

(Prepared by/Return to: Amy Kahler, Des Moines Water Works, 2201 George Flagg Parkway, Des Moines, IA 50321, 515-283-8760)

Meeting
CENTRAL IOWA REGIONAL DRINKING WATER COMMISSION
Technical Advisory Committee
A.C. Ward Treatment Plant
September 17, 2015
10:00 a.m.

Present

The following attendees introduced themselves:

Tim Hoskins (Norwalk), Karen Oppelt (Altoona), Ken Plager (Ankeny), John Gibson (Waukee), Dan Klopfer (DMWW), Ted Corrigan (DMWW), Amy Kahler (DMWW), Shane Kinsey (Johnston), Dale Acheson (Urbandale Water Utility), Diana Wilson (WDMWW), Madeline Sturms (Pleasant Hill), Bill Stowe (DMWW), Gary Benjamin (Xenia Rural Water District), Jeff May (Clive), Dan Lovett (Xenia Rural Water District).

Members of the public in attendance: Don Peterson

Review Information Received from Committee Members

Ted Corrigan and Dan Klopfer briefly reviewed information that had been received from committee members, including population projections through 2050, projected demand through 2035, per capita demand, peak flow, and average flow. A spreadsheet summarizing data (in five year increments) for each community has been developed and will continue to be populated as data is received.

Review Plans for Communities Not Participating on the Committee

Ted Corrigan will reach out to the communities not directly participating on the committee to receive their information. In the absence of information from the communities, MPO data will be used.

Define Boundaries of the Study Area

Ted Corrigan distributed a draft summary of the boundaries of the service area to be considered in the long-range planning of the Core Network. Nearly all of Polk County will be included in the study, with a few smaller-community exceptions. Intentions are to *not* include any areas north of the Skunk River, nor Marshall, Jasper, Marion, and Story counties. Ted made note of a few specific communities:

- Grimes – has expressed interest through Xenia Rural Water District. Yes for now.
- Carlisle – No
- Mitchellville – TBD
- Indianola – No
- Winterset – No

See separate document ***Study Area Boundary Considerations*** for detail on the recommended boundaries.

Discuss Use of MPO Data

MPO data for each community has been added to the spreadsheet. It was noted that in most cases, community projections for demand are greater than MPO data and in finalizing the data to be used for long-range planning, it will need to be determined whether to use community specific or MPO data. This will be discussed at October's meeting.

Des Moines Water Works Board Activities for September

Ted Corrigan and Dan Klopfer reviewed the Des Moines Water Works Board of Trustees agenda for the upcoming September board meeting, noting the following items of interest:

1. Acceptance of Fleur Drive East Basin to River Intake Connection
 - a. Project allows DMWW to take water from the gallery directly to Fleur Dr. intake structure, pulling lower nitrate water directly into the treatment process.
 - b. \$500k project.

2. 2015 Saylorville Water Treatment Plant Chemical Feed Modifications
 - a. Chemical feed modifications to get longer life out of membranes and have them perform at a higher level.
 - b. Bids in \$150k range

3. Request Authorization to Solicit Bids for 2015 Crystal Lake Pumping System and Establish the Date of Public Hearing as the Date of the December 2015 Board Meeting
 - a. Pump station and piping to allow DMWW to pump water from river to wetland to Crystal Lake to better denitrify source water, or alternatively, to pipe directly to McMullen Water Treatment Plant.
 - b. Part of "chain of lakes" concept developed for serving McMullen Treatment Plant – connecting denitrified source waters (i.e., sand/gravel pits) and allowing them to flow to Crystal Lake, serving McMullen Treatment Plant. Will also expand capacity of plant.
 - c. \$2.5 M project

Open

Dale Acheson asked what other things DMWW is doing to address high nitrate levels in the Raccoon and Des Moines Rivers. Ted Corrigan responded that, in addition to developing the "chain of lakes" concept, there are evaluations currently underway studying 1) a new and larger nitrate removal facility (magnetic ion exchange and reverse osmosis) and 2) developing a wetland in Water Works Park as part of the park plan. Additionally, DMWW is working with WRA to pass the nitrate brine to WRA's wastewater treatment process so nitrate brine will not be discharged to the river. This is projected to be completed mid-2016. Ted also indicated that DMWW is evaluating process changes to improve disinfection byproducts (TTHMs), including 1) enhanced softening, 2) granular activated

carbon contactors, 3) aeration within storage facilities, and as a last resort, 4) chloramination as a disinfection method. Once the TTHM study is complete, that study will be presented to the Technical Advisory Committee.

Next Meeting Date

The next meeting will be October 15, 2015, location to be determined. The focus will be reviewing population and demand projections.

Assignments

If you have not forwarded your community population/demand data to Dan Klopfer (klopfer@dmww.com), please do so by October 1. As a reminder, that data includes:

- Water long-range plan, if one exists, for each member community
- Community population projections through 2050
- Per capita water use – what changes, if any, are expected in per capita water use?
- Demand projections through 2035 for each community, and for this demand, how much will be necessary from the Core Network?

Meeting adjourned at 11:15.

Study Area Boundary Considerations

Regional Technical Advisory Committee

September 17, 2015

Polk County

Currently, Polk County is almost entirely served from the Core Network. There are some exceptions including Grimes, Altoona, West Des Moines, and Carlisle. Each of these cities has its own treatment facilities. West Des Moines currently receives capacity from the Core Network and Altoona has a Core Network connection. Core Network Capacity needs for these communities will be included in the Study. Grimes is currently evaluating participation in the Study. Capacity for Grimes will be included in the Study as appropriate. Carlisle is not currently interested in capacity from the Core Network. Capacity for Carlisle will not be included in the Study. Capacity for the remainder of Polk County will be included in the Study from a planning perspective.

Central Iowa Rural Water

To the north and east of Polk County, Central Iowa Rural Water serves customers in Story, Marshall, and Jasper counties from connections in Marshalltown and Newton. This area is currently well served and recent inquiries indicate it is not likely Central Iowa will be interested in receiving capacity from the Core Network in the foreseeable future. Capacity for Central Iowa will not be included in the Study.

Marion County Rural Water

To the southeast, Marion County Rural Water provides service to customers in Marion County. Marion County Rural Water has experienced problems with capacity for expansion in the western portions of its system but the system is not currently growing. It is not likely Marion County will be interested in receiving capacity from the Core Network in the foreseeable future either directly or through a connection with Warren Rural Water. Capacity for Marion County will not be included in the Study.

Warren County/Warren Rural Water

To the south, Warren Rural Water provides service to customers in Warren County and the northeastern three quarters of Madison County. Two notable exceptions are Indianola and Winterset. Winterset has had source water issues in the past but has invested significant capital recently and seems satisfied with their near term capacity. Capacity for Winterset will not be included in the Study. Indianola currently has no capacity issues. With source and treatment capacity of 3 MGD and peak demand of 1.5 MGD they are not currently interested in capacity from the Core Network. Capacity for Indianola will not be included in the Study. Warren Rural Water receives all of its water supply from the Core Network and is likely to continue doing so. For that reason, capacity for the entire Warren Rural Water service area will be included in the Study.

Rathbun Rural Water Association

Further to the south, the Rathbun Regional Water Association serves customers in Lucas and Monroe Counties as well as others. Rathbun Regional Water is a large system with ample capacity and resources and this area will not be considered as potential future service area.

Southern Iowa Rural Water

To the south east, the Southern Iowa Rural Water Association provides water to customers in Union and Clarke Counties and portions of Adair and Madison Counties from connections including Greenfield, Creston, and Osceola. It is unlikely Southern Iowa will be interested in capacity from the Core Network. Capacity for Southern Iowa will not be included in the Study.

Xenia Rural Water District

To the west and northwest, Xenia Rural Water District provides water to customers in Dallas and Boone Counties as well as portions of Guthrie, Adair, Madison, Green, Story, Hamilton, and Webster Counties. This service is provided from connection to the Core Network as well as Ames, Boone, Madrid, and Xenia's own treatment plants. Xenia's capacity needs from the Core Network will be included in the Study.