

Swisher Water Questions

Through 2/8/23 Public Information Meeting

Questions as submitted by the community through the 2nd Public Information Meeting on 2/8/23. Additional questions submitted after 2/8/23 will be published to the City website separately. If you don't see your question below or on other question /response document, please email swisher-comm@southslope.net and a response will be provided.

NOTE: If there's a number after the question, this indicates the frequency of the question submitted by the community.

HR Green's Responses are provided in Green.

1. When will households begin to be charged for this water system? (x5)
 - a. Will this take place let's say 7/1/23 before anything starts to pay ahead before actual hook-ups.

If the vote passes, the City Council will work with its Municipal Adviser to set and establish a rate structure. There have been preliminary discussions for the following concept of a rate structure:

 - Low, nominal monthly rate for the overall community to be used for the initial capital improvements necessary for a Municipal Water System.
 - An additional Flat Rate for Water Service to those customers which are directly served by the Municipal Water System. This would be a similar concept to the Flat Rate assessment for Sewer Service
 - Upon full build-out and completion of the Water System in the future, billing for water and sewer is anticipated to be based on metered use as opposed to a Flat Rate.

If the community votes to implement a Municipal Water System It is anticipated that City ordinances would be developed over 2023 with initial community-wide rates to go in effect no sooner than January 2024.
2. As water mains are built in each area, how much will it cost the homeowner to connect to City water? (x5)
 - a. Is the money we are to pay now included in bringing the water up to our house?

The preliminary costs identified by HR Green are based on study-level anticipated costs for the following:

 - Capital costs: includes incremental costs for upsizing the planned wells within the developments, wellhouse buildings, water tower for storage, water mains including hydrants and valves, and service lines to a new curb stop located near the property line.
 - Operational expenses: includes labor and staffing for the water system Operator, electricity consumption, and chemicals (as needed)
 - Debt service payments over an extended loan

- The costs for the final connection between a curb stop and the residence/structure will be determined as part of a future City Ordinance. Final costs will be dependent on a number of factors including location, type of pipe, and distance to City main

- b. Where will the meters be located? Basement, outside, meter vault? Will they be remote readers? Will City own them and service them? (x2)

It is generally anticipated that meters would be installed in the basement. However, meter location may be made on a case-by-case basis with an option for a buried meter vault.

Ownership of the service line varies by community and will be determined with a future City Ordinance. For reference, it is common for customers to own (at minimum) the service line from the residence/structure to a curb stop set near the property line. Private service line ownership may extend the entire length to the connection at the water main.

Meters are anticipated to be furnished and serviced by the City. Customers may be expected to protect the meter from freezing or other damage within the respective residence/structure. It is common in the industry for new meters to be remote read.

3. Costs for phase 1 and Phase 2 were discussed. Would the cost in phase 2 be- phase 1+phase2 plus water usage be your total water bill? Cost is totally confusing. And what if no Grant's could be executed? (x4)

Additional information on costs and implementation included on updated presentation slides

- a. What would monthly bills run if Swisher passed the water vote in March ... confused about grants mentioned (something like 20% discount)? Mention of a federal Infrastructure bill - what is that about?
- Federal Infrastructure Funding information included on updated presentation slides
- b. What low-income assistance is available for those who are unable to pay city utility expenses?
- c. Regarding state/federal grants requiring a certain percentage of our population to be defined as low-income, what is Swisher's per capita income? What percentage of low-income residents is required to submit grants to offset expenses?

Data from the Iowa DNR's Socioeconomic Assessment Worksheet provided as part of the SRF loan program:

- Swisher has a Median Household Income of \$84,167 compared to a value of \$60,523 for the State of Iowa.
- Swisher has 2.1% below the Federal Poverty level (11.5% State of Iowa) and 6.8% below 200% of the Federal Poverty Level, which are used as benchmarks associated with the SRF Loan Program.

- d. What type of rate structure is the City planning? Flat rate? Based on usage? What will be the expected typical residential cost for a family of 4?

See response to Question #1 above.

- e. How is the City funding this? And how will it be paid back? Will water rates reflect installation and development costs?
Funding for water-related infrastructure is anticipated to be paid through user rates. The analysis and preliminary rates assume 100% funding through user rates. Presentation slides provide additional examples of the implications of reducing user rates by utilizing grants and infrastructure funding, combining/consolidating projects with other City CIP project, etc.
4. This is more of a statement I found out from our homeowners insurance. Having city water will NOT decrease our homeowners insurance. It may help the Fire Department with available water but as long as our fire department is a volunteer fire department our homeowners Insurance will Not change!
See updated presentation slide that provides additional information on the parameters impacting the ISO Public Protection Classification (PPC) value. Additional responses below.
 - a. Every insurance company operating in the State of Iowa must file their "premium rate determinations" with the Insurance Division, so the use of ISO PPC's is NOT secret nor proprietary. As you know, departments with full-time employees are generally rated PPC 1-3. Volunteer departments are usually PPC 5-10 but towns with city water are usually PPC 5-7. Towns with no city hydrants are always PPC 9-10.
See Letter of Endorsement from JMFD for information on surrounding communities and anticipated reduction (improvement) in the PPC rating for Swisher.
 - b. ISO Ratings ... heard this drives homeowners insurance premiums. Please explain more about what ISO means.
The Insurance Services Office (ISO) is a subsidiary of Verisk which provides Community Hazard Mitigation services for Fire Protection Ratings (see PPC above), Flood Management Community Rating System (CRS) and more. These rating systems are used within the insurance industry to assist insurers in setting insurance rates based on the mitigated level of risk.
 - c. Should each resident contact their insurance provider to see how their homeowners insurance might be impacted if there is a fire hydrant near your home?
Residents are encouraged to contact their insurance provider if they have specific questions as to their individual policies.
5. Also, with our current well we pay \$75.00 a year for our water and maintenance of our well. Being retired and on a fixed income why would we want to pay anywhere up to \$100.00 or so a month during phase 2. (x2)
See responses to questions #1, #3, and the updated presentation for additional information on costs and implementation. See response on question #4 for the implications to individual homeowner's insurance.
6. Will the monthly fee, charged for water, also include the costs of the streets that will be improved when a water main is put in? Meaning the fee will cover more than water. People are saying they would prefer their money go towards improving city streets instead, but it is my understanding that the city streets will be improved during this project. (x2)
The costs presented in Phase II include surface restoration for installation of the water main and include planning-level assumptions on roadway, sidewalk, driveway and other impacted surface

features. The Implementation of Phase II would consider other City Capital Improvement Plan (CIP) Projects already planned for sidewalk and roadway rehabilitation/replacement. By combining projects, surface restoration items could be funded separately, which would reduce the costs that would go towards water rates.

7. What are the disadvantages of having City Water?

The primary disadvantages are the infrastructure capital costs.

8. What are the benefits of having wells?

Wells classified as a Groundwater source by the EPA required minimum levels of treatment as compared to Surface Water sources. This classification applies to both public and private wells.

9. If city water is passed, will any residents be able to opt out of city water?

If the vote passes, the City Council will work to develop and pass updated City Ordinances for the ownership, public and private requirements, private well programs, and developmental standards for a Water System. The overall goal of a Municipal Water System is to provide water service throughout the community. Individual wells could remain in place to provide irrigation service in accordance with final Ordinance policies.

10. Will everybody be charged a flat rate for water or will there be water meters and each house will be charged for the amount of water they use? (x2)

See response to Question #1 above.

11. How will city water get into my house? Will the basement floor/foundation be cut into?

See response to Question #2 above for the meter location. Exact details of service line routing will vary on a case-by-case basis.

12. How long will phase I last before Phase II switches over?

Phase I is anticipated over a 3-5 year implementation period, depending on schedules for funding, construction, and other factors. The implementation period for Phase II could be implemented over a 10 or 20-year period depending on outside funding with grants, City CIP planning, and other factors.

13. What's the difference between phase I and phase II? Why are the prices different?

Phase I includes two initial wells, a water tower, and transmission main to connect these planned improvements and current adjacent Public Water Systems. The costs for Phase I are generally to provide source water and storage improvements for the community.

Phase II includes the full build-out of the distribution system throughout the entire community, and additional wells as needed to meet overall community needs. The costs for Phase II are generally to provide a distribution system piping network.

14. Regarding current well testing options - are those tests specifically for the two contaminants highlighted at the Jan 25th water meeting or for a broader scope of contamination?

Private well testing requirements are regulated by Johnson County Board of Health which currently requires sampling for bacteria and nitrate. Public Water Supply wells are regulated by the Iowa DNR and require sampling for over 90 constituents.

Areas of Swisher are currently served by a combination of Private and Public Wells. Private wells can optionally test for additional water quality parameters. However, a Municipal Water System would be required to test for all water quality parameters identified by the EPA.

15. Please clarify ... have heard regarding filling water tankers - JMFD has buried a tank/well on the fire station property that will fill only 1 or 2 tankers.

JMFD has a well at its facilities to refill tanker trucks. JMFD has a combination of trucks with varying storage tank sizes. The actual tanker truck filling combination and rates will vary.

16. If JMFD is at a structure fire at the other end of their district, does JMFD need to find other sources of water?

JMFD's service territory extends outside of Swisher. The benefits of a Municipal Water System by the City of Swisher will provide a direct impact to residents in the City of Swisher. Water sources for areas outside of the City of Swisher would likely remain as they are today through the use of tanker trucks.

17. Could the potential number of tanks required to fight a structural fire be up to 20 tanks?

JMFD has trucks with tank sizing varying from 400 to 3,000 gallons with a total storage volume of 6,400 gallons. The National Fire Protection Agency (NFPA) recommends a fire flow rate of 1,000 gpm for one and two-family dwellings that don't exceed two stories in height. By NFPA standards, this supply rate corresponds to a minimum storage volume of 20,000 gallons. As is current practice, JMFD refills tanker trucks at its facility to respond to a structure fire.

18. Is JMFD paying for other sources of water or do our community partners cover this expense?

This question can be addressed to JMFD.

19. Why has Swisher never had a 55+ retirement community or any sort of senior housing?

A retirement community was previously located in Swisher. There are a number of factors that would impact the decision of a private business to locate to certain communities. The availability of water, fire protection, and sewer service are generally considered as critical utilities to attract developments.

20. Where would a water tower be located or has that been decided?

The siting of a water tower was included as part of a planning-level study completed by HR Green. Three tower sites were considered for the overall impact to the proposed water system. The final water tower location is anticipated to be on a joint 4-acre site with one of the proposed groundwater wells. Preliminary discussions with developers have identified that land would be made available within a 80-acre development near the northwest side of City limits.

21. Will the water mains follow the streets?

Generally, yes, water main will be installed along City streets within the roadway right-of-way.

22. It also was mentioned that with City Well and Tower that there are two new developments interested if we get a tower. With that said then we will also incur additional costs as the current sewer system will need to be upgraded to support the additional 350 to 450 new homes or commercial buildings. This will be an additional cost to each homeowner.

The City has annexed approximately 110 acres of land that is anticipated for future development. Of the total 110 acres, approximately 40 acres has a preliminary development plan. The City is planning to install a sewer main to serve these areas of development, the plan is located on the City's webpage:

<https://www.swisheriaorg/news>

23. What type of treatment will there be, if any to the water? Chlorine, Fluoride? (x3)

Treatment is not required by the Groundwater Rule. However, it is common to chlorinate municipal water systems in order to provide protection against bacterial growth in the system. A phosphate-based sequestering agent and inhibitor may be provided depending on final water quality to control iron/manganese and water corrosivity. Water fluoridation is an option depending on final water quality and desire within the community for additional fluoride in the drinking water source.

24. Will the City drill a new well for the water supply? Or use existing wells?

Two new wells are anticipated as part of the Phase I improvements. Existing wells could be eligible for a future buy-back program based on a number of factors including methods and materials of construction, capacity, water quality, and source water control/protection. The details of a well buy-back program would be developed as part of a future City Ordinance.

25. Will there be storage, elevated or in ground? Or just pumping as needed?

An elevated storage tank (aka water tower) is proposed as part of the Phase I improvements.

26. Has a ground water assessment been performed? Is naturally occurring ammonia present? PFAS? Nitrates? Manganese? What parameters were checked for? (x2)

An existing Public Water Supply well drilled into the target Silurian aquifer was recently sampled. The results did not result in any water quality parameters exceeding EPA's primary (enforceable) drinking water standards. Iron levels were slightly elevated compared to a non-enforceable secondary standard that are established for overall water aesthetics (color, odors, taste, etc.).

27. Have test wells been done to confirm capacity capabilities? How deep will the well/wells be?

Aquifer capacity testing has not been conducted by the City. The proposed well depth is anticipated to be approximately 500 feet deep.

28. Will existing water mains be used from PWSs or private/community wells? Will water mains be sized for fire flow?

Water mains will be sized for fire flow service (i.e., minimum 6-inch diameter). The City has established supplementary design and developmental standards to size water main assuming a connection to a future water system. As such, water main designed and constructed in accordance with those standards would be utilized.

29. Will there be a storage tank mixer installed to mitigate stagnation and stratification of water? Or will the tank be designed so that there is a separate influent vs effluent to protect from this issue?

A tank mixer and piping arrangement would be determined as part of final design. In general, storage tank design considers factors such as these to increase overall tank turnover and minimize areas of stagnation.

30. If new mains will be installed, how will they be installed? Bored vs open cut? What material will they be? PVC vs DI? (x2)

Water main installation will be determined as part of final design. Both trenchless and trenched installation would likely be utilized depending on the final alignment, existing surface features, and various other factors.

Water main material would be in accordance with the Statewide Urban Design and Specification (SUDAS) Standard Specifications, which allow ductile iron (DI) or polyvinyl chloride (PVC).

31. If PVC, have ground assessments been done for contaminants from underground storage (UST) past and current? Since plastic is permeable.

Leaking underground storage tanks (LUSTs) will be evaluated on a project-by-project basis. Where areas of groundwater contamination are present, water pipeline and gasket materials will be provided in accordance with Iowa DNR requirements.

32. What will the distribution system boundaries be? Will it include the East side of I380?

At this time, the distribution system is anticipated to serve the Swisher corporate limits. There are no current plans to extend service east of Interstate 380.

33. Will they be phasing in areas as they install water mains or will it be done all at once?

Phase II installation of water main is anticipated to be a phased approach.

34. What will ownership of the service line be? City to stopbox/Homeowner to meter? All City? All Homeowner?

See response to response to Question #2 above.

35. What will material of service lines be? Copper or PEX? Will homeowner have option?

SUDAS allows service line materials to be copper, PVC, brass, polyethylene, or ductile iron pipe in accordance with local codes and City's jurisdictional requirements.

36. Who is responsible for final connection? Will the City make recommendations of contractors for this? Will there be a warranty period for any service line leaks? (so no "fly by night" companies that swoop in as in during disasters to swindle people)

City-installed service lines as part of a Capital Improvement Plan (CIP) Project are typically covered under a bonded contractor and include a warranty period.

- a. What will service line material be, PEX or copper? Will home owners have a choice?
See response to Question #35 above.
- b. Who will "own" the service line? Homeowner exclusively? City? Or combination with division at the stop box?

See response to Question #2 above.

- c. Who is responsible for final connection for home to service line? Will homeowners have choice of contractor?

See response to Question #2 above. The final method of service line installation and connection will be determined as part of future City Ordinance.

37. Will the working pressure be significantly higher than what homeowners currently have? If higher, will plumbers check existing plumbing in homes for integrity prior to hookup (could cause potential leaks in homeowners plumbing in weak spots if pressure is higher)

Normal service pressures are anticipated to vary from 55 to 100 psi based on the preliminary overflow elevation identified in HR Green's 2022 *Water System Study*. The pressure plane of the distribution system will be confirmed as part of final design. Areas of higher pressures would be provided with individual pressure reducing valves (PRVs) on home service lines in accordance with Plumbing Code.

38. How does the City plan to communicate during the project to make sure the public is aware of where and when contractors will be working?

Similar to current CIP projects, communication could include a combination of City Council meetings, information posted to the City website, public information meetings, door flyers, and other means.

39. Is there a timeline associated with connecting to the new system, are homeowners required to connect in a certain timeline? What happens if they do not?

Residents and business owners will be able to connect over a phased implementation period as the distribution system is constructed over time. The intent of the Municipal Water System is to provide service to all property owners upon completion of the Phase II projects. Future City Ordinances will establish policies and procedures for connecting property owners to the Municipal Water System.

40. What happens if there is a failure? Will there be generator backup? Pump redundancy?

The Municipal Water System would be designed and constructed with well redundancy and standby power generation facilities in accordance with Iowa DNR standards. The proposed water system would provide for nearly uninterrupted service.

41. Will the system be looped for best water quality?

Yes, the distribution system design will prioritize a looped network to minimize dead-ends mains that can contribute to stagnant conditions.

42. How will the system fund sampling, especially PFAS since analysis is so expensive?

Water sampling, as well as other operational costs, would be funded primarily through user rates.

43. If existing wells are not bought back by the City, is it the owners responsibility to fund the cost of plugging?
Policies and procedures for private well abandonment, as well as any funding assistance to property owners, will be determined as part of a future City Ordinance. As identified above, it is anticipated that private wells could remain in service for irrigation use.
44. One piece of literature online said no treatment would be necessary while the other talked about an RO treatment option. What is the City planning?
The February 2022 Water System Study evaluated potential treatment options, including Reverse Osmosis (RO) treatment. Subsequently, an existing Silurian aquifer well was sampling for water quality parameters and minimal chemical treatment is anticipated (see response to Question # 23).
45. What will this cost the local businesses?
Usage fees and rates for local businesses will be established along with residential fees and rates as part of a future City Ordinance. See response to Question #1 above.
46. How is the city prepared to handle a situation which an event happens, and the city needs substantially more funds for city water, how is the council prepared to deal with this?
The Water System Study Amendment No. 1 considered a phased approach to build out a water system. The intent with this phased approach is to allow the City flexibility to plan and implement these improvements over time, cost-effectively couple water main improvements with other CIP projects, and apply for grants and other funding sources to offset capital costs.
47. Question 22 states my sewer rates could go up also based on water usage? Sounds like a double edge sword, what stops the city from manipulating the sewer rates to take the fall for high water rates?
By metering water usage, both water and sewer rates ultimately can be based on actual usage as opposed to a flat rate.
48. Is it true that it was said, in a round about way, that Swisher can't afford this project (by an HR Green representative)?
As identified in the January 25th Public Information Meeting, there are federal infrastructure funding and other grant opportunities available for water projects such as what is being proposed for Swisher. However, grant applications cannot be submitted until the community passes a public referendum vote to form a water utility. The intent is to apply for federal infrastructure funds and other grants if the vote is successful in order to lessen the financial impact to the community.
49. Do the developers of the new houses pay for all services on their properties? Or is this included in what we pay?
The cost for water service to properties within a development are the responsibility of the developer.
50. Are current projected costs based around current households? Or current plus the 450 projected houses coming to Swisher?

The costs are based on both current residences in Swisher (approximately 377) and up to an estimated 457 future residences for an overall total of 834. To conservatively estimate costs at this planning stage, infrastructure costs include additional planning-level contingencies.

51. Why has the DNR not contacted residents if we are in imminent danger to our community with the PFAS?

The Iowa DNR does not have regulatory authority over water quality parameters until the EPA has established a primary drinking water limit. The EPA has issued a preliminary health advisory level for PFAS and is in the process of establishing enforceable primary drinking water limits. Until a national drinking water limit is established, the EPA, DNR, and other organizations are providing notices and education materials to the public on PFAS and other emerging contaminants. See the City of Swisher website for additional information and resources.

<https://www.swisheria.org/news>

52. Are all of the city council members that were elected by the residents of Swisher in favor of this new water system?

The Council overall has authorized the Special Election. Council members can address their support for the water system individually.

53. Is it true that if it's passed on March 7, residents will have to start paying monthly payments for this project, which we may not actually get water to our homes for ~10 years?

The actual costs and methods for setting customer rates would be determined after a passing vote. There has been discussion on a lower nominal water system charge for the overall community with an additional flat rate charge for customers served by the new Water System until the full build-out of the system. However, the final details have not been determined. Additional information will be mailed by the City and presented at the 3rd Public Information Meeting.

54. Where does the city contractor stop with the water service?

The preliminary costs include public infrastructure including wells, a water tower storage tank, distribution system piping, and service line installed to a curb stop located near the property line. Future City Ordinances as determined by City Council will establish if the costs to make the final connection from the curb stop to the water meter will be the responsibility of the homeowner or the City.

55. If inside the basement will they repair and water proof entry area?

The final connection will be made on a case-by-case basis. For example, a homeowner's private well piping that serves the home plumbing could be reused and connected outside the home to the public water system, with interior plumbing modifications to install a water meter. Alternatively, a new service line could be installed into the basement depending on the integrity of the current piping. The public infrastructure costs as presented do not include basement waterproofing.

56. Does the contractor repair and replace sod and other landscaping in digging areas?

Surface restoration would be included for the utility portion of the project, up to and including the curb stop box. Sidewalk, grass seeding and/or sod are included as part of this surface restoration. Additional restoration for the homeowner portion of service line installation are not included in the initial project costs as presented.

57. Will it be required that a resident be connected to the system, and if not how would the cost of the water system affect that resident?

See response to question #39 above.

58. Would it be cheaper to connect to the Cedar Rapids water system or is that a possibility?

As part of the initial study, HR Green considered water service connections to the City of Cedar Rapids, Poweshiek Rural Water, and the City of North Liberty. Due to a combination of capacity limitations, costs, and logistical considerations none of the utilities could commit to provide service.

In addition for reference, the distribution system including the water tower, water main, and service lines would be required regardless if water is provided by City wells or a connection to Cedar Rapids (or other water systems). The costs associated with the distribution system account for the majority of the overall project costs.