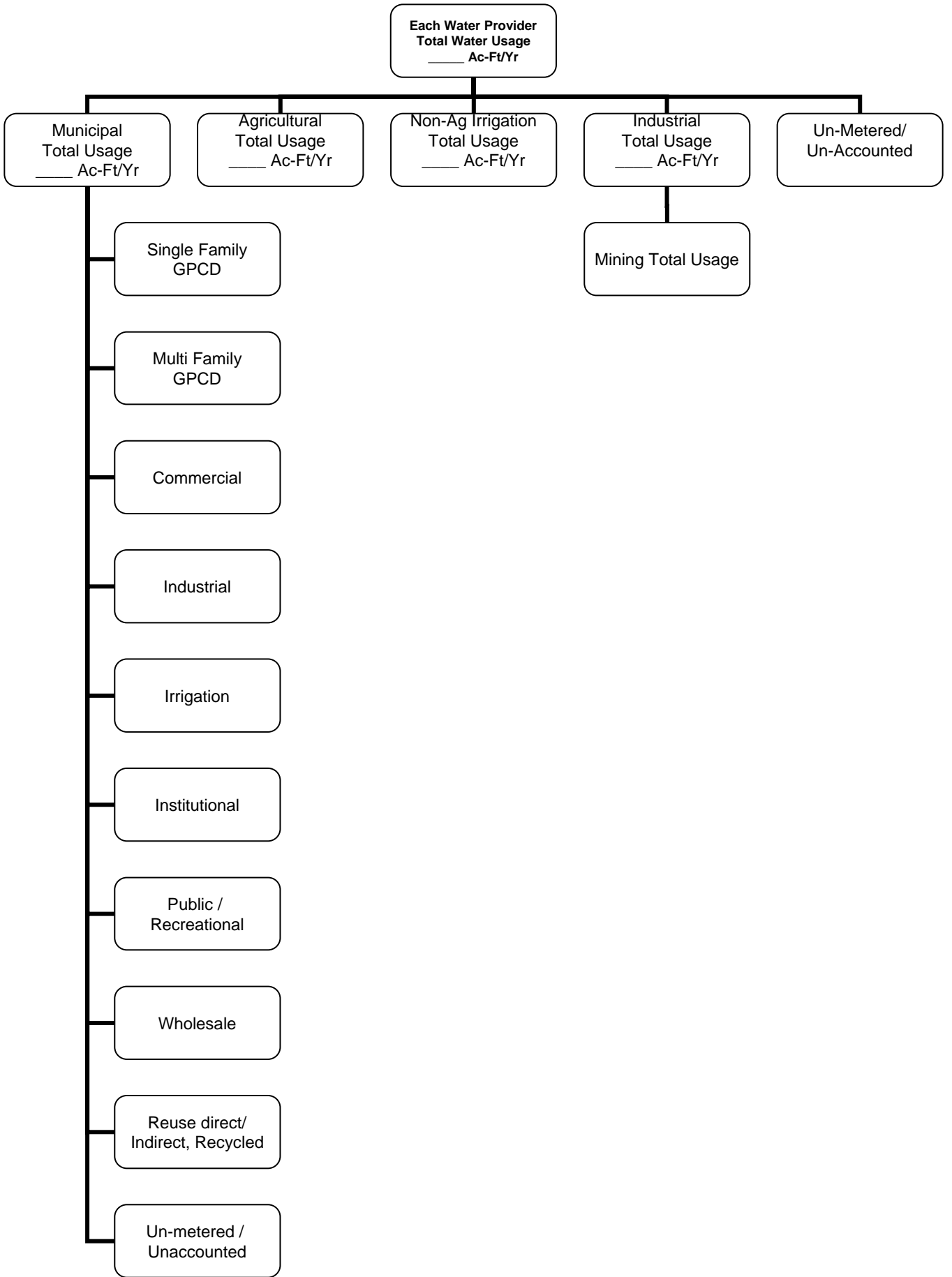
# Appendix A

## Karen's Originals

- Categories Flow Chart
- Municipal Defined Terms

# Municipal Total Usage

<b>Category</b>	<b>Description</b>	<b>Examples</b>
1. Single Family	Residential properties with single family occupancy	Detached houses
2. Multi Family	Housing for multiple families	Apartments, Mobile home parks
3. Commercial (NAICS 62,71,72,81,92)	Entities using water as part of business processes.	Service industries, office buildings including medical and dental, car wash, hotels, restaurants, large venue stadiums
4. Industrial (NAICS 21-23,31-33)	Process designed to convert a product of lower value to higher value. Includes power production but not irrigation	Construction, manufacturing, mining, quarrying, and oil and gas extraction
5. Irrigation (potable)	Landscape water usage for aesthetic purposes	Irrigation water not athletic fields or parks
6. Institutional (NAICS 61,62,92)	Entities intended to house people for non permanent residential purposes	Universities, Schools, Hospitals, Nursing homes, Prisons
7. Public/Recreational (NAICS 71)	Spaces metered for public or recreation use, squares, parks, public aesthetic needs.	Athletic fields, public parks, fountains, theme parks, zoos
8. Wholesale	Sale of municipal water to other entities intended for resale	Municipalities, MUDs, PUDs
9. Reuse Direct/Indirect, Recycled	Entities using recycled/reclaimed water	Golf courses, non-potable irrigation, manufacturing
10. Un-metered/Un-accounted	Difference between what is pumped at source and metered usage	System leaks, flushing of water line



# Appendix B

## Gene Montgomery's Suggestions

- Categories Flow Chart Matrix

## Water Categories and Subcategories

### Municipal

### Agriculture

### Industrial

Residential - continuous human habitation -- Single Family -- Multi-Family	Irrigation - raising crops for commercial purposes	Manufacturing - Any industrial operation that converts materials to goods or services
Institutional - non-permanent human habitation	Livestock - Raising animals for commercial or recreational purposes	Steam-Electric - Electric power generation
Commercial - businesses		Mining - Open pit or underground removal and processing of materials for sale or use
Public/Recreation - common spaces and shared areas		Mineral Extraction - Oil & Gas, brine, geothermal or insitu extraction of minerals
Other - Not in other categories		
Wholesale - Sales to other entities for resale (Water is categorized by end use)		
Reuse - Direct or Indirect reclamation and recycle (Water is categorized by end use)		
Unmetered/Un-Accounted - Difference between what is pumped at source and metered usage		



## Water Categories and Subcategories

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A water supply system such as SAWS might have water uses in these highlighted categories. It is not necessary for a supply system to have all water in a single main category (municipal/ag/Industrial) but the sum of water in all categories would be equal to the total supplied source volume.

## Water Categories and Subcategories

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Unmetered/Un-Accounted - Difference between what is pumped at source and metered usage		

A water supply system such as Austin might have water uses in these highlighted categories since they provide water to a power plant and a commercial tree farm. It is not necessary for a supply system to have all water in a single main category (municipal/ag/Industrial) but the sum of water in all categories would be equal to the total supplied source volume.

## Water Categories and Subcategories

### Municipal

### Agriculture

### Industrial

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Subcategories that would use GPCD as a metric.

## Water Categories and Subcategories

### Municipal

### Agriculture

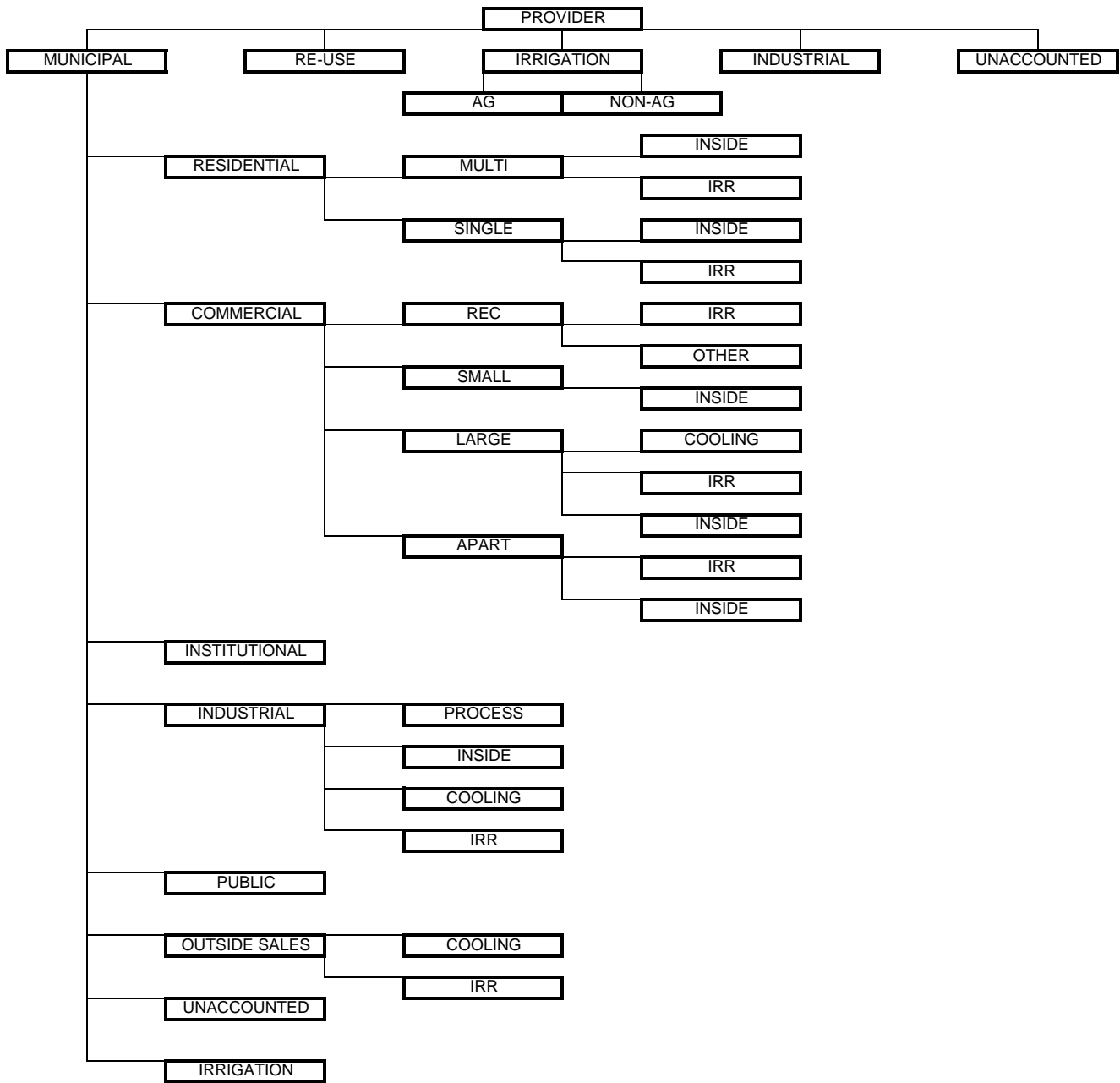
### Industrial

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Other - Not in other categories		
Wholesale - Sales to other entities for resale (Water is categorized by end use)		
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Subcategories that would use UOP (units of production) as a metric.

# Appendix C

## TCEQ's Suggestions



# Appendix D

## Greg Carter's Suggestions

		Total Water Use		
Municipal	Agricultural	Non Ag Irrigation	Industrial	Unmetered / Unaccounted
		suggest that this category be changed to miscellaneous or other or remove it		
Single Family gpcd	Irrigated Crops		Mining - oil & gas, solid fuel, quarry	
Multifamily gpcd	Concentrated animal feeding (cattle feed lots, poultry houses)		Steam Electric	
Commercial	Ag products storage / processing (cotton gin, grain elevator)		Refining	
Industrial	Livestock		Petrochemical	
Irrigation	Aquaculture		Paper	
Institutional	Silviculture		Food Processing	
Public / Recreation			Electronics	
Wholesale			Automotive / Aircraft	
Reuse Direct / Indirect, Recycled			Other Manufacturing	
Unmetered / Unaccounted			Timber	



# Municipal Total Usage

Category	Description	Examples
1. Single Family	Residential properties with single family occupancy	Detached houses, would this include duplexes?
2. Multi Family	Housing for multiple families	Apartments, Mobile home parks
3. Commercial (NAICS 62,71,72,81,92)	Entities using water as part of business processes.	Service industries, office buildings including medical and dental, car wash, hotels, restaurants, large venue stadiums, warehouses, laundrymat, malls / shopping
4. Industrial (NAICS 21-23,31-33)	Process designed to convert a product of lower value to higher value. Includes power production but not irrigation	Construction, manufacturing, mining, quarrying, and oil and gas extraction, steam electric, in addition to the items listed under industrial in the other list - add ports, possibly transportation
5. Irrigation (potable)	Landscape water usage for aesthetic purposes	Irrigation water not athletic fields or parks, nursery, orchard
6. Institutional (NAICS 61,62,92)	Entities intended to house people for non permanent residential purposes	Universities, Schools, Hospitals, Nursing homes, Prisons, Military bases, including repair facilities on base if they would not be considered as industrial
7. Public/Recreational (NAICS 71)	Spaces metered for public or recreation use, squares, parks, public aesthetic needs.	Athletic fields, public parks, fountains, theme parks, zoos, Would fountains be included as part of another water bill? - as for an office building?
8. Wholesale	Sale of municipal water to other entities intended for	Municipalities, MUDs, PUDs, Rural water supply

## Municipal Total Usage

	resale	corps, possibly military bases
9. Reuse Direct/Indirect, Recycled	Entities using recycled/reclaimed water	Golf courses, non-potable irrigation, manufacturing
10. Un-metered/Un-accounted	Difference between what is pumped at source and metered usage	System leaks, flushing of water line, Fire fighting, wastewaters from water plants?, line breaks

# Appendix E

## Karl Fennessey's Suggestions

# Municipal Total Usage

Category	Description	Examples
1. Single Family	Residential properties with single family occupancy	Detached houses
2. Multi Family	Housing for multiple families	Apartments, Mobile home parks
3. Commercial (NAICS 62,71,72,81,92)	Entities using water as part of business processes.	Service industries, office buildings including medical and dental, car wash, hotels, restaurants, large venue stadiums
4. Industrial (NAICS 21-23,31-33)	Process designed to convert a product of lower value to higher value. Includes power production but not irrigation or agriculture.	Construction, manufacturing, mining, quarrying, and oil and gas extraction
5. Irrigation (potable)	Landscape water usage for aesthetic purposes	Irrigation water not athletic fields or parks
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10. Un-metered/Un-accounted	Difference between what is pumped at source and metered usage	System leaks, flushing of water line
11. Agriculture	Water used for commercial	Vegetable / fruit farming,

# Municipal Total Usage

	farming.	grape vineyards.
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