

March 25, 2019

Shakopee Public Utilities Commission
255 Sarazin Street
Shakopee, MN 55379

RE: City of Shakopee Review Comments for SPUC Comprehensive Water System Plan and Water Supply Plan

City staff have been able to review SPUC's Comprehensive Water System Plan and have the following comments which will need to be addressed prior to Metropolitan Council approval. First set of comments are in response to the Comprehensive Water System Plan, dated September 13, 2018.

1. Current Shakopee population is incorrect. Stated as "approximately 37,000", this number reflects 2010 census data. This number should be the latest Metropolitan Council estimate for 2017, which is 41,519.
2. On page 13, Table 3-2 "Projected Population Data" is not consistent with revised City or Met Council projections for city population, please refer to the following table for consistent information.

City of Shakopee Population Forecasts				
	2010	2020	2030	2040
Population	36,946	47,800	55,900	62,600
Households	12,722	16,300	19,400	22,100
Employment	18,831	25,700	29,100	32,800

3. Existing and projected land use maps and table should be revised to remain consistent with the City's 2040 Comprehensive Plan land use maps and tables.

Table B-1 through B-5 "Projected Water Consumption by Land Use" need to be revised to reflect correct planned land use categories as defined in the 2040 Comprehensive Plan and correct full build out acreage for these planned categories. Information on these tables appears to be from the 2030 Comprehensive Plan which will not be in effect once the 2040 Plan is adopted.

Figure 2-3 "Existing Water System Model Map" and Figure 3-1 "Existing Land Use" do not include the new Windermere development, this should be included in both maps.

4. Page ES-1 – The Existing Facilities inventory does not match the Water Supply Plan inventory in Table 5 of that plan.

5. Page ES-1 – 8 million gallons in well capacity plus 11.25 MG in storage is a substantial amount over the historic maximum day demand.
6. Recommend to include a more detailed discussion about the history and master planning for a water treatment plant, referencing any past studies that have been completed, etc.
7. Appendices were not provided for review. Please provide.
8. Page 38 – Suggest including more specific info on Manganese to supplement and support the text in section 5.2.3.2 as there are several wells within the window that should be monitored a little more critically to ensure they do not exceed the .1 mg/L health risk guidance level with mention in a health risk context vs. only discussing the aesthetic nuisances.
9. Page 37, section 5.2.3.1 – While the Nitrate levels as reported in the annual CCR are below the MCL, only barely. A more robust discussion about the timing of the testing from year to year, the historic trends, etc. should be discussed to very explicitly detail the extremely closeness of exceeding the MCL. The discussion of blending water to mitigate the levels should be better discussed. (e.g. since the wells are connected directly into the distribution/transmission system, there is little blending that occurs until further outward into the system; therefore, there could be potential consumers immediate to the higher-level nitrate wells that are receiving the higher levels of nitrates and this should be further disclosed in more detail to consumers if indeed fact. The historical levels of nitrates are concerning with little fluctuation over the years. Are the well head protection initiatives, testing, blending, etc. enough to protect and supply safe drinking water supply relative to Nitrates? It is not certain with the info provided.

Remainder of comments are in response to Water Supply Plan dated December 12, 2018

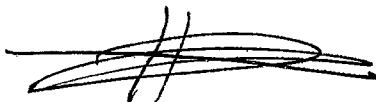
10. Table 3. Valley Fair is listed as the high drinking water user. This property needs to be better inventoried to confirm meters vs. sanitary sewer meters vs. any possible private wells. There is an auxiliary sewer meter, not certain on the entire story about having this auxiliary meter vs. the SPUC meters.
11. Table 5 – The ground vs. elevated inventory does not match the Comprehensive Plan inventory on page ES-1 of that plan.
12. P. 14, last paragraph – Seems that 125.5 gallons per capita is an extremely high assumption that would lead too much of an overbuild of the system.
13. Table 10 – There are many boxes that are checked where the city is not aware of the indicated coordination as follows:
 - a. Lake – the “other” mitigation measure box that is checked, and the “monitored” regular check-in box
 - b. Wetland – same comments for the boxes checked under Lake
 - c. Trout Stream – same comments for the boxes checked under Lake

14. Table 11 – While the WHP was adopted as indicated on 11/2011, it is apparent from discussions with city staff that there is a lack of adequate coordination with the city pertaining to the well head protection implementation initiatives, issues, etc., most notably when it comes to development and surface water coordination.
15. Table 12 – A 2020 CIP year of Water Treatment Facilities does not reflect the current CIP.
16. Please provide the city a copy of SPUC's Emergency Response Plan dated May 2017.
17. Table 21 – the New Water Conservation Ordinances action taken box is checked "no". It seems as an initiative that dates back to the 2006 plan commitment that this should already be completed. Verify status.
18. Table 23 – Per the table, there are only 300 automated meters. An AMI project is included in the CIP to automate meter reading over the next few years. Please confirm that this project is expected to replace all mechanical meters. The coordination of this is important to better monitor the city's discharge into the sanitary sewer also (e.g. recent event where a water service/line broke, with 280k gallons flowing into the city's sanitary sewer system).
19. Table 26 – Install AMI timeframe indicates "when possible". Suggest to update to match timeline in CIP.
20. Table 30 – Not aware of SPUC's participation in any Rain Barrel initiative with the watersheds.
21. Table 31 – Seemingly very little educational inclusion methodologies are being used.

Find SRF Memorandum No. 11925 attached requesting revised water supply forecasts for the AUAR study currently underway.

The City can provide all required data by request. If there are any questions or concerns about the City's comments, please contact city staff, thank you.

Sincerely,



Bill Reynolds
City Administrator

CC
Michael Kerski, Director Planning and Development
Steve Lillehaug, City Engineer
Shakopee Public Utility Commissioners



Memorandum

SRF No. 11925

To: Mark Noble, Senior Planner
Planning Division, City of Shakopee

From: Stephanie Falkers, Senior Associate

Date: March 22, 2019

Subject: Jackson Township AUAR – Water System Planning

Jackson Township AUAR

SRF Consulting Group is assisting the City of Shakopee with the development of an Alternative Urban Areawide Review (AUAR) for the areas included within the Jackson Township Orderly Annexation Area to the southwest of the city. The AUAR is a form of environmental review, intended to describe a development scenario and assess potential impacts to environmental and cultural resources. Impacts to public infrastructure services are also assessed, including water and sanitary services and the transportation network.

The Jackson Township AUAR will assess the impacts that result from a full-build scenario of the study area, according to the land uses proposed in the Draft 2040 Comprehensive Plan Update. This scenario includes over 600 acres identified for residential development and over 550 acres of commercial/industrial development (see proposed land uses on the following page).

To assess the potential impacts and need for mitigation, a full build-out of the proposed 2040 land use plan should be used to inform any water and sanitary modeling. The use of the 2040 growth assumptions will result in a more accurate depiction of water needs to support the growing area and will allow for the identification of appropriate mitigation activities within the AUAR.

It is our understanding that the current Comprehensive Water System Plan for the City, includes growth assumptions that align with the growth assumptions proposed in the 2030 Comprehensive Plan. To provide an accurate assessment of the future water system, the modeling should be updated to reflect the growth assumptions included in the Draft 2040 Comprehensive Plan Update.

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