03/23/10

Time Start: 10:05 am Time Stop: 12:10 pm

## Meeting and Conference Call:

Work Group 2 Metrics & Trends

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

## **Council Members , Alternates & Interested Parties**

Spokesperson Karen Guz

Gene Montgomery
Ken Kramer
Cheri Vogel
Nora Mullarkey
Stephen Densmore
Amanda Dewees
Carole Davis
Cheri Vogel
Scott Swanson
Brian Long
Dreema Gross

Bill Hoffman

TWDB Staff
Vanessa Escobar
Laila Johnson
John Sutton
Kevin Kluge

The meeting was called to order with introductions from the group. Karen introduced Cheri Vogel, from New Mexico Office of State Engineer, who was participating via telephone. Cheri began by providing a background and description of the development and uses of the New Mexico Office of State Engineer's GPCD Methodology and Tool.

## NMOSE Program Description:

The Office of the State Engineer is charged with the administrating the state's water resources according to the rules of western water rights. The State Engineer has power over the supervision, measurement, appropriation, and distribution of all surface and groundwater in New Mexico, including streams and rivers that cross state boundaries. In New Mexico a permit is issues for all surface water, ground water, and domestic sources.

Approximately 3-4 years ago the New Mexico Office of the State Engineer decided to include a GPCD reporting requirement in water rights permits. With that new requirement the NMOSE developed a standardized methodology for gallons per capita per day (GPCD) calculations in New Mexico, which is a standardized tool for water use reporting.

Office of the State Engineer staff designed a gallons per capita per day (NMOSE GPCD) calculator to implement the methodology. It uses a Microsoft Excel ™ structure to record the data and to develop the results. The NMOSE GPCD Instruction Module provides the details on how the Calculator works, to include the data to input and how to interpret the results. Both the Calculator and the Instruction Module are available on the Office of the State Engineer website at <a href="http://www.ose.state.nm.us/newtstweb/wucp\_gcpd.html">http://www.ose.state.nm.us/newtstweb/wucp\_gcpd.html</a>.

This methodology provides the drinking water supplier with a categorized baseline of historical and current water use, and assist both the state and the drinking water supplier in planning, tracking and reporting water uses. This methodology is used by the New Mexico Office of the State Engineer to track municipal water use over time and manage the State's water resources into the future.

The GPCD methodology will be required as part of application when requesting to hold water unused (40 Year Plans), in water conservation plans, and mandated water use reporting. It may also be required as a permit condition in sensitive hydrologic basins, emergency permits, and large or excessive users. This type of data is also requested as part of the Uniform Funding Application that is used for evaluating water and wastewater loan fund requests.

This methodology was developed by the New Mexico Office of the State Engineer in cooperation with leading water engineers and conservation experts in the nation. The methodology and the GPCD Calculator were reviewed within New Mexico and nationally by state agencies, municipalities, and university and water conservation experts. It was pilot tested by seven drinking water suppliers within the state.

Some comments related to the NMSOE's experiences since implementing the methodology and tool are noted below:

- The NMSOE does not write a 'Target GPCD' into each new or revised permit, but rather each permit holder has to use the GPCD tool to come up with their own GPCD.
- Cities have to use this tool to report GPCD to the NMSOE, but a city has the option to use other methods of calculating GPCD for purposes of sharing with the public.
- When considering climate and weather patterns it is recognized that drought issues can
  significantly impact the output of the tool. The NMOSE tries to emphasize utilizing the
  tool and the data output can be very useful to a city and the NMOSE in that it allows us
  to know how systems are being impacted during extended droughts. Systems can then
  utilize that information to better plan for their needs and better target their
  conservation programs.
- One of the primary roles that the NMSOE has is to assist cities in setting their own goals and ranges within a five year rolling average.
- The tool provides a sector based analysis which allows for a more in depth analysis of water usage. Information gathered from this sector based analysis will not ever be use by the state to penalize cities for economic growth.
- The was a lot of "push back" and resistance from systems when it was announced that the state would now be requiring this reporting requirement and the use of the tool.
- It is ineffective for a system to implement conservation programs if they are not even able to organize data about their system usage. This tool provides them an opportunity to organize data and interpret data so that the system can better develop and implement their conservation programs.
- The NMSOE is considering producing a simple more concise document such as a "GPCD Light" that would be used for more simple, and smaller systems.
- One of the most difficult components of the tool were the issues associated with Multifamily usage.
- This tool uses the 2000 census data for population because it is the most recent and mainstream authorities when it comes to population.

- As a tool the calculator is designed for interpretations and analysis that looks at the
  water that is currently being used. This type of data and analysis can be very useful for a
  provider in their own internal planning purposes.
- The tool assumes the same occupancy coefficients for both single family and multifamily.
- There is no separate institutional category.
- One thing that can be changed about the tool is presenting the data in an alternative more user friendly format.

The question was asked of workgroup members and discussed as to whether a GPCD reporting tool would be useful to water providers in Texas. Several workgroup members who represented water provider systems stated that such a reporting tool would provide useful data for internal planning purposes as well as provide useful information for the development and implementation of conservation programs. It was also stated that completing this type of form would not be very difficult, because most of the data input required is already being utilize for other program evaluations internally by providers.

It was also stated that information and data, such as that comes from NMOSE GPCD Tool, seem to be an area where data and analysis is lacking. The GPCD information that is currently being generated by TWDB is primarily for the purposes of planning on a regional level rather than conservation and planning on a provider level.

In the workgroup discussion it was pointed out that this type of GPCD data (*generated from the NMSOE GPCD Calculator*) serves a completely different purpose than the type of GPCD data that Texas Water Development Board (TWDB) Water Resources Planning Division generates. There was some emphasis on the fact that GPCD data generated by TWDB Water Resources Planning Division is used for the purposes of planning; and in Texas water supply planning is done on a water user group level, not necessarily a water provider level. Additionally, it was emphasized that Conservation Division program development and implementation occurs on a provider level. GPCD generated by a tool such as the NMOSE GPCD Calculator is primarily used at a provider level for the purposes of internal planning and conservation.

A comment was made that the Council should consider what would be the ultimate goal of a standardized GPCD methodology in Texas? Would it be for regional planning purposes, or provider water conservation planning purposes? The purpose and use of the metric would influence how the methodology is designed.

A comment was made that a GPCD such as New Mexico's would be a great replacement or inclusion to the TWDB's current Water Conservation Annual Report Form. A comment was made that if that were to be the recommendation , that the TWDB would need to consider if it would be appropriate to consider including use of the GPCD reporting tool into the utility profile as well. Incorporating into both the utility profile and annual report would ensure more consistency.

There was an update from TWDB staff on the research and planning grant project that will be funded entitled: "Texas Water System Map: The Compilation of a Statewide Geodataset and

Digital Maps of Water Service Area Boundaries." The intent of this research project is to obtain a single geodatabase of service area boundaries for all public water systems that meet specified criteria (approximately 4,500 systems). The number of systems is significantly higher than the number of municipal water user groups in the 2007 State Water Plan due to the fact that one water user group may be made up of multiple systems; particularly in the case for the 254 rural County Other water user groups. The statewide geodataset will allow for a statewide estimate of water system populations.

It was suggested that because the population component of GPCD is a primary concern, that it would be important to develop a standardized method for determining population. It was suggested that some members of the workgroup should get together to draft a description of a recommended methodology for determining the population component of GPCD. This description of population estimation method would be further included in the workgroup's overall report and recommendation to the Legislature.

The workgroup adjourned at 12:10 pm.