SLS Special Surcharge Meeting
November 18, 2021
Zoom 6:00 PM

Attendance: Lois Craig, Brian and Marilyn Pulk, Tom and Billie Alcott, Ron Roberts, Dave Heron, Beth Binger, Duane Smith, Fran McCarthy, Steve and Lisa Visintainer, Brian and Emily Oldfield, Eydfinn and Ulla Tausen, Rob Marsicek, Nancy Reed, Steve Hucik, Randy Nollan, Mary Silva, Barbara Freeman, and a few other participants that were not identified.

Meeting called to order at 6:00 pm.

Lois: Reviewed the agenda for the meeting:

1) Reason for a second well
2) Consulting Companies supporting our project
3) Estimated Costs and Notional Timeline
4) Long Term Reserve Plan

Then she asked for all microphones to be muted except for the presenters Tom Alcott and Brian Pulk. If participants have questions or comments, they can raise their hands or we could use the chat feature. Reminded people to stay respectful and patient.

(For the purpose of these notes, all community member comments, or questions are printed in italics.)

Tom Alcott, a community member who is the chair of the second well committee, and Brian Pulk, the SLS treasurer, put up the power point with all information.

Slide Two: Tom Alcott introduced himself as a homeowner who has been a part of the community for three years and has volunteered to help out with the team looking into the second well. He has a degree in mechanical engineering and is learning about water systems and the second well project with each step of this process. He shared the SLS Board has been considering a second well since the state required Salt Water Mitigation Plan was completed in 2012. A second well was one of the recommendations

Tom explained the existing well is 58 years old which was installed November 1963. It is approximately 230 yards from the beach which creates problems for us. The aquifer is shaped like a lens and the closer to the beach the thinner the aquifer gets with more chances of mixing the salt water with the fresh water from the aquifer. Being so close to the beach is not the best placement. The Island County Hydrologist stated most wells typically last about 50 years and recommended SLS start work to replace the existing well.

In August of 2021 the existing pump failed due to excessive rust from galvanized iron piping from the pump to the surface. New stainless steel submersible pump & pump control, PVC pipe from the pump to surface with stainless steel couplers, electrical wire to pump, well casing/bottom screen assembly brush cleaned, and rust and sediment bailed from the bottom of the well. Cost was $27,000. With all this work, the infrastructure is in great shape.

Slide Three: Despite the repairs on the existing well, we still have a water quality issue to deal with. Two areas that have been monitored closely: Conductivity and Chloride

Conductivity is a testing measure that allows the total dissolved solids to be tracked. Conductivity is a measure of the ability of water to pass an electrical current. The state has a maximum contamination level that they set at 700 and our water for a long period of time has been just above that mark. There are no health concerns with that level of conductivity, but the state does correlate that level of conductivity with sea water intrusion. So, the state watches both those numbers of chloride and conductivity because they are interrelated. We know our water is considered 'hard', as evidenced by the marks it leaves after drying. It is not a health concern but a nuisance. It is often associated with levels between 600 and 800 on the conductivity measurements – which is exactly where our water is.

Prolonged exposure to chloride above the levels of 250 is considered a health hazard. Shangri-La Shores well readings have been around 100 depending on the time of year of the readings.

When the Saltwater Mitigation Plan was completed in 2012, it contained a Sea Water Intrusion Mitigation Plan and that is supposed to kick in whenever the chloride level exceeds 100, per the Island County Sea Water Intrusion Policy. We are following the steps laid out in the plan: monitor readings weekly, adjust the rate of pumping, conserve water during periods of high chloride readings, and supplement the existing well during periods of high chloride levels which is what this second well project is designed to do. (A last resort is to construct a second reservoir – which is highly expensive.)

Slide Four: This report from the Island County Public Health Department shows the sampling of our well (blue dots for well number 34C) and its correlation between the fresh water (green) and the sea water (red) and the mix of the two (yellow). Tom explained the seasonal precipitation reflects the better readings in the green usually in the fall with more rainfall, while in the dryer months of summer the readings tend to lean toward the yellow or red on the graph. Our aquifer is refreshed by rainfall. The yellow interface can also be affected by the tides especially since our well is so close to the beach. The high tides cause the yellow interface to rise, so depending on when you take the water sample reveals different data.

Slide Five: Aerial View of the existing well and proposed location for a 2nd well.

Question from Steve Hucik: What is the current depth of our existing well and the potential depth of the new well? Tom thought an approximation would be currently the well is between 150 and 170 feet and the new one would be in the 250 feet range. Two things are measured – 1) the depth of the well from the surface 2) the depth of water IN the well. So you want to have a deeper amount of water in the well so when you pump you do not risk drawing out too much water beyond the refresh level of the well.

Slide Six: Proposed 2nd Well Locations. This shows two possible locations with the required 100-foot sanitation radius, although there are three possibilities with the third location between the blue and green dots. The two shown possibilities have considerations about slope of the land, current vegetation, extending the road closer to the well, and in the proximity to the current Stewart well. When Brian and Tom looked at putting a marker between the two proposed dots, it seemed convenient for a drilling truck to access the site, but that means the sanitary radius would then extend to both properties. The Washington State Department of Health could approve a variance allowing for this location and that would be the best scenario.

Slide Seven: Two consulting companies are helping with this project. Davido Consulting is an engineering company that has worked on similar projects from Canada to the San Diego area including a homeowner's association north of us also developing a new well. Listed are the services their clients have received, and the starred items are ones that they have been helping us with. They have been helpful to this point with the site inspection application with the county and establishing a notional timeline for this project.

Slide Eight: The second consulting company supporting the second well work – The Pacific Groundwater Group, are hydrogeologists who work closely with the Davido Consulting to develop new wells. Their area of expertise that help our project are in green. This company is held in high regard by Noel Phillip who is the Washington State Department of Ecology NW Regional Water Resource Office Well Construction Manager. Noel is the point of contact for getting our water rights amended to include the new well.

Slides Nine – Thirteen: Tom shared an estimated timeline for the project knowing the times and dates are dependent on the government and county approval of different steps. Tom and Brian sat down with the project team and constructed this plan.

Question on the chat: What is existing electrical load capacity at the reservoir? Tom and Brian noticed an electrical box on the side of the reservoir and Tom suspects that is a sensor that tells the pump house what the water levels is in the reservoir, so it tells the pump when to turn on or off. Currently there is nothing else up there that requires electricity other than that sensor. We would need to run power in from Woods Lane for the 240 three phase power for the pump.

Question from Steve Hucik: What is the risk for having adequate flow rate and total volume draw down to replace the existing well? Do the consulting companies have knowledge about the risk of once they drill the well of the adequate flow rate or draw down value and any impact to the aquifer or the neighbor well? Is there any way of telling that from what they see so far? Tom replied we had the hydrogeologist look at the area and analyze data that was available from the county with regards to hydrology and wells in the area. Their initial assessment is they do not see any issues. However, after the well is drilled, they do need to do a draw down test, but they are not expecting any problems.

Question from Fran: Do these estimates take into consideration inflation for this multi-year project? Tom said we did not put in inflation but did put in a 20% contingency on the overall budget and he believes this will cover the inflation for the next two years.

Question from Glen Sherwood: Are there any incentives available? Maybe government incentives since we are improving the infrastructure? Brian responded he had a chat with a lady in Mount Vernon who controls those sorts of things and there are a couple of things. One is a government grant which she told us we would not get because of the income levels of our residents and she said basically don't waste your time with that one. They do have government loans that are 2% loans for 40 years, but there is a lot of costs involved with doing those loans. You have to jump through hoops and do some studies: a cultural study, an environment study and a few other things we are not required to do. We estimated the cost of that (based on the Kinneth Point community who are doing one), they are spending about $8000 just to be able to get a 40 year loan. In our case, we were collecting a long-term reserve and with this we would have to add more to it. We thought going the route of having a 40-year loan was not the way to go.

Lois asked if Tom wants to go with more questions here or continue with the budget proposal breakdowns?

Tom: Any more financial question might be appropriate when Brian does his slide.

Question from Fran McCarthy: Is there any concern about the water quality based on the location to the OLT Field? Brian we are tested for that regularly and we have not had any problems here or in the surrounding neighboring wells where we are talking about a new well.

Question: How do our test results compare to other wells in the area? Do other wells have salt water mitigation and high conductivity levels? Tom: We are the only well in the area that has the hard water indicator on the county map that shows all the wells. You can go to the county well locator map to see all the wells around our well (34C) and there are five items that are covered by that indicator. He could not remember off the top of his head what they are, but nearby wells look a bit better than ours.

Question: Has Mrs. Stewart shared the water quality of her well on the Stewart property? Yes because that is public records. She has a two party well and is required to share and post her testing to the county. Just like us, she has a public water system.

Question from Fran: With the two lots for sale on Race Road and one just sold, people have been walking there and I was wondering how they plan to develop property and will it affect where we put the well or if we could put the well there? Brian: They are developing a two party well that will serve those two properties. They are in the process now and I don't know how far along they are, but that is their plan. We actually had talked to them about partnering up and the issue we had with them was about 400 feet of piping to get to where they need to put their well so that wasn't going to work out. In terms of how it will affect us – we are in a very large aquifer and if you look at the well locations that the county has tracked, you can see that the aquifer goes for literally miles. So, what we are going to do and what they are going to do is not going to have any impact on it in total.

Question from Steve Hucik: Do the conductivity levels from surrounding wells that Tom was talking about look lower than what we are currently seeing? Brian: I would assume so, the hydrogeologist has looked at all that data. Tom: I haven't looked at individual well sample numbers for neighboring wells. I just looked at the overall indicators shown on their well locator map.

Question: Why not drill our existing well deeper? Tom: If we drilled our existing well deeper, we would be in pure salt water. There is salt water underneath our freshwater in the aquifer and the problem is we are close to the mix area of the freshwater and saltwater based on readings.

Slide Fourteen - Sixteen: Project Budget: The estimated project budget is divided into three sections – construction ($104,671), engineering support ($54,000), other costs ($44,875)

Slide Seventeen: Total Project Budget – Estimated Project Cost ($203,545) 20% Contingency ($40,709) Total Cost: $244,254

Slide Eighteen: Brian Pulk, the treasurer, explained six years ago we started putting money away for the long-term reserve plan required by the state. We have a long-term plan for the common areas and the water system which we are discussing tonight. The long-term water system reserve plan is designed to cover the project we are talking about right now, the eventuality of replacing pipes in the road, the eventuality of replacing the reservoir, and those sorts of things – in the long-term. So, six years ago we started collecting money and the amount we collect from each water share each year is increasing by

3% each year. The third and fourth columns shows the plan we put together basically six years ago, updated three years ago and are now updating it again for the three year update, shows the per water share part of what you pay when you get your assessment in January. So when you paid $486 this past year, part of it was two hundred some dollars for the water system long-term plan. That part of it we propose to continue. But that leaves us short for this project.

When we put together the long-term reserve plan, we had lower numbers for the estimated costs for putting in a new well and we had planned to complete it a year or two later. With the water system long term reserve account being short, the special surcharge (the green columns) is what we are discussing here today, which would fund this project. The new well expense, just broke it down into a third of the cost each year and that should be pretty good. Assuming that the costs are about 82,000 a year to cover this $245,000 cost and hopefully it is less than that, what we need to do to cover that and keep a significant balance in the long-term reserve account would be about $700 per water share for the next three years. That would leave us with balances in the last two columns on the right growing over the years. This surcharge would be due July 1 of 2022, 2023, and 2024.

Question: How many households are we talking about? Brian: 76 water shares.

Question: Does that include the numbers for the development next to the existing well? Brian: Yes, there are five water shares in that area and those are included in the 76.

Question: So this assessment is per lot whether or not the lot is developed? So wooded lots next to me would have the same assessment as I would? Brian: That is correct.

Beth: There are a couple questions in the chat.

Question from Brian and Emily Oldfield: Would adding a desalination system to the existing well be feasible or potentially adding it to the new well to protect against sea water encroachment to the aquifer in the future? Brian: We have not looked at that. What we are looking at is the two wells running – as long as the existing well continues to operate, the new well is one of two wells with the potential of becoming the sole well. At some point in time, we think the existing well will be retired but as long as it running, it will only have to pump have as much as it is now because we will have the new well.

Those are the questions so far. The purpose of this meeting is to talk about the plan Tom presented, the reasons why we are doing it, how much we anticipate it costing, and where the money will come from, and to get feedback and answer questions from the community.

Question from Steve Hucik: the people who did the work on the existing well to repair it and bring it up to standard, are they the same people we are looking at to do the new well? Brian: That is an interesting question. We have a recommendation from King Water, which is the same company who did our repairs, and we have a recommendation from PGG, the consulting group we have hired and they have recommended someone else. So that is to be determined. *Steve: because the cost of $27,000 for basically getting a new well without the drilling, seems to me to be a pretty good deal. It seemed fairly reasonable.* Tom: I think it would be a good practice to get more than one quote. It would be to our benefit to do that.

Question from JOY ALCATEL: Could you further clarify that one lot equals one share? Correct? Brian: That is correct. I own two lots so that is two water shares. If you have two lots that are combined into

one lot with the county, some of the lots are combined, so that would be one water share. If you have more than one tax lot and at some point you have combined them into one tax lot, then you only have one water share. *Steve: Whether you have a water line to the lot or not, it doesn't matter. If you own the lot, you have a water share.* Brian: It is driven by what the county says you have.

Question: How many people have adjoining lots that have been combined from the original? Brian: I am going to guess on the order of 10. Lois has a map that has that more accurately.

Beth: And then if people have more questions, should be offer an email to Lois or call into Lois? How do we want to proceed with that?

Lois: I am fine with talking questions. The amount of work that Tom and Brian have done is phenomenal. I will be honest, I only turned on the faucet and got my water and had no clue about the complexities of a water system. This is opening my eyes!

Question from Steve Hucik: Do we know how many properties in SLS do not have the capability for septic and therefore they can't build on the lot? Will they bring up the issue of not being able to build and potentially not needing the water share accept they have to pay for the water share improvement? Lois: So really your question is how many lots don't perk? I don't know. Steve: Will those people refuse to pay? Brian: We have technology that has been improving and at some point those lots that don't perk may perk later. Right now, every lot has a water share, with the exception of one that does not have a water share, every lot that has a water share pays their dues every year and will be subject to this surcharge. What they do get when they do hook up, they do not have to pay the $5000 hookup fee and they get a meter put on their property with water pumped to the meter and they take it from there. That is what they are getting when they pay for a water share. And in our by-laws every lot has a water share.

Comment from Fran McCarthy: This is a tremendous amount of work and from the bottom of my heart, I thank you because this is not something I could even begin and disentangle. I really do appreciate you doing this for all of us.

Beth: Tom and Brian, I cannot even imagine the amount of hours and research…. and thank you.

Question from Eydfinn Tausen: I have two lots. One is for the house and one is used for the drain field. Do I pay for both lots? Brian: That depends on what is registered at the county.

Duane: Also Brian, I believe to not get the water share, they have to get with the county and prove the lot will not perk before they can get an exemption for the tax part of it too, but that is quite a process that they have to go through in order to get out of it. Brian: Yes, that is true in terms of their property tax assessments, but it doesn't affect what we are talking about in terms of water shares.

Lois: So what I understand is we will give a little more time for anyone else to submit questions or comments. Then this will go back to the board, and we will vote on the resolution to move the 2nd well project forward. And continue with this process we have outlined.

Comment from Steve Hucik: Tom did talk about possibly getting additional quotes. Would you get those additional quotes to confirm the range of the total project cost, so that then you could defend the per water share more appropriately when you say you've got three quotes and they are all in the similar range and similar quality of quote, then you at least can feel better about justifying the cost per year. It is a timing issue of when you agree to the amount and when you get the other quotes.

Lois: The difficulty is before you can get such a quote, there are so many pieces that have to be in place. Before Step B, complete Step A and etc. *Steve: But you may be able to get quotes from the more significant cost portions that are less subject to approvals and permits. But the drilling, and cost of the pump and the cost of the wiring and all that, you may get an estimate of that and if those are pretty close you probably have a large fraction of the overall costs with multiple quotes that makes you feel a little more comfortable you have a good handle on it.*

Question from Barbara Freeman (?): How much money has been spent to date on this expansive well project? Brian: We have spent about $4000. Steve: Pretty reasonable for the amount of work that has been done.

Randy: Can we get a comparison of our results from neighboring wells? Tom: A neighboring HOA is using a government process – and the copy of their estimate is a lot higher that ours. *Randy is looking more for the chloride, conductivity, and salt water intrusion results from neighboring wells - are other wells having these same issues?* Brian: We have not looked at that but the hydrogeologist and the county hydrologist have and we are in a worse position because we are so close to the beach. Other wells in our area are much higher in elevation and further from the beach. This will be a better situation where we are going.

Question: Does the easement allow a well? Tom: Yes. The easement agreement specifically states we are allowed to place a well on the easement.

Question: Is it possible to raise the casing of the existing well to freshwater? Tom: A driller will drill down until they get water and then drill further to get a significant amount of water to be above the pump so water can be refreshed. They cannot cause the aquifer to come up any higher. The water level in your well is set from hydrostatic pressure from the aquifer. So there is no control over that.

Lois: When that well was drilled in 1963, things may have been at different levels and less wells were drawing on the aquifer? Tom: Two things can happen: the water level can go down and you risk pumping your well dry and the other risk is the sea water level could rise causing the freshwater level to decrease as the sea water level increases in height. Both of those things could cause the freshwater level in your well to be minimized. You really can't adjust your well anyway to deal with the natural occurring freshwater level and the sea level in the well. The best thing to do is to move your well to the deeper parts of the aquifer inland. As I mentioned the aquifer is shaped like a lens, like on your eye. It is thickest in the middle and thins out around the edges.

Question: If the pump is in the bottom of the aquifer intrusion zone then you move up in the aquifer? Tom: They put the pump in the well and near the bottom of the well and as you pump, the surface level of the water in your well goes down, so your pump affects the water level at the top of your well and also draws in new fresh water at the bottom which if you are close to the mix zone of seawater and freshwater you draw in a mix of both if you pump too fast.

Comment from Steve Hucik: I think the issue is, in the present well that is so close to the beach, you have a short amount of freshwater above the pump and you really can't do much about that. The only way to fix that is to move up to where the reservoir is and then you get a much taller amount of freshwater above the pump and that solves your problem.

Lois: Thank you everyone for joining us. We will let you know the next steps and what is going on. I appreciate all your time you had with us. Board members and Tom, if you could stay on.

Lois: Will need to have another meeting after a time period to allow for other feedback or comments.

Brian: We need to wait some time and have another meeting to vote on the resolution. Something after Thanksgiving?

Dave: What is the purpose of the meeting?

Lois: We have to vote and get this in the notes that we have put this out to the community, and we have had a comment period, and say we are moving forward with the resolution. It is in the notes we have offered this opportunity for community members to ask questions or share comments before voting.

Brian: How about the 30th? Tuesday November 30? All agree

Lois: Okay, I will set Zoom up. November 30th 6:00 PM and keep moving forward!

Meeting adjourned at 7:35 PM.

Respectfully submitted on behalf of the SLS Board of Trustees by Lois Craig

Note: Transcribed in December 2021 from the Zoom meeting after the November 30th Board meeting.