

## Questions/Clarifications with the City's response

Q1 Section 3, 3.01, 2 - Purification Plant Master Planning Experience (required), second bullet point (page 5): Please clarify the second bullet point as it relates to the water purification master plan, specifically, biological treatment and nutrient removal.

**A1** *One aspect of the master plan is an evaluation of existing treatment methods as well as discussion of other treatment methods; this list is not exhaustive but an example of water treatment methods; please include relevant water purification/treatment technology experience and/or expertise.*

Q2 Section 3, 3.02, task 1.1 third bullet point (page 6): Please clarify who the City task holders are that will require communication?

**A2** *The task holders at the City will be determined at a later date but will be a smaller group of approximately of 3 to 6 with one main point of contact.*

Q3 Section 3, 3.02, task 1.4 - Future Condition, 1 (page 7): Please clarify the type of forecasted growth needs of the City?

**A3** *Coordinate with the City to verify forecasted growth, service areas, and water demand.*

Q4 Section 3, 3.02, task 2.2.B – Develop a Well Field Development Plan, i, 4 (Page 9): Will the selected consultant rely upon maintenance worker knowledge or make assumptions with this task to insure that completion meets the desired timeline?

**A4** *The expectation is that the consultant will meet with the City maintenance staff and review records/history in conjunction with their own knowledge/approach to achieving optimal/cost effective ground water extraction which will coincide with increasing demand over the course of the planning periods.*

Q5 Section 3, 3.02, task 2.2.B – Develop a Well Field Development Plan, ii, 1 (Page 9): Will the airport water rights to be moved include the Diversion Channel pump DCII?

**A5** *No.*

Q6 Section 3, 3.02, task 2.2.C – Big Sioux River Surface Water Rights Conversion, i, (Page 9): Please clarify which aquifer is expected to receive the transferred surface water rights from the Big Sioux River.

**A6** *The intent is to task the consultant with determining if Big Sioux River Surface Water Rights can be converted to Big Sioux Aquifer Ground Water Rights and identify the process and potential impacts/considerations.*

Q7 Section 3, 3.02, task 2.3 – Ground Water Extraction, iii, 1 (Page 10): Will the selected consultant need to create a hydraulic model of the underground aquifer or will the USGS model be available?

**A7 *The USGS model is available.***

Q8 Please clarify the aquifer to be modeled, as Sioux Falls currently harvests water from two aquifers?

**A8 *The Big Sioux Aquifer is the aquifer of interest for this task.***

Q9 Section 3, 3.02, task 2.3 – Ground Water Extraction, iii, 3 (Page 10): Will the selected consultant need to break this down to surface water and ground water?

**A9 *The primary source for raw water is ground water considering that the Big Sioux Surface water is not available during severe drought conditions that would trigger the most severe water restrictions. However, another scenario would be the loss of distribution supply from Lewis & Clark which could require implementing the most severe water restrictions when drought is not necessarily a limiting factor and surface water is available.***

***The intent of this task is to evaluate the City's ability to self-sustain minimum water volume requirements throughout the timeline of the planning periods, assuming full utilization of City owned water right allocations and impact of identified drought restrictions which could limit extraction volumes to less than full water rights volumes.***

Q10 Section 3, 3.02, task 2.4 - Water Purification Plant Facilities and Equipment, A; & Task 2.5 Water Purification Plant Capacity, A (Page 11): Will the selected consultant determine peak flows based on equipment capacity or hydraulic capacity?

**A11 *Whichever is the limiting factor. It is expected that the consultant will identify equipment/operational capacity limitations, hydraulic limitations, and treatment limitations (i.e. disinfection) to identify the existing capacity limitation and provide the data necessary to evaluate potential improvements to increase plant capacity.***

Q11 Section 3, 3.02, task 2.7 – Future Growth and Peak Demand Solutions, B, ii (Page 13): Please define the aquifer south of Sioux Falls

**A11 *The primary aquifer to consider is the Lower/South Big Sioux aquifer; The intent is to identify the nearest available water rights, level of difficulty of extraction and transmission, and compare water quality with that of the ground water currently being extracted by the City.***

Q12 Section 3, 3.02, task 2.7 – Future Growth and Peak Demand Solutions, B, iii (Page 14): Please clarify what distance from Sioux Falls (radius in miles) will need to be evaluated for a regional system.

**A12** *The intent of the task is to obtain from the consultant insight on potential future needs and opportunities within the consultant's assessment of reasonableness with regard to distance from the City for a mutually beneficial water supply solution. The City doesn't anticipate the reasonable area of interest to exceed a 30 mile radius from the City but is relying on the results of this task to better inform the City of the benefit and reasonableness of regional partnership opportunities.*