Transcript of Hatzic Prairie Water System Expansion Public Information Meeting
Held on January 11, 2018 at McConnell Hall

Present: Director Ray Boucher
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Tareq Islam: We are very happy that you are here and are very happy that you have welcomed us to your community. My name is Tareq Islam, and I am the Director of Engineering and Community Services. (Introduced FVRD Team)

Sterling Chan: Thanks guys. And also with us we have Ardt Burgert, he's from Piteau and Associates, he's the consultant that's been working with us on this project. So without further ado, I will start on the presentation.

I guess before we get into it, there is a little bit of housekeeping. We are going to start with the presentation, myself, Graham and Arnd are going to go over it and then after that we will open it up for a Q and A discussion type forum. Please hold your questions until the end of the presentation. We do have quite a few slides so chances are your question will be answered later on, so we ask that you just hold your questions. Just one other thing I would like to point out, the meeting is being recorded so that we can transcribe it after the fact, so in order for us to record it we need people to speak into the mikes, so for your question to be on the record, please speak into the mike and if you don't mind doing so, please introduce yourself giving us a name to record with the question or comment we would appreciate it.

Tonight's meeting objective is first of all, to give you a brief overview of the existing Hatzic Prairie Water System and also talk about the upgrades that are ongoing and kind of what residents can expect in the future. We're going to talk about the studies that we've done on the aquifer and the well to date. We're also going to talk about the provincial water licensing process. Groundwater is a provincial resource and it's regulated by the province. And the other thing is Graham is here and he is going to talk about the development potential in the area. It seems there is a lot of chatter, a lot of questions about what's this project really about, is there some development looming that people don't know about. We are going to talk about the type of development that people can expect in the valley. And then finally, an opportunity for people to ask questions.

OK. Who is the FVRD? Most probably already know this but we are a regional government composed of 6 municipalities and 8 electoral areas. The electoral areas are

all the unincorporated areas outside the municipalities. We are in Electoral Area F; Director Boucher is your elected official.

Just a quick note about our role. The engineering department at the FVRD currently operates 14 water systems, 3 sewer systems and are in the process of acquiring an additional 3 sewer systems as we speak. All of our services and utilities are paid for through what's known as a Service Area. Only the people that receive that service, the people that are customers of the water system, are in the service area for that water system and it's paid for entirely by those users. It's an example of the ultimate user pay, if you use the water, you pay for it. If you are on the Hatzic Prairie Water System, you are paying for it, you are not paying for people out in Deroche or Lake Errock and vice versa so it's completely discreet.

Just a couple notes about the existing water system. It originally started out as several small private water systems that were at the southern end of the valley. They had some very serious water quality concerns. The water was from surface water and they had issues like E.Coli, basically the water was completely unpotable, in some cases you couldn't use it to brush your teeth, you couldn't even use it to shower, it was not good. Residents in the area approached the FVRD and asked us to look into constructing a new community water system. This was back in about 2008. What we did was we were approached by the residents and we were able to secure some grant funding to help pay for the system and eventually what we did was we conducted what was known as a petition process which basically put it to a vote on whether the people wanted the project to go ahead or not. The petition was successful and along with some grant funding we were able to build the water system. This is the existing system (points to slide). In 2011 we did some further upgrades, we built the reservoir, and this is where we talk about the water source.

The existing system is supplied from 2 wells, both of which are located at Durieu Elementary School. There are about 147 properties within the service area right now and there are 127 active users, people that are actually using the water and right now our average daily usage is calculated to be 1.5 liters per second. The system provides domestic drinking water as well as fire protection. Water consumption is metered and basically the more water you use the more it costs. People who use a large quantity of water pay more for the water. That's important to note.

This is a map that shows the existing system. We talked about the original properties that were looking for water, these down in Sward Road and Sheltered Cove, that area. Those were the properties that initially approached us. They didn't have any potable water and thus the system was built. You'll note though that the water source, the school, is quite a ways away from the houses that had the issues are. The reason for that is quite simply that there wasn't a closer viable water source. If there was, they would have been on it. The closest viable water source that we could find was up at the school. Now that water source taps into the Hatzic Prairie Aquifer which is known as an unconfined aquifer so it is susceptible to contamination and pathogens and other issues. To date there haven't been any issues, we've never had a positive test for coliforms or anything like that but that is the risk. Since it wasn't an ideal water source given how far away that it already is from the customers that it is serving, it was the best that we

could do at the time with the money that we had. We did get grants to pay for the system but we also had to borrow a lot of money and the people on that system are still paying back the money. We did the best we could with the money we had at the time.

Let's talk about the upgrades to the water system that we are looking at right now. We secured roughly 1.5 million dollars in grant funding this past year through a grant that's called the Clean Water and Wastewater Fund. The upgrades that we were given the money for is the development of a new water source, the one that we're here to discuss tonight. It will involve about 3800 meters of new water main.

The purpose of the project was to extend the watermain south along Sylvester Road and to provide potable water to about 14 properties in that area and also to secure a new water source from the Miracle Valley Aquifer which is the aquifer that McConnell Creek is located on. The Miracle Valley Aquifer is considerably larger than the Hatzic Prairie Aquifer. It's a confined aquifer so it is not at risk of contamination, pathogens or anything like that. Additionally it's got extremely high quality water as I'm sure you are well aware. This is a quick overview of what the upgrades are looking like. Right here in the red, that's the extension down Sylvester Road that I mentioned that's serving those 14 properties along this corridor. The other part of the project is the new well that is up there, and then the watermain connecting the new water source down to our system.

In terms of project funding, I already mentioned that we got nearly 1.5 million dollars in grant funding. The funding was awarded to us in April of 2017 and the deadline to complete the project was March 31, 2018. We were given less than one year to complete this project. The grant funding is a cost share program meaning that the grant actually only covers 83% of the cost of the project. The remaining 17%, the FVRD is responsible for covering. We are covering that 17% in two different ways. The 17% that is needed for the new water source and the connection to the new water source is coming from our system reserves. That is money that we had in the bank so we are covering that. The unfunded portion of the Sylvester Road expansion to the 14 properties, we are actually borrowing that money on behalf of those residents and they are going to have to pay it back.

Work that we have done to date; in August the well was drilled on the Kokoska property. It was done by Field Drilling Contractors. Those of you that use google earth, if you went to google earth right now you can actually see the drill rig on the property. It's pretty cool. The testing was conducted shortly thereafter. Piteau and Associates, wrote the well report that was finalized in November of 2017. As part of their report they did draw down test and monitored adjacent wells but I will let Arnd speak to that a little later. The detail design, the civil engineering design was done by another consultant of ours, Urban Systems, they are not here tonight but the design was finalized this past December and construction started in December and is scheduled to go through to March 2018. I should note that the FVRD is acting as the general contractor on this project. If anyone had any questions, comments or concerns about the actual construction that's taking place, disruption of traffic, anything like that, Dave is the man to talk to about that. He is supervising that construction right now. So far I don't think there have been any concerns about that.

Now I will turn it over to Arnd and he will go through his portion of the presentation.

Arnd Burgert: Thank you Sterling. Good evening. I'm Arnd from Piteau Associates. We are the groundwater consultants and we are helping the FVRD with its project. I just have a few slides that will summarize the testing that we did. So I guess even before we get going we helped the FVRD site the well and the main components of that; the main objectives of siting a well are to find a spot where we are likely encounter a productive aquifer with good water quality. We want to avoid impact on neighboring wells, we want to avoid reducing stream flows and our civil designers want to be involved in siting the well because they make sure that they can make connections to the reservoir.

Sterling Chan: I guess just one other quick comment on that slide, access to property, to the well site was a consideration in this well site selection. The FVRD didn't have to pay for that site; we were allowed to situate our well there at no cost. That was also an important thing because many landowners probably wouldn't do that.

Arnd Burgert: Thanks Sterling. So once the site was selected, our well construction, as Sterling mentioned we had a well drilling contractor. This was the drill rig that was there. It's called a dual mode air rotary drill. It drills using compressed air to force the casing down. As they are drilling we collect samples of the cuttings that are returned to the surface and do analysis on those to design the wells cribbing. Now we have a well but it's not finished yet. It has to be developed and developing means agitating the well and flushing it out to get all the fine grain material out of the formation around the well screen to increase the wells efficiency and once the well is built, testing it. This is done with a series of aquifer pumping tests. First, we do what's called a variable rate test which is just that, we put a pump in the well and operate the pump first at a very low rate and then an increased rate and then a higher rate. Then based on the results of that, we can design or choose a flow rate for the second test which is a constant rate test. The constant rate test is where we pump for a length of time at a constant rate and from that we can rate the yield of the well and do some analysis and gather information about the formation. The other thing that we do while we are doing these pumping tests is monitor water levels in neighbouring wells. And that's an important component in our study.

This map shows where those wells are. The red dot is the production well; the other registered wells are on there as blue dots. There are 3 with a yellow ring around them. Those 3 with the yellow ring are the ones we monitored during our pumping tests. So let's have a look at the results. These are time series plots of the water that was in those wells so time is going from left to right, we begin on August 1st and we end on August 31st and we are looking at, on the first axis we are looking at what we call water level drawdown. So that's the change in the water level in these wells. The top graph is our production well. You can see that when we turn the pumps on the water level drops way down and then when we switch the pump off the water level comes back up. The other is the other wells that we are monitoring. You can get a pretty good picture of what happened there. So this is the second graph here, this is the well on the west side of Stave Lake Road, and the red arrow marks the interval when our pumping test was happening and it's a pretty good picture of what the interference was between those wells. So in that well the water level dropped about a half a meter while we were

pumping our well. The next one here, the third graph, that's this well up here, 78286, and you can see the difference. This is while we were pumping our well; you can see that the change in the water level isn't too much. I expanded that so this one here is on an expanded scale, so the change is about .1 meters so the water level fell about that much. The third one, this is the well that's nearest to our production well, 95451. During our pumping test you can see how the water level changed there again about .3 of a meter. The other thing I will point out on this here, this was our pumping test going on and you can see how the water level changes in response to other events that are going on. This is some other well that is pumping that's not related to us.

And the other thing that we do during our pumping test is to monitor the flow rate in the nearest stream, which is Durieu Creek. On the graph here you can see where the creek is to the east of our well. Again, this is the same time series as before. All these dots are level measurements; the red arrow is the duration of the pumping test. These measurements were made at stations shown as the orange marks here and here. Those sites were selected on Durieu Creek because the water flows through a culvert so it's a reasonable place to measure because otherwise the stream channel is too wide and rough and the water is not very deep. So you can see the flow rate change during our pumping test and afterwards wasn't really measureable. The ups and downs at those points are within the margin of error.

Oh yes the other thing what this aquifer looks like. We can use information from all the other wells in the area and draw some vertical slices. So we have one here from where this black line is from here all the way up to there, is a cross section. That's Stave Lake way up there and then the cross section comes down and this is Hartley Road and this is the hall right here. And the cross section comes all the way down past our production well to Durieu Road right here and into Hatzic Valley right here. On the next slide we will see that longish section and it will give you an idea of what the aquifer looks like with Stave Lake at the north end. The topography rises up, this is Hartley Road right here and the topography drops down at Durieu Road and Hatzic. So this grey striped area, these are the aquifer sediments right here, on top of that, the white area there, that's the fixed section of clay, and that layer confines the aquifer which means it's like a cap that contains the water. You can see the blue marks beside the black marks are the wells and the blue marks are the level of the well. Here the blue marks are above the level of the aquifer. So that's what we call artesian, there's actually some pressure inside the aquifer there. This red line, that's the production well.

Sterling Chan: See the portion at the top that says sand there.

Arnd Burgert: This is actually the other aquifer that is at the top and has no cover, we call that an unconfined aquifer. That's all I had for now.

Sterling Chan: Thank you Arnd. Now I would like to talk a little bit about water licensing. So I mentioned this earlier tonight. Groundwater is a provincially owned resource, it's owned by the province, not by the regional district, not by the people who own the land, it's the province that owns it. Accordingly, the province are actually the ones who regulate the use of groundwater. This is an important part that has sort of developed in the past couple years. In February of 2016 changes to the Water Sustainability Act came

into place. Basically what they said was that anybody who uses groundwater for purposes other than domestic use, so that could be using it for agriculture, using it for industry, if you are a local government and you supply the people with drinking water you need to have a water license. What that water license says is how much water you are allowed to extract on an annual basis. This is something that's required for new and existing users so if you are an existing user, you have a well already and you use the water for something other than your domestic water use you need to have a water license. The FVRD doesn't regulate this, it's not something that we have control over. Mentioning this, in case there is someone in the audience that this might be applicable to, right now because of the changes in the regulations the province is actually waiving the fee for people to apply for the water licenses. So if you have a well right now and you are using for something other than domestic water use, the province will let you apply for a water license and waive the fee at this time. You still have to do it, you can wait until afterwards but it's about $5,000.00. This is not the FVRD's business, I am just letting you know that is you have a well and use it for something other than domestic you might want to talk to the province about a water license.

Groundwater licensing is done through the Ministry of Forests, Lands and Natural Resource Operation and Rural Development. (FLNRORD) The bottom line about the license is you have to have one. Even though the FVRD has drilled the well we can't actually use it for our water system until we have a water license. We have made that application and it is with the province for processing.

I spoke with the province earlier today and yesterday actually to go over the process a little bit. They couldn't be here tonight but I did get a summary of their process to share with you.

One of the questions was notification, how do people know that someone is getting a water licence? FLNRORD will send out referrals to people based on the license applications. Basically if you are in what's known as the zone of influence and you have a well, the province will notify you. Because of this water source being hydraulically connected to a stream, i.e. Durieu Creek, anybody with a water license on Durieu Creek will be notified and it will be sent out to them as a referral.

Another thing is that the province is aware of the conversation that this project has generated and the ratepayers group will be also consulted as one of the referrals for the water license for this. The point is that these decisions aren't made in a vacuum; they do try to consult other users.

Shifting gears a little from the license itself to the Miracle Valley Aquifer. There are about 300 properties that are currently situated on top of Miracle Valley Aquifer, aka the McConnell Creek Area. Of those properties there are about 255 homes that are on the aquifer. According to the provincial registry at the Province of British Columbia, they have 143 wells in their well registry. From our past experience that number is typically understated because a lot of people's wells aren't registered with the province. This is a quick snapshot, this is off of the province's website, basically it shows the outline of the aquifer, the black line, and each one of those blue dots is a well. When I was talking to the province, I also asked about groundwater license applications and it

turns out that the FVRD and one other person are applying for a water license right now. So it seems that there isn't a whole lot of activity on that front. With that I'm going to turn the mic over to Graham Daneluz and he's going to talk about planning and development.

Graham Daneluz:

Thank you Sterling. I found that really informative. How's the volume, can you hear me? Crank it up a wee bit? Better? A bit better without blowing out the folks in the front? Good.

My name is Graham Daneluz and I'm the Deputy Director of Planning and Development at the Regional District. My job at the region is a little different from Sterling's and Tareq's and the other folks that are here tonight. I work in land use planning and development issues. Sterling asked me to come out tonight to talk a little bit about development in the valley. I think there are some concerns; some residents are concerned that these water system upgrades are motivated by new development proposals. So I thought I would outline the proposals that are active in the valley and what kinds of developments that I think we are going to see in the short to medium term within this water system service area. But first I want to say there are no secret development applications that we are working on. You can go to our website: fvrd.ca and work your way to the planning service section and you will see an interactive map that illustrates all of the development applications we're working on. I realize that this is probably not a great map for you all to see but you can make out Hatzic Lake here and Stave Lake here and these coloured blobs represent development applications.

This is probably more than you care to know but it gives you a sketch of what we are currently working on with folks in the valley. We've got up at the very top of the map up there a two lot subdivision that the application was made in 2017. A little over on the other side of the valley there's an ALR exclusion application, a three lot subdivision and a seven lot subdivision. You can see sometimes they take a while to work through, this one's from 2012, 2016. Rezoning on the other side of the Mission border there for a two lot subdivision. A little boundary adjustment here along Dale Road, that's shifting the boundary between two properties not creating a new lot, just changing the shape of a couple properties. Down here along Sylvester we have a three lot subdivision and a four lot subdivision and finally at the bottom of the map, a two lot subdivision. This is just a snapshot of the applications that are current now but it is pretty indicative of the kinds of development proposals and subdivisions that I would expect to see in the valley over the foreseeable future. For me that might be 3 to 5 years or 3 to 10 years.

It's hard to say but that's pretty characteristic of the subdivisions and development we see in the valley. And you'll see the reason why, I think you can make out these large orange blobs, that represents the agricultural land reserves, and that's land where the Agricultural Land Commission regulates the kinds of uses that can occur there and has an approval over all subdivisions. Their overall mandate is to preserve agricultural lands and they have the overall approval over subdivisions and the primary goal for those agricultural lands in the valley bottom is to protect them for agricultural uses for the long term. So we don't see a great deal of subdivision of farm land, it doesn't mean that there isn't any but they are typically small amounts, so we might see a large farm parcel

split into two medium sized farm parcels, 40 acres split into 20 acres, or some 10 acre lots created with ALC approval but we typically don't see a lot of development or subdivision within the Agricultural Land Reserve in this valley. If we aren't going to see a great deal of subdivision in the valley bottoms, what about the hillsides? And you know from the first map I showed that is indeed where the rural subdivisions are occurring. And those are subdivisions of 5 acre parcels or 10 acre parcels on the lower hillsides. But even there, this is a map that indicates areas that might be subject to hazards having to do with steep slopes or streams that drain that mountainside, streams can cause flooding or debris flows and those things are a constraint to development. They don't prevent all development because often the hazard can be managed but they limit the scope of development that I think we can expect see on the lower hillsides. You can see these red areas and this kind of orangey colour; we have the Fraser River flood plain here down and Hatzic Prairie. You can expect that those slopes and stream and flood hazards are going to be a further constraint to subdivision and development in the valley. You have an official Community Plan for Hatzic Valley. This is the land use map, it might be hard to make out but in this case the yellow is agricultural land and we see these slopes here, private lands in brown, that's kind of a limited use designation, green – forestry lands, a couple of pockets where we can see suburban type subdivisions in that purple area. The purple areas are sort of right in here and here, Cascade Ridge. A little bit in here near Durieu Road. That's areas where they are currently zoned for properties of 2.5 acres. If you can make this out, it's an RS2 zone. We can see a little bit further the smaller lots in the valley, 2.5 acres in that area. We don't have any current proposals there. That gives you some idea of the kinds of developments that we in the planning department in the FVRD are anticipating for Hatzic Valley over the next little while.

So if I was to summarize the development prospects in the short to medium term which I think is sort of 3 – 10 years. Modest subdivisions of rural lots on the lower hillsides, 5 or 10 acre parcels on the lower hillsides and sides of the valley constrained by slope hazards and streams and that sort of thing, minor tweaks, just a little bit of infill subdivision on the agricultural valley bottoms. Those are pretty infrequent but they can happen from time to time. For perspective, if we look at the period 1996 to 2008, the average annual rate of development was about 1.5 parcels per year. And maybe 7 new dwellings each year. 1996 – 1997 was a strong period for development. We hit another one around 2008 – 2009 and of course, we are in another one today which is one reason I think we see all the subdivisions on the books. But I would suggest that's not a bad benchmark for understanding what kinds of new subdivisions we're going to see over the next 5 – 10 years within the water service area. I would say that we will probably see a bit of an increase in that because as I mentioned we are in a very hot property market, we're seeing lots of development applications across the region. So we will probably see a little bump in that but even if it's a doubling of that, these numbers, that we see here historically, we are talking about 14 dwellings per year and that might be a 1 – 2% annual increase in the population, so relatively low growth rate even if we doubled this historic development frequency.

Does that give you a bit of an idea of the kinds of development we are looking at with the kinds of applications that are currently on the books and the kinds of proposals I

would think would come forward over the next 3 – 10 years within the water service area? Please hold your questions to the end but I'll still be here.

Tareq Islam: I just wanted to mention one thing and that is this presentation will be on our website tomorrow so it will be available to you so you don't have to write down everything. All the information will be available.

Sterling Chan: Thanks Tareq. That actually does bring us to the question section of the meeting. If you would like to ask a question we just ask that you step up to the mike, otherwise we can't record you and if you don't mind stating your name for the record.

Ralph Hopkins: Did I understand you to say at the beginning that this new well that you are drilling; you are drilling into the Miracle Valley Aquifer?

Sterling Chan: That's correct.

Ralph Hopkins: So the Hatzic Aquifer which is higher up and is a smaller aquifer, you're not changing anything is that?

Sterling Chan: That's correct. The Hatzic Aquifer, let me just go to a map to explain it.

Ralph Hopkins: How deep would that well be in the Miracle Valley Aquifer?

Sterling Chan: Its 155 feet. This slide, so the area in orange is the Miracle Valley Aquifer and the area in purple below is the Hatzic Prairie Aquifer, so it's lower down and it's much smaller.

Ralph Hopkins: OK, thank you.

Sterling Chan: Sorry, one other thing I'll just show this slide. This is a cross section that was taken from the 2014 Piteau report that some of you may have seen. The area in red, that's the existing well site and that is basically showing the limits of the Hatzic Prairie Aquifer, the orange section is the aquitard and the section in yellow up here, that's the Miracle Valley Aquifer. Just for comparison sake to demonstrate the magnitude of the two aquifers, one compared to the other. The other thing I should point out is when we talked about confined and unconfined aquifers earlier in the presentation, the Hatzic Prairie Aquifer being unconfined, that's that section right there where the aquifer actually, where either side of the aquifer actually meets the surface. Basically where your water table is, right at ground level.

Hugh Davidson: I'm one of the neighboring properties whose well was monitored. So what a lot of people probably don't know is that we've had a Q & A already with Sterling via email and some very pointed questions that have been going back and forth. Some of it's kind of inflammatory so you may get a little inkling of that today. I apologize in advance. So one of the comments that you made Graham that concerned me when you talk about using the past history of development as a predictor of the future. Well infrastructure has to precede development; you can't develop unless the infrastructure is in place. So anytime you are expanding the infrastructure I would expect there to be an increase in the rate of development. Any thoughts or comments on that?

Graham Daneluz:

With the kinds of plans and bylaws that are in place now, Land Use Plan, Official Community Plan for the valley and the zoning bylaw, we are not planning for development in Hatzic Valley of a density that would require a community water system to be in place. Typically where we see small lots, less than an acre or an acre, those are the kinds of lots where we start to think about community services like a water system. The kinds of rural subdivisions that we see on these lower slopes , 5 acre parcels, 10 acre parcels, those kinds of subdivisions , they're not predicated on community water systems. Now the presence of a community water system can be advantageous for those rural subdivisions in a few cases in a few spots on those valley sides where they have run into water quality issues when they are trying to drill a well and in those cases it's an attractive option to have a community water system that might be economical to connect to. But the water system in Hatzic Valley is not supporting dense development of small lots like it typically would in other communities. We're not planning for that kind of development in large part because we've got the agricultural land reserve which is relatively inflexible for development uses; we've got these relatively steep slopes and streams and we've got the Fraser flood plain down here and other flood plains up above so the area suitable for small lot residential development in Hatzic Valley would be really limited. There might be some potential in those suburban residential areas that I've identified in pink up there. Some of those are already developed, Cascade Ridge for example, but even those developments at 2.5 acres they're really not predicated on community services like water and sewer. That's the long winded answer, the short answer is yes, there is some benefit to developments like rural subdivisions, especially where there are water quality problems, but this infrastructure is not a gateway for small lot development in Hatzic Valley.

Sterling Chan: Thank you, can I just add one more comment to that quickly? Further to what Graham has said about land use and land uses that are contemplated, the purpose of the water system is actually service, I noted earlier that we built this new reservoir in 2011 and the purpose of that is to provide fire protection and basically, it's to sustain pressure. As you are all aware, the height of land continues to climb as you go up the hill, basically the height that our reservoir is situated at, you're not going to get the type of pressures that you need to support fire flows beyond the very bottom of Stave Lake Road. That's not to say that the system couldn't be expanded to go further up that way to support other users, it's just that it would require a new reservoir which somebody has to pay for. In terms of who could connect and where, what kind of properties this system can support, it's basically from Durieu Road down. Everyone above that could maybe get domestic flow but you would never get any sort of fire protection.

Hugh Davidson: Some of us in the room have been into this a few iterations on this with you on what does this mean, what is this, what if, various scenarios going. Probably a lot of people in the room are just hearing all of this for the very first time. I have a copy of the hydrologists report as soon as it came out and others have only seen excerpts from it. So I would like to suggest that if you could put all this including the email on a website somewhere that people can go in and see it because otherwise, I think you will be repeating a lot of stuff.

Sterling Chan: Sure that's a great idea.

Hugh Davidson: So can you go back to the slide that has the cross section aa.

Sterling Chan: The one from the 2014 report?

Hugh Davidson: 2017, the well construction. Yes that one. So this is what got alarm bells shrieking in a lot pf people's minds. It shows the new well drawing essentially from the bottom of the aquifer and a bunch of other wells at the top that are drawing from higher elevations. The provincial regulations only require the hydrologists report to look at wells within a one kilometer radius but no kind of attempt was made to monitor impact on wells higher up the aquifer. We've seen excerpts from reports that talk about the estimated recharge rate of the aquifer, a bunch of stuff like that but today, a lot of people in the room who have seen the report aren't really convinced that there is a sound data driven argument to say that nobody will be impacted by the activity of this new well on this aquifer. That statement hasn't been made. We're all confident that the well will yield the 9 liters, 10 liters per second, that's another subject, but none of us are very confident that people higher up on the aquifer won't be impacted somehow when this well starts producing at full rate. That's one of the things we are looking for. Now I understand that this comes back to the province to look after that. One little piece here that, this one excerpt from the Q & A; Krystyna De Bartolo from the ratepayers had some excellent Q & A going back and forth, one of her questions was; is this needed to overcome the poor location of the school wells? This shows that the Hatzic Prairie Aquifer is a partially unconfined aquifer which makes wells susceptible to surface contamination, which you already spoke to. Your response was: as was eluded to the wells at the school aren't ideal. We haven't had any issues to date but this is about limiting risk. I saw that phrase 'limiting risk' and it really jumped out at me because from our standpoint, you're not limiting risk, you're transferring risk. You're limiting the risk to the people on the Hatzic Prairie Aquifer and you're transferring up here and to what extent? It's not known, no one really knows, I don't know. That's kind of one of the fundamental questions that I think the people here are trying to get an answer to.

Arnd Burgert: Thanks, I will answer these one at a time or the questions will pile up. So your second question was about impact on the wells at higher elevations. So I should say that when we test a well as we tested the production well, we're not making this stuff up, and the province has guidelines on standards, on how wells are to be tested, and that's what we do, and that's what we've done for many years. And I would say that there are hundreds of aquifers across the province and each of them is a shared resource and they have domestic wells and commercial wells and municipal wells and I don't know why anyone would think that in this case that one new well is going to be the end of the world.

Hugh Davidson: Well just from a layperson looking at it, the diagram shows the new well coming in and drawing from the sweet spot at the very bottom of the aquifer and the other wells drawing from points much higher up, logically you look at it and you think that if the aquifer starts drying up the FVRD well will be the very last one to be impacted. The other ones up top will get hit first. So that's why I'm sort of looking for that assurance that the wells up top won't get hit and I haven't seen that done in the statement. Your

report shows that the new well will function great , lots of water, great quality and the rest of it but nobody's come out and said everybody else doesn't have to worry and at the end of the day, I think that's what we're looking for. And to add to that, another thing I'm getting out of this conversation or the email threads back and forth is should an issue happen, let's say 5 years from now after the new well has been pumping for a few years somebody up top has an issue, who do they turn to? How can they even show that there was a cause and effect between their well and the new well? They're kind of left with the expense of a new well or something. And I take it that you guys are kind of looking at it and saying, that's really the province's role but you know I look at this and I hear that they are looking after the interests of the people who have access to, that are on the Hatzic Prairie Aquifer, you're concerned about their access to water supply but we're not seeing the same level of concern from the FVRD for us up here.

Arnd Burgert: Again I will respond to a bit of that. First of all, I'll talk about the wells at the top of the aquifer and the bottom of the aquifer. Let me first point out that the well we drilled does not go to the bottom of the aquifer. No one has tested that deep.

Hugh Davidson: So I guess my point is that it's drawing from a lower point, everyone else is higher.

Arnd Burgert: It's drawing from a lower point and that allows for what we call drawdown. So when you are pumping you can draw the water level down further and still have suction over the pump. That's why a deeper well.

Hugh Davidson: That's not really my point. (audience noise) My point is if you have a tank of water and your straw is the deepest straw in that tank, everybody else is higher up, when the tank starts to run dry you would be the last one to get hit.

Arnd Burgert: Good that's just what I was going to allude to. The way you are modelling the aquifer is a bathtub full of water and that model is not right. If you will let me modify your model so that it's more realistic to what the aquifer is. You would have to take the bathtub and make all the sides permeable, and we have to fill the bathtub with sand and then would have to add a faucet or rather many faucets that are letting water in all over the bathtub and we would need drains all over the bathtub that are letting water out. And really you can see that there is a gradient on the line so we would have to take the bathtub and lift one end up and shove a couple two by fours under there so the whole thing is on an angle. And as a result, it's a dynamic system. Every year there is water coming in, every year there is water going out. . .

Hugh Davidson: I get it that it's way more complicated than a bathtub but somebody somewhere should be able to say, using whatever models necessary that you guys at the top, you're OK or not and that just hasn't happened .

Arnd Burgert: There is no rational reason to think that this well or any existing well will cause the aquifer to deplete.

Hugh Davidson: I don't mean deplete, I mean lower.

Arnd Burgert: That's what you're talking about, it's called aquifer depletion. There are aquifers where that does happen, it can happen, anytime the rate of discharge from the aquifer, so the water that's coming out, if that rate exceeds the rate of recharge the water level will drop year to year.

Hugh Davidson: So the report, it speaks to the recharge rate is estimated at 140 litres per second based on a certain permeability of the aquitard, of the clay layer. If that clay layer happened to be more permeable that recharge rate doubles. You have to infer that if the recharge, if the clay layer was less permeable that recharge rate could be cut in half. It's just a huge unknown from what I'm getting from reading it. And then based on all these unknowns it just becomes a transferable risk to the people up here because it seems like, if something happens, first of all, nobody's got a reasonable, a viable way of the homeowner to prove it and if it did happen, well the FVRD's followed provincial regulations so they're OK, the province followed their own guidelines, they're OK but we're "so you've got a problem, how about that, too bad. That's why this whole thing is so concerning.

Arnd Burgert: It's concerning to you guys but to me it's not concerning because there are several methods for answering your questions. They all involve water balance and there are several different ways to do that.

Hugh Davidson: Well I guess at the end of the day I would just like to see that analysis done that demonstrates and states that because of this, this, this and that the impact on the upper wells will be negligible or whatever. Just to have that analysis done in a formal way.

Arnd Burgert: That's what I have been saying and that's what our report says.

Hugh Davidson: I didn't see anything in that report that speaks to the impact on . . . here's the predicted impact on wells at the top, where we are right now, on the top of the aquifer. (several kilometers away) Yes, you didn't go anywhere outside that kilometer radius that is dictated by the provincial government.

Arnd Burgert: remember, we monitored the three wells which are in the one kilometer radius and the drawdown there was a few inches.

Hugh Davidson: So the one kilometer radius makes to me perfect sense if we had a more or less flat aquifer, but it's not. Water flows downhill, and some sticks are higher up than the ones at the bottom. It's just not a very reassuring because of the shape of the aquifer the ones higher up weren't even looked at. That's troubling.

Arnd Burgert: So if you're suggesting that the closest wells have a drawdown of a few inches, if we look at wells further away you're suggesting that the drawdown would be greater? If you're worried about drawdown over time, you're talking about aquifer depletion and that would happen if the rate of discharge exceeded the rate of recharge. (crowd noise and talking over Arnd).

Hugh Davidson: Which does happen at . . . . . .

(crowd talking and random comments that can't be made out)

Arnd Burgert: First of all let me talk to what you just said there, it happens every summer? That's very typical of every aquifer on the coast. The water levels go up in the winter and they go down in the summer. So if you look at the year after year you see that trend over and over and in a drought year the water level will be a little bit lower and in a rainy year it will get topped back up again. That's a normal thing for an aquifer to do. There are aquifers where year after year that wobbly line is trending downwards. So this aquifer has no indication of . . . . .

Hugh Davidson: Again what I think people wanted to see is something in writing certified so we can refer to another hydrologist and say does this make sense, that says that wells on the top of the aquifer will not be impacted or will be impacted by a few millimeters, a few microns, a few centimeters or whatever, some sort of numerical data driven prediction that says this is what we expect.

Arnd Burgert: Our report states that these drawdowns are not expected to affect the operation of all these wells.

(crowd noise and talking)

Hugh Davidson: So that's the other thing too, the question was just raised that the homeowner has no recourse, that they are left on their own. I can understand this approach if this was a commercial. Oh sorry. I can understand this approach of sticking to the provincial guidelines if this was a . . . someone putting in a fish hatchery or needed a large amount of water for non-domestic use but we kind of expect better due diligence out of the FVRD rather than say "hey the well will work, we don't think it will cause a problem, if it does cause a problem, it's not our problem, maybe the homeowners can sue the province". We expect better than that from the FVRD considering it's their project in the first place.

Arnd Burgert: So you are saying that you expect better from the FVRD than what we've done here. So what you're saying is that you expect the FVRD to go above and beyond what anyone else does when they are testing wells?

Hugh Davidson: Absolutely.

(Unintelligible audience noise and comments)

Hugh Davidson: There's a duty of care that the FVRD has to everybody not just those in Hatzic Prairie.

Arnd Burgert: And that's been met.

Hugh Davidson: Tell me what page of the report it says that the wells up top won't be impacted by this well because I've missed it.

Unknown Speaker: You guys don't know and that's why you can't say it.

Dir. Boucher: Step up to the mike please.

Unknown Speaker: Sorry, I'll be up there.

(Unintelligible audience noise and laughter)

Hugh Davidson: I want to move on, I've beat this one up long enough. One other thing I wanted to get into a little bit is capacity. One of the questions that has gone back and forth with Sterling is how much water does this system actually need? The two school wells are basically producing combined or they can produce 45 and some odd litres per second. The total demand to service that 127 homes is 1.5 liters per second. So if you extrapolate 1.5 litres per second for 127 homes out to 300 homes, which is your predicted maximum you get a number which is 3.6 liters per second or something like that. So the application going into the province is 10 liters per second. So there's kind of a history here with the FVRD and water supply of either overbuilding of the system compared to what they actually use, and this case because there is now a licensing requirement, they are trying to over license more than you may actually need. The needs aren't really well expressed; I don't really have an understanding as to how much water does the FVRD really need to do what it intends to do? It seems to be having a policy of let's just license whatever we can get and if we have too much that's no problem. Forget whatever impact it may have on anybody else. So anyways, I think I'm done with my rant.

Sterling Chan: Do you want me to speak to that Hugh?

Hugh Davidson: Sure.

Sterling Chan: Ok so, Like you mentioned the tested yield, the combined yield of those two wells down at the bottom of the hill which for the time being we are going to leave those on line anyway, is 44 – 45 liters per second.

Hugh Davidson: So you have more than enough water.

Sterling Chan: Exactly

Hugh Davison: Here's an excerpt actually a quote from off the FVRD website. This was a report that went to the board on I think it was October of 2016, it was to do with the application for the grants in the first place. It says that the existing Hatzic Prairie Water System currently supplies drinking water to 145 properties in the service area and is able to provide capacity for a total of 230 connections, however there is insufficient capacity to expand the system and allow additional properties to connect. And I read that and I think to service these additional 14 properties that you will be able to reach by extending water mains, you don't need more water, you got tons of water. So I'm just trying to get a handle on what guys are looking for, what are you going to do with all this excess capacity that you seem to be asking for.

Sterling Chan: That's a fair question. The 230 properties comment, those were the, were basically within the boundary of the Hatzic Prairie Water System as it was originally

contemplated. That was basically the original system and when we talk about 300 that's what ever extension we might see on either end of it, right? As you are probably aware, some of the land owners adjacent to that water source have some concerns over well interference. One of the things that the FVRD said was, 'well look, if you guys are concerned about this, we will build the system as contemplated but anything else we're not going to touch right now until we can get this water source done with'. So it wasn't a technical reason, it was a matter of perception, I guess.

Hugh Davidson: So it sounds like you are shuffling risk from A to B and right now we are B. That doesn't sit very well. One thing that I certainly felt and others feel it as well, right now there's a license application in front of the province for like 10 liters per second. We're told that may need maybe a year to process it but right now many in this room, myself and many others are thinking the clock's ticking. If we're going to change this, understand it better, we've got to do it now. So the license has only been with the province for a couple of months, and I think it would be a show of good faith on the FVRD to withdraw the application until we've had a lot more thorough analysis or something that sort of satisfies people to say "oh yeah, you're right, there is no threat to the people up top". You've only lost 2 months in the queue and you got plenty of water right now. The purpose of the new well is to you said limit risk and we're looking at a transferring of risk and we would be very happy to find out that there is no risk. Life is good, carry on. But we're not there yet. And I think the whole kind of threat level, pressure level would back off a whole lot if you just withdrew that license application.

(applause)

Sterling Chan: So Hugh I have given thought to that request and as you mentioned we are 2 months in to the process so in that sense you said if we withdrew it now we would only be 2 months behind but when I think about it the other argument I hear in my head is that all 20,000 non-domestic wells in this province need to be licensed so there's going to be this huge demand for those staff resources at the province and I know that stuff at the province that is projected to take 140 days can take 8 months, can take 2 years .

Hugh Davidson: You have enough water at the school wells to last you years.

Sterling Chan: Yes, for sure. All I'm doing is articulating the two different arguments that are made in my head, the conflicting arguments. And then I'm thinking to the conversation that I had with the water authorization specialist at FLNRORD today, basically speaking about the fact that they are going to send referrals to everyone who lives within the zone of influence, the water license holders. And that they specifically mentioned that they are interested in speaking with the ratepayers out in Hatzic Prairie, McConnell Creek, and I'm just thinking about what that process looks like and every time you add more referrals in it extends that process longer so I'm just trying to think if there is a way we can maybe do that where we don't put ourselves at the back of the line behind 20,000, literally 20,000 other applications because our file just got assigned to an authorization specialist so as of this week it's the first time somebody's cracked it open. I don't necessarily want to go to the back of the bus and put myself another 3 years at the back of the line but at the same time I want to work with you and make sure that we can answer those questions. I need to think about how we are going to do that.

Hugh Davidson: Perhaps reaching out to the province and asking can you suspend it and not lose your place.

Sterling Chan: For sure. That's a conversation I'm sure I'm going to have to have with them but I'm trying to find something that's going to work for both of us.

Hugh Davidson: OK, thank you, appreciate it. I think that's good for me.

Camia Weaver: My name is Camia Weaver; I'm a resident up here on the aquifer, right down Hartley Road. My, I wouldn't even say it's a question, it's a comment, I think what you're seeing here is a lot of people who are really unhappy about the process that took place here because you must have had some preliminary plan, you applied for funding for a grant, you drilled a well, you tested the well, you did all this stuff without talking to anybody here. Nobody! (applause and talking).

You are our elected representative and we have not heard anything about this until it's a bloody fait accomplice. You're tearing up our roads, you're putting in water pipes, you put in a well. You tell us that the water on the current wells is sufficient in quantity and quality on Hatzic Prairie but you've taken the steps and done all of this, you know, and applied for the license without having any consultation with the people that is really matters to, which is us. (applause and talking) That's really offensive and now you're saying, "Oh well I'm trying to see how I can make everyone happy with your application for a license". Well you should have bloody well talked to us a long time ago about this. And then you wouldn't have any problem with your application for the license because things would either have been sorted out or you wouldn't have wasted that money and time because if your application is turned down, you know, you're the one who has the problem, not us. I just really, really dislike the secrecy, the not having respect for the people that live here. There's no respect. Right?

Sterling Chan: So yes based on the people we have in the room here, all the feedback received to date, the FVRD, we honestly did not consult the residents the way that you guys feel you deserved to be consulted.

Camia Weaver: Any way at all you mean?

Sterling Chan: And we'll accept that, its fair criticism, we're not going to hide from that, we'll take it.

Camia Weaver: Well then maybe it's incumbent upon you now to take the suggestion that was made that you either withdraw or suspend your application for a license until all of these things are worked out and until people have the confirmation that we're not going to be screwed in this process. Okay? That's fair, right that's fair.

(applause and talking)

Darla Williams: My name is Darla Williams and I didn't expect to have a lot to say here today but I'm not seeing one part of your presentation that concerned the environment. You are dealing with the creek, you've done your little test on McConnell Creek. Has Fisheries and

Oceans been involved in this and any environmentalist been brought in to do a study of the impact of what it's going to take from the creeks and all that kind of stuff around here?

Sterling Chan: By environmentalist you're talking about the biologist right?

Darla Williams: Yes but Fisheries and Oceans preferably to get in here and find out what impact it's going to take, cause the creek that you're dealing with down there is a fish bearing creek and have they been notified at all?

Sterling Chan: The Ministry refers to DFO as part of the water license application that is one of their referrals. So regarding what studies were done on the creek Arnd did go over the test of the drawdown on the creek. That was one of the figures that he showed in his presentation and more or less showed that the effect on the creek was non-existent. Arnd do you want to speak a little more, maybe go over the estimates a second time?

Arnd Burgert: Yes so assessing the effect on a stream is actually done in two ways, one is the physical measurement that we did during the pumping test and I have been involved in pumping tests elsewhere where the stream actually dries up so it can be done and if there is an impact

Darla Williams: There is.

Arnd Burgert: You can see it. The other way to do it is analytically. So we use, remember I talked about the water level drawdown in the wells, we can estimate what the water level drawdown is in the aquifer beneath the creek, so remember, there is the aquifer here and then there is a layer here of what we call the aquitard, the clay layer and the creek is on top of that. And as I said, the aquifer is artesian, so it's under pressure and the water is actually pressing upwards so there is water from the aquifer pressing upwards through that clay layer and coming up to the surface. That happens all the time. And so when we pump our well and the water level draws down it takes a little bit of that pressure away from underneath, under the clay layer. Follow?

Darla Williams: Yes. It still drops the level of the creek down right?

Arnd Burgert: Now hang on now, we're not there yet. So we've reduced the pressure a little bit, that's pressing upwards and so based on the pressure pressing upwards through the clay layer we can estimate what the impact will be on the water that's moving up through the aquitard to the creek.

Darla Williams: So you wouldn't mind if I took it to a few of my DFO contacts that I have and gave them access to your reports, once you've got it uploaded on line, I'm going to put it through to them and see what they got to say. If they've done anything or if they have any concern about this because it's all part of it. The environment as well as the wells as well.

Arnd Burgert: Of course.

Darla Williams: That sounds good.

Hugh Davidson: One of the questions I had with Sterling was looking at the Durieu Creek report, thought I saw some things that weren't there and got really excited but one outstanding question I did have was, you talk about the pressure of the water pushing through the clay, the Durieu Creek is largely spring fed, not largely but it is considerable fed by a spring. So my understanding is that the spring is an aperture that has water flowing around, not oozing through. So anyway, the whole thing around the position of no change in flow from Durieu Creek wasn't ringing true to me because of the fact that there's this spring in play. I know the water monitoring, the stage monitoring was done down close to Durieu Road at the bottom of the map there but there's also a large pond into which Durieu Creek flows through before it flows out of that pond to across the road. So I did have an outstanding question and I will follow up with Sterling and keep pushing on that because I didn't quite understand how the seepage through a clay layer had anything to do with impacting the flow of the spring.

Arnd Burgert: OK, I'll respond. First of all, don't forget the three monitoring stations, one was at Durieu Road below the pond, two were in the stream channel above the pond, so one was very close to the well and the others in the culvert between the pump and the well. To clarify that. The other question about spring flow being influenced by the operation of the new well, the flow from the spring works the same way as flow through the aquitard. Whatever the water level is in the aquifer that feeds the spring, the spring flow is relative to that.

Hugh Davidson: I think I've probably got about another hours' worth of questions but I won't bring them up here.

Arnd Burgert: So depending on the ratio of drawdown at the spring that will control how much the flow rate is reduced and as you saw the location of the spring is very near the edge of the radius of our well's influence. So again if the water level drawdown is a couple of inches the effects on the flow will be negligible.

Rick: I just want to know, I want to clear something up, we are members of the McConnell Creek business community and we are rational and not irrational, just to clear that up. But if you are so sure that this is not going to affect our water supply, why will you not put that down, document that for future so if there is a problem we know where to go.

(applause and talking)

Arnd Burgert: If I can read the excerpt from our report again, it says these drawdowns are not expected to affect the operation of these wells. (shouting from audience) I'm not sure what else you want a person to say. (shouting and talking from audience).

Dir. Boucher: OK next question.

Brian Harvey: I'm Brian Harvey and I'm on Stave Lake Road. I'm sorry I arrived late today and I'm going to have to display my ignorance, why is this happening and why . . . is it all private or has it got anything to do with the political? Just a quickie.

Sterling Chan: No problem. Just let me quickly go to this slide right here. If you missed the start of the presentation, the why I guess you'll quickly catch on what the project actually entails as well just so you get the full thing. So it's the area in blue, those lines are the existing Hatzic Prairie Water System, the red lines there, those are extensions of the watermain and the triangle up at the top in red is the new water source. So the reason that we are looking at a new water source is the current water source is on what's known as an unconfined aquifer; which means that it's susceptible to contamination and pathogens, so it's a less robust water source. The new water source, the triangle at the top is on what's known as the Miracle Valley Aquifer which is a confined aquifer, it's got a cap layer on top of it so it's protected from contamination and it's a much larger water source, it's a much higher water quality and it doesn't have that element of risk of contamination. And then I guess the other part of it is who's paying for it.

Brian Harvey: Excuse me but I'm not following you. I did ask why is this being done, is it because of the future development for houses or why is it developing?

Sterling Chan: The long and short is that it's not being done to facilitate any sort of development. This water system doesn't change the development . . .

Brian Harvey: Are you private business yourself?

Sterling Chan: No I work for the FVRD.

Brian Harvey: You are, oh, OK. And so it's not entirely a private development.

Sterling Chan: No it's not paid for in any way by private industry or to benefit private industry; this project is strictly providing water to residents on Hatzic Prairie and that water system.

Keiko Hashimoto:

My name is Keiko Hashimoto and I'm one of the owners of those 14 properties that were mentioned. I can well understand why the first water system was put in because people down around Hatzic Island didn't have potable water. However, there was no urgency, no such situation, for that little strip there, from Seux Road down to Dale Road but yet here we go putting it in. I see pipes already being laid, surveyors out in front of my property. It's like a fait accomplice without really proper consultation. Just let me finish please. A run was made at this maybe a year and a half ago and anyway you did not get a majority of people who were interested amongst the 14 property owners and yet here again it came at us where those who wanted it were to return signed and send in their application. So I just want to make it clear that those of us who don't need it and don't want it we're not subsidizing this water system for those who benefit by being able to develop their properties. There are certain, I'm not going to get into names, but there are some property owners who cannot subdivide because they do not have water. With water they can.

Sterling Chan: So just a comment about the process that was undertaken regarding the 14 lots and that watermain extension to the south on Sylvester Road. So for everybody in the room who is not part of that neighbourhood, we did conduct a petition process for the

expansion of that water line there. Basically people were given the opportunity to vote, if you will, whether or not they wanted that project to go ahead or not. So all 14 property owners there were notified and we had 9 out of the 14 owners come back saying yes we would like that project to proceed. The FVRD isn't in the business of forcing (interrupted)

Keiko Hashimoto:
OK so those 9 will be sharing whatever cost there is for this?

Sterling Chan: No the cost is split equally between 14 properties.

Keiko Hashimoto:
No, that isn't right. (loud shouting from audience) When the natural gas line came down that same stretch those who did not want it did not hook up to it, they paid nothing. Those of us who wanted it, we paid to hook up and not a problem. It should not be any different than that.

Sterling Chan: That's the statutory process. It's like a democracy, you (loud shouting from audience)

Dir. Boucher: OK guys!

Keiko Hashimoto:
Anyway, I've said my part but there is no way that people who did not want this, do not need it, will be paying. (applause and shouting from audience)

Camia Weaver: It's me, I'm back again, Camia Weaver. I still have not heard an answer to why when you have the Hatzic Prairie Aquifer , it's producing water, the wells that you already have are producing water, the quality is not compromised, the quantity is not compromised, why are you doing it and why are you doing it without the consultation?

Sterling Chan: I've said this a couple times but the reason is because it's a higher quality water source, it's a confined aquifer, it's protected against contamination. Just because we haven't had a problem (interrupted)

Camia Weaver: Has there been any kind of contamination of the water in the Hatzic Prairie Aquifer or in the wells there, in the water there?

Sterling Chan: No there haven't been any hits on our wells to date.

Camia Weaver: You haven't, you haven't, so it's like why are you pushing through this process without talking to anyone, without consulting with people, when there really isn't a reason for it unless you have some other intention that you're not disclosing to us? You're saying that for the 14 properties there, there's enough water for them, the quality is not compromised, so like, a lot of people here are feeling like you're not telling us the whole story.

Sterling Chan: So again I'll reiterate that there is no back story here, there is no secret agenda. You're going to have to take our word for it because I don't know what else I can do to prove it

to you at this point. We've literally opened our books and showed you everything. If you have any other questions, we'll show you.

Camia Weaver: Well the question is why.

Sterling Chan: OK so just in terms of the timing and nothing else, this project, as I've mentioned is paid for through grant funding through the provincial and federal governments. Every time there's a grant application or an opening, we submit an application for each one of our electoral areas. We will submit a grant application every single time because we're allowed to and the feds and province are offering you free money, why wouldn't you apply for it, right. So let's (interrupted)

Camia Weaver: Because this impacts a lot of people, it has the potential to impact a lot of people with whom you have not consulted. That's why. Even applying for the funding but then you have a duty to talk to the people who might be affected by what you are planning to do.

Sterling Chan: So regarding consultation, we actually did consult the community before we applied for the grant funding. (audience noise)

Camia Weaver: Who did you consult?

Sterling Chan: Tareq took part in this as it was before my time at the FVRD but they actually had a meeting down at Hatzic Hall to discuss these upgrades to the Hatzic Prairie Water System. Now I can't speak to who was (interrupted by audience member)

Beata Kunze: I can tell you who was consulted, everybody was not consulted. Everybody who lives down south of Seux Road. I was at that meeting and we were consulted because

Sterling Chan: Could you speak into the mic please?

Beata Kunze: Sorry. Beata Kunze, and the meeting took place one and a half years ago about and it was about the property that was the owner applied to develop it and he needs water by Dale Road. All the people who were going to be impacted by it were there and nobody else. But it's not our water that is going to get channeled there, it's the people who live north of Seux Road who were not invited. And just so you know, the Hatzic, I mean the Durieu well despite that they did all the fancy study and we were assured that it's not going to impact with our wells, our pond is practically empty since you guys started pumping and our pond was always overflowing all summer. And that's since that. And out neighbour whose well is shallower than most people's, his well is dry since that. And since I have the microphone, I have one more question. I'm one of those 14 properties there and I'm having a real hard time to find 9 people who have said yes because I know most everybody there and they all said no they didn't sign the paper. So I really would like to see those ones that you counted. So would the property owner who is developing his property have 3 votes?

Sterling Chan: No absolutely not. We will have to check just to make sure we can release that information. (As it turns out the names of owners who sign petitions can not be released for privacy reasons. This is akin to not revealing how a person votes).

Beata Kunze: Because I don't feel like paying for his development either. Thank you.

(applause)

Arnd Burgert: I just want to answer one thing that lady said. If I understood correctly, did you say that somebody's well has gone dry since the new production well has been in operation?

Beata Kunze: Yes.

Sterling Chan: No the school well.

Beata Kunze: The Durieu well. It's the Durieu well.

Arnd Burgert: Oh I'm sorry I misunderstood.

Khalsa Centre: Good evening, my name is (unintelligible) with the Khalsa Centre on Stave Lake Road. I have a question about the 2012 test wells; there were 2 test wells in 2012. There was a report from Scott Resource Services. One of the test wells was on Paul (couldn't decipher last name) property. The report says that the Miracle Valley Aquifer was being investigated for a potential source for a municipal water supply in 2012 and I wanted to read you the conclusion and I want to know what happened to this. It says "given the existing effects of reduced flow in the Belcharton Creek and presumed similar effects to the Bouchier Creek, Oru Creek, SRS anticipates that obtaining environmental approval to withdraw additional water from the Miracle Valley Aquifer will be difficult and would only be granted following adequate a) modelling to quantify effect; b) biophysical assessments to determine existing baseline environmental resources; and c) mitigation or compensation to offset the quantified effect on relevant species", talking about salmon and other fish species. And then it says "based on SRS experience with another project for Abbotsford, it's probable that the water would be sufficient in size to trigger a review under the BC Environmental Assessment Act and then would also require approval from DFO". And then it goes on to say also from the Canadian Environmental Assessment Act. So I want to know what happened to that and why none of those things are happening now.

Sterling Chan: So that report was commissioned by the District of Mission. Mission was looking for a new water source at the time. I can't say why they abandoned those plans. I don't work for Mission, I don't know why they decided to walk away from it but from the sound of things some of those conditions and studies and assessments and compensations might have been a little too much. I don't know why they decided to walk away from it but just to put a little bit of context into this study, because those things really sound awful and I would have a lot of warning bells going off too. The District of Mission, when they did that study were looking for 230 liters per second of sustained water extraction. Our license application is for 10 liters a second and realistically that number is going to be closer to one 1.5 liters per second to maybe 3 something liters per second. So we're talking over a hundred times the volume of extraction so we're looking at two completely different animals there. Regarding the environmental assessment I believe that's triggered at 75 litres per second, the environmental impact assessment that you

described there is required for license applications with 75 liters per second or greater and again we are significantly under that threshold.

Khalsa Centre: OK, not that I'm doubting you but it says nothing in this letter about what their proposal was in terms of liters per second. I understand what you're saying in terms of less liters per second but I still don't understand why we wouldn't have to have an environmental review in any event because you are taking water out of an aquifer and there is the potential for impact on these creeks.

Sterling Chan: Right so they are requirement for an assessment is beyond what we've done. The environmental assessment is based on somewhere, you have to draw a line in the sand somewhere based on once you hit this much extraction it's required. So every time an individual homeowner wants to drill a well you don't have to hire a biologist. That would be a little bit overkill, I would think. Even if it was a well supplying 2 homes you might also argue that hiring a biologist and these extensive reports would be overkill, even for three homes. What the regulators have done is drawn a line in the sand basically that says if your extraction is over 75 liters per second, do the report, if you're under then what we did was the level of (interrupted)

Khalsa Centre: So that's a really nice way of saying the provincial government makes us do it at 75 and we don't want to do it because we are under 75. You could do it at 10, you could ask them to do it, you don't have to say no. You could make a commitment right now, you guys are all work for the FVRD except for the gentleman at the end who's your consultant. Say it right now, you're going to stop this project until you get an environmental assessment done.

(applause and random comments)

Sterling Chan: I can't make a commitment to a study like that because I haven't looked into the costs, what the timing would be, whether I would have any sort of budget available to do that. I can't make any kind of commitment like that to you on the spot, in this forum. Again what I can say is we won't be extracting water from that water source until we have a license. We intend on keeping the existing water source on line so that if we do have that problem we still have that redundancy. If it turns out to be a bad thing we can go back to our original water source.

Tareq Islam: What I'm hearing from the community is, I know the concerns you have, and I'm just asking for you to give us an opportunity here, what I would like to suggest now is; I'd like to go back and have a discussion with my team including our consultants; I hear what you are saying so what I would like to do is perhaps look into several other things. One is to have a conversation with the consultants in terms of the requirement they are asking in terms of whether this well is going to affect you in the long term or not and have a supplementary report done either by Piteau Associates or maybe our engineering consultants Urban Systems, we'll have consultations with them as well to see if it's something you need, we can deliver on that. Another thing is, I know we are asking for 10 liters a second in our license and I know you are very concerned and we're admitting that we don't need that much; I haven't had any chance to discuss this with my team but when we go back, we can see if maybe we can cut that in half and in the

future if we need more we will come back to the community and ask what do you think? I'm not making a promise here but I would like to have the discussion with my team and see if we can reduce that as well and reduce some of your concerns.

Unidentified Speaker:

Are you going to hold off while you do that? Because all of this affects none of you, none of you live here.

Tareq Islam: I understand that. One of the only problems we have is, well without the license we can't operate anyway, but the grant funding that we received, we have only (interrupted)

Unidentified Speaker: You could apply for an extension.

Tareq Islam: What I'm hearing from the community, I know what you are saying but in terms of the federal and provincial dollars that we've gotten, asking for an extension, there is no guarantee and we can lose this grant (interrupted by audience noise)

Dir. Boucher: One at a time please.

Tareq Islam: That's the only thing that we can do is go back and ask the province and if they give an extension then that will work, and then they have to discuss this with the feds as well. We have such a short period of time and we know these things are quite hard in terms of asking for an extension and we already have some program in place, but at the end of the day the province gets to make the call as to whether this project can go ahead in terms of licensing of this well. If I can satisfy in terms of getting a hydrological report that alleviates some of your concerns as well as capping the production level maybe that's some sort of a compromise, I'm not sure, but I hear what you are saying but then we also have an existing aquifer that has some risk and we have an opportunity to reduce that as well.

John Weston: I'm John Weston and I own land at the south east end of Stave Lake. I've been in public service myself and I know it's messy, it's hard, at least we're getting an opportunity to speak to you and you appear to have really open minds, I just would like to add my comment. I'm very grateful to my neighbors who have done all this work, nothing like a crash course in hydrology. Even the vocabulary is difficult to grasp. My sense is that the consultation process shouldn't make someone feel like they have to expedite their understanding of something so technical, I feel this frantic feeling that I've got to understand all this and give you my input in the next few weeks or else that boat has sailed and there's no more opportunity and interests may be forever prejudiced. So I'm wondering even if those who are responsible for funding, federal or provincial may also feel that the consultation process needs to be expanded for that funding to remain in place. Thanks for listening to us tonight.

Sterling Chan: Thanks for the comments John. (applause) Just before you start I just wanted to expand it down there. Regarding the grant funding received, this was one of 6 grants that were received by the FVRD. In the Electoral Areas, we received 6 grants about 4.3

million dollars, all the projects that are funded by grants are required to be finished by March 31st of this year. So if it seems like there's a lot of moving parts and things are moving quickly, it's because they are.

Khalsa Centre: So just to follow up on the discussion about the dependency between the grant and the water license, my understanding from talking to Sterling is that the typical processing time for a water license application is a year; so even best case scenario if the community had the full support for this water license, you're not going to have it by the grant expiry deadline anyway. We sort of raised this question in a separate email thread and I'm sure you can follow up with Sterling on it; was there a dependency between the grant funding and the water license and the short answer that we got out of it was there is not. So suspending, shelving, doing whatever with the water license shouldn't impact your grant in any way, shape or form.

Sterling Chan: That's absolutely correct but the linear infrastructure, the water mains that we are putting into the ground need to be into the ground by a certain date in order to qualify for the funding.

Elizabeth Price: My name is Elizabeth Price. I live on Hartley Road. Since this has all blown up about the beginning of December when we saw the pipes going in and started going what's going on; Did you at that time, because I know it was asked back in December, go to the province and the federal government and ask specifically if you could get an extension? I've worked with the governments, I've worked in business with government grants on a number of things and they do give extensions when there are circumstances. Did you go and ask? Or are you just putting it off and putting it off until it's too late to ask?

Sterling Chan: No we haven't asked yet but we will.

Elizabeth Price: But you were asked back in well before Christmas could you ask for an extension.

Sterling Chan: I don't recall being asked about the extension. I remember being specifically asked about suspending the license application.

Elizabeth Price: I believe in one of the email chains that I've seen there was something about that but that's OK. That's neither here nor there. Are you now going to go and ask whether there can be an extension so that this can be put on hold, if there can be and extension, until our concerns are met?

Sterling Chan: I'll ask tomorrow.

Elizabeth Price: Thank you. The other one that you had when we were talking about the water license; you said that FLNRORD, I hate acronyms, would be considering the zone of influence and the ratepayers association. What is the zone of influence?

Arnd Burgert: Good question. The zone of influence when we are talking about a pumping well on an aquifer; the zone of influence is the area in which the water level in the aquifer will drawdown and we can choose what that zone is and we can define it by choosing where to cut it off because theoretically it's a curve that goes like this so it's very shallow. On

the map I showed you there was a green circle, our zone of influence; the cut off was 0.1 meters of drawdown at a pumping rate of 9 liters per second. So there's a large conservatism already built into that as Sterling has told you, the actual pumping rate will be less than half that, probably near a third.

Elizabeth Price: I'm going to get to that in a minute. So basically, then the water licensing people only have to contact those people who are within that zone of influence when they go to look at their licensing of your well? Am I understanding that correctly?

Arnd Burgert: No that's not correct.

Elizabeth Price: OK that is what I was asking, what is the zone of influence then because you had said that the water licensing people would contact the people within the zone of influence. So that's what I'm wanting to find out, are they going to contact everyone within the aquifer or just those people within the zone of influence?

Sterling Chan: They never gave me a specific list, but the words in the presentation are actually copied and pasted from an email from FLNRORD. So it was the properties with wells, with registered wells within the zone of influence. It was all downstream water license holders on the surface water, and the ratepayers (interrupted)

Elizabeth Price: I understand that, so that's all that they are going to have to contact. So that means my well which is up there on Hartley Road at the aquifer that looks like this and you're pulling like this and it comes down like this and so if there is over a period of time a what did you call it, a water depletion, goes down, my well that's up here coming down, if the water starts going down in the aquifer , my well is going to be impacted because of the well that's down here. Because it's on a slope and you're pulling from probably 200 feet up, maybe I'm wrong but that's the way my little brain works. Can you get my idea about your well down here, my well up here, your well's going down here, my well is going down here. If the water in the aquifer starts going down, the well that's down here is going to be impacted the least about the well that's up here and that's what we're concerned about.

Arnd Burgert: We seem to be kind of back to this bathtub idea and that model isn't really applicable. A couple things, first of all, we know the water levels in an aquifer have a gradient on them, so they're highest at the Hartley Road and then the water level is lower down at Durieu Creek. So in an aquifer with a water level that is very flat, if you have a well and the water level starts drawing down, it draws down in the shape of a circle. But we don't have that here; we have a gradient on the aquifer so the water level drawn down is in the shape of an oval. An oval that is mostly on the bottom side of the pumping well. So if you are above it would be very hard to have an impact far above compared to directly below the well.

Tareq Islam: Just to make it simpler, I just want to explain what you are asking. Just think about the aquifer as a pipe and that pipe has holes, all over the top, and when you have a well here and a well here, the water is flowing, don't think its sitting. You think its sitting and not going anywhere, then when you have a well here and you have a well on the

upper gradient, then yes, this will get water when this doesn't have any. But it's a pipe so the water is flowing through so when you have a well here and a well here and if anything goes wrong with the aquifer this will be affected and this will be affected as well. It's a pipe, the water is flowing so you're concerned about the well that is up here will dry first and it's not valid. If the aquifer gets affected it's going to affect everyone.

Elizabeth Price: Then I would like some guarantees that our water isn't. Now the other thing I was going to ask is I've seen some reports now that studies can be done through isotopes and satellite imagery and things like that on what the actual refresh rate of an aquifer is. There's um I haven't looked at them, I've been busy the last couple of days but there were a couple of email chains that came up with reports on how aquifer refresh rates can be studied with isotopes going into the water and pulling out well samples and seeing what the isotopes are in the water . Can you comment on any of those?

Sterling Chan: Sorry just before Arnd comments on those I just wanted to get back to a point that was in your previous question that I don't think got fully answered regarding water licensing through FLNRORD and the fact that you're not in the zone of influence, you're not a licensed user etc. How will they know about the upper part of it?

Elizabeth Price: They know about it, I sent a letter.

Sterling Chan: Ok, I was going to say that I've been talking to them a fair amount in the last little bit and this meeting is going to be transcribed; all the minutes and stuff are going to be sent directly to them so they're very interested to hear the outcome of this meeting. They were actually planning on attending tonight but due to the inclement weather they opted against it. OK back to the original question.

Arnd Burgert: So the question was could a person do an isotope study to help assess the recharge to the aquifer? Yeah sure there are things like that that can be done but they are not very common because there are much simpler methods to estimate flow through an aquifer.

Elizabeth Price: But that's just an estimate. I mean we are looking at . . .

Arnd Burgert: That's all you will ever hear. An isotope study will give you estimates.

Elizabeth Price: Well then maybe it will give us a better estimate of what is actually because right now we've got, we think it's this, we think it's that. We've got neighbors that we've asked to let know about this and out of our 4 neighbours 3 of them have said over the last few years they now have, in the summer, their wells have gone dry. I'm not too sure whether they're shallow wells, I know one of them is a deep well, but over a period of time, I believe the water, because there's more people, there's more, the water has gone down so we don't know over the long haul what the rates can be. So that's my concerns.

Arnd Burgert: So I've found a much better way of answering that question. So what you're concerned about, if you think wells are going dry, and they may be, I don't know. You might be much better off rather commissioning an isotope study, which is kind of unusual and a

little bit esoteric, you might be much better off to spend that money on monitoring those wells.

Elizabeth Price: Would the FVRD be willing to spend money on some monitoring wells to see what the refresh rate, what the, how much water is coming in and going out of the aquifer?

Tareq Islam: For the Hatzic Prairie Aquifer, that's exactly what we did. We heard concerns from the locals that their wells were getting affected so we put 4 monitoring wells and we actually monitored for over a year and we have data on those so we can put a similar program in place. These are things that we don't just do it for a month, we have to do it for many years. We don't have any funding source yet but that's why I am saying maybe we can go back and regroup and kind of put that into context, how much it's going to cost and if you are looking at 2 or 3 hundred thousand dollars, obviously we don't have that funding for such a small service area. We'll have to see what we can do but because we have done that for our Hatzic Prairie water system, in that area, I think we can put in place a very similar program for McConnell Creek. But at the same time those have to be done just for monitoring so not that we would stop the project and monitor. So that way we can get some guarantee and report back to the community. You know 2 years ago this was what was happening and now this is happening.

Arnd Burgert: I just thought of one other thing to add to that. The new production well, once it's commissioned, will be fitted with a transducer that logs into our system so that will be one monitoring point that will continually read water levels. So actually that might be a good thing to have in this aquifer because now there is no monitoring well in the aquifer.

Elizabeth Price: You brought another question up that I want to ask. So you said that you monitored the Hatzic Prairie aquifer and after the wells were put in, and what has happened to the aquifer, has it dropped?

Tareq Islam: It hasn't dropped.

Elizabeth Price: OK I've got a question, on your website there was a; there was in February 2016, there was a Hatzic Prairie groundwater monitoring meeting that was on there and there was going to be a monitoring report , by Kalwij Water Dynamics. I couldn't find that report, has that report been finalized or is there anything on that report? Because in that report it stated that the results of this report will be used to inform of future water system planning but the future water system planning has gone ahead without seeing any of this report.

Tareq Islam: Yes, that report, the way we looked at it was to address the concern that the local community had. This project is mainly, we are not doing it because of water level drop in the local community, this is more for the long term future and for the unconfined aquifer that we have.

Elizabeth Price: Is it for GARP?

Tareq Islam: It is for GARP, it is mainly for GARP.

Elizabeth Price: It's mainly for GARP, that's fine then. Let's get that out there.

Tareq Islam: The monitoring was to satisfy the local community and at the same time we will come to this now. We've got the report; the last report came in in December because we don't want to go halfway through a program, so the last report that I got from the consultants is just December. And so at the same time this program is going in parallel so that's why we haven't gone back to the community because at the end of the day (talking over each other) it's about the source.

Elizabeth Price: That's right so for anybody who doesn't know what GARP is, it's Groundwater At Risk of Pathogens. I think you've answered my question.

Jeffrey Price: Sorry I was going to ask Ray a question, that's who I've been waiting for.

Dir. Boucher: Go ahead, you have the mic if you want. We want to . . .

Jeffrey Price: We haven't heard anything from you Ray today. I just feel that you are the elected official of everyone here, and up to this point I don't think I heard anything from you. I don't feel confident in what you've done to this point. The meetings you must have attended for this to get to this point and I don't know from this meeting, I don't feel that. You're my elected official from my area. And that's the worry that I think a lot of people here know. I don't sit in this meeting with you guys, I know you have meetings, I know you do a lot of work and you are trying to do your best jobs but our faith goes with you and we're now finding out at this point. That's where I'm feeling. Can you respond? (applause and noise)

Dir. Boucher: OK I'll respond. I brought it up in a ratepayers meeting back in October that the well was underway and what was going on. Now my knowledge of this whole process, tonight's a big learning thing for me, I don't know a lot about aquifers, I don't know much about hydrology, so I'm learning probably like a lot of you people are. When this came up and I went to the Regional District and I talked to Sterling and Tareq and I said that we should have a community meeting and we should get together and talk to the people and find out any concerns if there's any out there. They agreed and so it evolved from what we were doing, digging that well and so on to where we're at tonight and I apologise. I don't know a lot about what we're talking about and that's why I've been fairly silent. Although I did bring it up at the ratepayers meeting and I let people know that the well was dug and that the Regional District was looking at increasing the service.

Jeffrey Price: I can understand not knowing a lot about aquifers. I'm going on high school science classes and whatever I can get off the internet. You say you found out, brought it up at the October ratepayers meeting that this well was already built and drilled and being tested. And that's where I'm going, and I understand the need to protect Hatzic Prairie, it's at risk of contamination, that's why this is being looked at but I just don't have the confidence. And I just want to know that you're there actually fighting for everyone here; doing absolutely everything to make sure that we are being represented. Because you didn't even know about it until it was in, it sounds like.

Dir. Boucher: Well no, no I did know about it when they went to Peter Kokoska and talked about putting a well up on the property and I did a site visit up there too as we were walking around. So I knew that the move was afoot and that there were some plans, I knew that we got grant money.

Jeffrey Price: The testing of the well was in when? August. We were notified in October of 2017. (Yes) So after the well was in and tested.

Dir. Boucher: I suppose. I didn't know any of the testing went on.

Jeffrey Price: That's what I'm going on. A well went in and that's where I go. Sharpen your pencil, figure this stuff out, I don't want to hear "I didn't know". Thank you.

Dir. Boucher: I will attempt to, and we'll sit down together and we'll review, we'll take back what you folks have told us tonight. I do take it seriously and I'm concerned for your concerns and I will address them and take them where they need to go. Before that, we could spend all night talking up here, it's a quarter after 9 now so I think we'll go with another 4 or 5 speakers and then we'll call it a night.

Beata Kunze: OK I'll be quick. My question is to Sterling regarding the extension from Suex to Dale. Can a high density agriculture business join in to that water line?

Sterling Chan: They can join into it but they can only use the water for domestic purposes.

Beata Kunze: No I asked for high density agriculture for agriculture purposes.

Sterling Chan: No you can't.

Beata Kunze: Because as far as I know I have to register my well because I have an agriculture business, why do I still have to pay for that line?

Sterling Chan: For domestic purposes.

Beata Kunze: But I don't use it for domestic purposes. So you understand, I get hit twice. I have to register my well that I'm using and now I have to pay for the line too. So I get hit twice. (audience noise) The Durieu well water, the pipes as I can see it run on Farms Road, correct? They run to the lake, Hatzic Lake? Yes, do those residents have to pay too?

Sterling Chan: Yes they did.

Beata Kunze: All of them? All on farms Road, everybody is paying for the line? Whether they are hooked up or not.

Sterling Chan: There are 147 properties in the service area that are paying for it. There are 127 people that are using water so yes there are 20 people who are paying for it who don't use it.

Unidentified Speaker: At $2,000.00 a year for 20 years. Added to the taxes, is that not correct?

Sterling Chan: No. Those people would be at about $500.00 a year on their taxes.

Unidentified Speaker: But these 14 are going to be $2,000.00 a year for 20 years.

Sterling Chan: So the division on that particular project is . . . .

Unidentified Speaker:

The paper in the beginning says it's a user pay fee paid entirely by the users. If you go back to your first paper that you put in this evening, if I read it correctly it says the users pay entirely for the system. If you're not a user, you don't pay. Bring it back up, you'll see. Bring it back up I want to see (audience noise)

Tareq Islam: Having a water line there is a benefit with fire flow and that will reduce your insurance costs for fire insurance so you are going to benefit. User pay, there are two methods of collecting revenue, one is taxation which is paying for the capital infrastructure and the other is the user fee which is paying for the water usage; operation and water usage.

Every property in our entire Regional District where ever we have a water system, including Hatzic Prairie Water System, they pay two ways, one is for the infrastructure and the other one is for their water usage.

In this case, the 14 properties that we're talking about, they are paying for the cost of the water system just for the Sylvester Rd portion of it and they are not paying 100% of it. The total cost of that project is a million dollars, almost that, and they are paying only 17% of it or actually a little more because the cost is more than what we anticipated. Still a significant portion of the cost of the waterline that's coming down from Seux Road to south of Sylvester Road is being paid by the senior governments which is the federal government and the provincial government and the balance of it is now going to be paid by the local users. That's the capital portion of it. If it is $2,000.00, I think then $1,500.00 of it is for the capital infrastructure.

The reason it's more is because you only have 14 users. The rest of the system when we originally established that service area you had over a hundred houses. When we did that petition process, very similar to what we did here for the 14 properties, I think about 80% of the population or properties said they were in favour. 20% said they didn't want it but they got stuck with it because that is the process that we have to follow with the provincial regulations and the *Local Government Act.* In the same case, as we were bringing this pipe down and because you are benefitting even though you are not connected, you are paying a portion of it. What you are paying is the capital portion of it and not the user fee portion. The user fee portion you are not paying. If you are not using the water, you are not paying, by having that water main in front of your house, two things are happening, one, you are saving money in your fire flow because now you can claim that for your home or your business because you have a recognized fire flow by the fire underwriter and the second thing is you're property value goes up. This is the trend now, if you have a waterline by your property your value goes up.

Dick Ainsworth: OK well on behalf of McConnell Creek I would like to thank you guys, I don't think you've had a great time. It's probably hotter up there than it is here. But you did state that you are going to get the answers, we're not going to get them tonight, we know that. You're going to get the answers, you're going to solve things and you're going to get back to us. Could we have a firm commitment of how soon? I know it's soon but we don't want to come back in three months after it's already (unintelligible).

Sterling Chan: Sure, I'll give you a commitment that we'll come back in maybe three weeks, Is that a good turn around for that? How does three weeks sound?

Dick Ainsworth: As long as you've got the answers so that we know that while you (unintelligible) and talk to the board about getting some commitment that if there is some problem that there is a contingency plan to look after. I know you have to go.

Tareq Islam: To summarize if I can, one thing I said is that we are going to look into reducing our flow, capacity wise, secondly, we are going to look into a supplementary report to the existing draft report that we've given you, regarding the aquifer; and the third thing is asking the province and the federal government to see if they can extend the grant program. That is not in our control but we can ask. We will have those three things that I mentioned in our next meeting that we have. And in the meantime because we have heard from you but have not been able to consult among ourselves and our engineer and our hydrologist as well as Ray; we're going to sit down and take all your concerns, develop a plan and we will bring that to you and see if you still like us.

Dick Ainsworth: Just before Christmas when I talked to you Sterling. I know that when we asked for a meeting and you did it right away so I'm trusting you to look after this and get it done.

Sterling Chan: We'll look at it tomorrow and we'll get the date announced as soon as we can so people have lots of notice.

Keiko Hashimoto:

Hi my name is Keiko Hashimoto and I have to go back to the map of, yes that. I wanted to know if you came around and down for only 14 people, 14 residents, instead of going up you would have a lot more houses. Why did you come this way?

Sterling Chan: Which way are you talking about?

Keiko Hashimoto:

Up there there are a lot more houses and the cost efficiency is going up but you came down this way, what's the reason?

Sterling Chan: There's a couple of reasons for that. The first reason is, I mentioned this earlier in the presentation, we're limited by water pressure so the higher up the hill we go the less water pressure we have.

Keiko Hashimoto:

But you could have drilled someplace higher couldn't you have? No, you couldn't have?

Tareq Islam: We looked at the engineering and our consultants looked at it and they modelled it and just because of the reservoir height it's in such a place even that well that we have, that property is not going to get fire flow. Our fire flow will be somewhere right here. If you see that our reservoir is right here and if we go further up we cannot provide water. Even to the reservoir the water pressure drops so much that there is a risk of negative pressure that could suck in other things inside. You have to always maintain your positive pressure in the pipes.

Keiko Hashimoto:

So we are the lucky ones who get stuck with the $188,000.00 you have to pay for? We don't want it but we are stuck with it. We don't even have a mortgage but now we have a mortgage of a little over $2,000.00 for 20 years. Most likely we will be dead but that's totally not fair to me. (audience noise)

Unknown Voice:

Your property value is going to go up so much because of this.

Keiko Hashimoto:

Only when I sell! If I have to sell, yes it might go up. But insurance somebody said go lower but it's only by $200.00 but I have to pay $2,000.00 for 20 years and another $600 something for 5 years he said. 25 years mortgage. But if you do the math, 188,000 by 14 is a little less than 15,000 but because we borrow we end up paying 45,000. Right? Because 188,000 divided by 14 is less than 15,000 per person.

Sterling Chan: Can we talk about it off line and I can explain to you how it's broken down?

Keiko Hashimoto:

But it is like borrowing a mortgage. 25 years, we are stuck 25 years. For water we don't want.

Sterling Chan: Yes, we can provide that.

Keiko Hashimoto:

It should be for 9 people who want it. And we can get penalized if we decide to crawl back tail between our legs and say we want it now, we can be penalized, yes? So how about all those people who subdivide into 3, 5 10 or 15, do they have to pay? Or only the original 14 has to come up with this money?

Sterling Chan: No they would have to pay for it. First of all, that money that you pay every year, it adds up, as you say over 20 years, so if somebody came in, in say year 5 and created 2 new lots, they would have to back pay for those 5 years for each of those 2 lots. They have to catch up and then moving forward the cost would be split 16 ways instead of 14 ways.

Keiko Hashimoto:

Because it didn't explain in the letter you sent.

Tareq Islam: If there is 5 new lots it will be now 19 and they will pay into it.

Keiko Hashimoto:

I have a very big lot so if I decide to subdivide, which I won't, but we may have to sell something to pay for this. $45,000.00

Male Voice: If these 14 people are paying for this water system you are putting in and we all know there is a property along Sylvester Road that the reason he couldn't get development is because he has no water. So if he decides to develop this property and he wants to hook into the system, then the 14 people that are there, they're subsidizing him. Their rate of whatever they are paying, say its $2,000.00 a year, if he decides to put in say 20 lots, their rate has to be cut proportionally to make sure that they're not footing the bill for him. And if he decides to join up 10 or 15 years down the road, these people should get all their money back.

Sterling Chan: They won't get their money back but he will have to pay a catch up fee and then the rate would be split . . .

Male Voice: But that's making money for you. He's not . . .

Sterling Chan: I'm sorry; you're not getting it sir.

Male Voice: I am getting it because the same thing happened to me with BC Hydro. It doesn't matter, if these people are paying; say the cost is $1,000,000.00 OK and there's 14 people who are going to pay $40,000.00 a year for 5 years; for round figures; so say somebody comes in later on and decides to join up after it's all been paid for, then these people have paid for the system. It's not rocket science; anyone in here can figure it out. So why aren't they going to get their money back if somebody decides to join up and puts in 20 lots? (loud audience noise) It doesn't matter. If somebody decides to join up and like you said 10 years down the road it doesn't matter they don't get their money back. You guys are making money off them later on down the road.

Sterling Chan: No, if somebody bought into the system 10 years from now they would pay the equivalent of what those people before them paid for those 10 years. They pay up front as a lump sum so that in year 10 the new property has paid as much as those who were originally on it. And then moving from years 10 to 20 that rate would be cut down by the new number of properties. So they would be paying the exact same amount.

Dave Roblin: The money sits in reserve for any upgrades (audience talking and noise)

Bruce Edwards: Bruce Edwards. Two things, there's been a lot of talk about guesses and it would be very valuable to have some actual measurements so I suggest it would be a very good idea to commit to having data loggers in representative wells in the aquifer. So then we can know what is happening. Now if there had been due diligence, this would have been done years ago to prepare a baseline but it's better to start it now than to not have done it at all.

Sterling Chan: That's a great comment about the baseline data. So again, Tareq mentioned it and I'll mention it again, as part of the take away from this meeting, we've heard all your

feedback and we get it, there is definitely a strong desire for more information, more studies. Our teams going to have to go back and look at what we can do; we're going to talk to the province and the feds about getting an extension and we are going to have to come back to you at a future meeting and tell you how we plan to address these concerns. We have heard you and all we can say is we will let you know because we can't make something up on the spot.

Bruce Edwards: Second point, I respectfully suggest that everyone who came here should be permitted to speak rather than you people deciding, "no we've heard enough people". It's customary for public hearings at least for everyone to be heard and I respectfully suggest that you listen to the people. (audience noise) Thank you.

Dir. Boucher: I don't mind everyone having the opportunity to speak but we seem to be answering some of the questions more than once. So I think, once we've addressed a subject and you've spoken, that should be good enough.

Robert Demerse:

Robert Demerse and I live in Silverdale and say hi to Barclay for me. I was born and raised here in McConnell Creek and I went to the little school across the way. I was here when the Salvation Army built the Miracle Valley Camp, and one of the things that really ticks me off and this won't mean much to you guys because you're not old timers of McConnell Creek or you never lived here, but we're proud of our name and I had to correct the District of Mission a number of times when they referred to this area as Miracle Valley. It's not Miracle Valley, Miracle Valley was just a site in McConnell Creek. So if there is an aquifer under Durieu, it's called Durieu Aquifer, if there's an aquifer under McConnell Creek, it's McConnell Creek Aquifer not Miracle Valley.

Sterling Chan: You may have to take that up with the province; we didn't name the aquifer unfortunately.

Robert Demerse:

Well you guys are in charge. Rename it McConnell Creek because that's what we are. The comment was made a while back that there's; first of all is the Durieu well going to be phased out?

Sterling Chan: We would like to phase it out at some point. Judging by the way things are going right now and the fact that we might be looking at this for quite a bit of time into the future, I'm going to say that it's not going anywhere.

Robert Demerse:

If this well goes ahead it will be phased out.

Sterling Chan: When we can get a guarantee in writing that says your aquifer is fine, nothing's ever going to happen to it.

Robert Demerse:

My point is that I did a development, you are well aware of that and there is always a reason behind doing something and I feel that possibly the District of Mission, the School District wants to sell that property. If there's a well on it how do they sell it with that well that you are using for the water? (audience noise)

Tareq Islam: That well and the pump station that we have, we have a right of way and if they sell it, we will still keep that. They can't take it away, it belongs to us.

Robert Demerse:
OK then maybe nobody will buy it in that condition. In my development that I did I used Piteau and Associates to do some tests. I did the drilling and you guys did the testing and I was very satisfied with your work. I think what they are saying, what Piteau is saying is probably 100% correct. I had no problem with the results that I got from mine. Thank you.

Sharie Conroy: Sharie Conroy, Stave Lake Road. No one has really mentioned what the source of Miracle Valley Aquifer is. (McConnell Creek) OK McConnell Creek, we'll rename it now.

Arnd Burgert: The source of water to an aquifer, there are usually multiple sources so in the case of the McConnell Creek Aquifer the three main sources are: A) precipitation – rainfall and melting snow directly seeping through the aquitard; B) seepage from the streams near the valley edges and probably along the bedrock contact as well. We think there is an extra source of recharge coming in there based on the water levels that we see across the aquifer; and the third source of recharge is from bedrock. Remember the valley sides rise steeply and it's mostly bedrock with an overburden but then that bedrock comes down underneath the sand and gravel aquifer and there are joints and faults in the bedrock that transmit water .

Sharie Conroy: I ask that question because there's been quite a few different reports and some have suggested Stave Lake, others have suggested it coming out from the eastern side. How can we be sure, how do we find out the true source is of the aquifer?

Arnd Burgert: Science is like that, the state of knowledge keeps increasing. Early reports had postulated or theorized that the aquifer has a source of recharge at Stave Lake but then when cross sections were drawn like the cross section that I showed earlier; it became apparent that the water level in the middle of the aquifer is higher than at Stave Lake so the recharge can't be this way.

Sharie Conroy: Alright because that would be very important when people talk about climate change and if there is a lack of rain, to know what the source is would be really important for future recharge of that aquifer. So it would be nice to have a, I guess you would have to go to the province to ask them to do some further studies. Would that be the proper way to go?

Arnd Burgert: I summarized the three sources. I think if we went to the province, they would give us the same answer.

Sharie Conroy: OK, so there's no other way of testing where the water comes from.

Arnd Burgert: Are you suggesting that there is a fifth source?

Sharie Conroy: No but if you know where the source is coming then you have a better idea of whether there might be a problem down the road. So I think it would be nice to be a bit more definite.

Elizabeth Pellizzary:

Good evening, my name is Elizabeth Pellizzary and I'm on Stave Lake Road. I'm new to the area so all this information is a first for me. My sense from this meeting this evening is that there are a lot of people that are not happy with this going forward. So my question to you is are you going forward regardless?

Sterling Chan: We're going to talk to, as I mentioned, the provincial and federal government grant administrators tomorrow to see if we can get the deadline extended because there are questions here that need to have answers before everybody's going to be happy here, right? If it turns out that something isn't sustainable, something that the science says then we would absolutely stop in a second, that's not even up for debate. But we have to ask that question. The problem with deadlines is if we don't do the grant work before the deadline then we lose the grant and we've spent all this money and we can't claim it and now we're out several hundred thousand dollars. At the same time if we complete the infrastructure, it still doesn't guarantee that the water license is going to get approved but at least we can claim the money back from the province. It's a bit of a losing proposition from the Regional District's perspective, if we stall and nothing happens and walk away from it, we've spent $500,000.00 already in work. If we completed it, claim the grant money, and we can at least get the grant money back. The water license still isn't in place; we're still not taking any water out of the aquifer, nothing's going to happen until we answer these questions. So in terms of whether the construction activities continue or not is dependent upon what the province says tomorrow.

Tareq Islam: So as I said before what we would like to do is talk to the province tomorrow and ask them; it may take a couple of days for them to get back to us so it's going to be maybe Monday or Tuesday when they will tell us whether or not we can have a scope change or not. If there is no scope change, you can't stop, you must finish the project but at the same time, we told you that we are going to go back and regroup and try to find the science and get the information that you are requesting; at least to have a path forward for that. We will come back to you in three weeks and share that idea and information and in the meantime, if we can hear from the province and the feds that they give us the green light, that maybe we can extend it then we will think about OK maybe we can stop the project. There are a lot of moving parts so we don't know yet. Director Boucher also intimated that we will have this conversation. Today was from us to hear from you, what you said, now we are going to go back and try to find those answers and we will come back to you.

Elizabeth Pellizzary:

OK. Another thing that I don't have is any costs. What are the costs to each individual property? What's the break down? I don't see any and that's important because what

if I don't like the costs and I'm happy with my water, I don't need to get hooked up. What is the cost to me? Can I opt out?

Male voice: Why didn't anything go to tender?

Elizabeth Pellizzary:
There's no data on costs. I don't have any.

Sterling Chan: You live on Stave Lake Road, you said, right? (Yes) So you're on a well right now, right? (Yes) You're not on the Hatzic Prairie Water System? (No) No cost. There is zero cost.

Elizabeth Pellizzary:
So if you put in the pipeline and you go to a designated area, I don't have to hook up and there's no cost to me.

Sterling Chan: If you're on the system already there's no cost. There's just the one section on Sylvester Road where anybody has to pay for cost there is because the government is only giving us a portion of the money to build the water line. The unfunded portion right there has to be paid back, has to be paid for somehow. The unfunded portion of the new water source is going to be paid for using reserves that we already have for that water system.

Tareq Islam: So these people, all these blue lines, these people are already paid for with the reserve fund, and we're building this and it's not fully funded, it's 83% funded from the senior governments, 17% of this project cost is paid from the reserve fund that these people have already paid into. This portion there is also a balance of the cost; they have to pay that balance. This is probably about 8% or maybe a little bit more depending on the project costs. We don't know that final cost at the end of the project because we haven't started construction. In terms of a tender that was mentioned, the Regional District is working as the general contractor so what we have done because we don't have any equipment and associated labour, so what we do is every few years we go to the market and through BC Bids, a public process, we ask for companies who can provide that equipment and labour and they give us a cost based on total price. The lowest one gets number one and the second lowest gets number 2 and the next gets number 3. So we select 4 companies to do this job. The first one gets the first chance to build it, we buy all the products ourselves, we go to public tendering process; if we are buying pipe, we ask 4 or 5 companies to bid on those pipes. We buy them. It's not a tender price for the entire project. In doing that because we don't have any profit margin because it's government, we can't make money. So this way we have saved a lot of money for (interrupted)

Male Voice: No but you can hand out a million dollar job to people that have the bid, you might get more competitive bids by going to more select tender. You've got a certain amount of people who are getting the jobs no matter what. You get a price from one guy over here who says I'll do it for a million bucks and you say sure go ahead we think you're the best fit instead of going to public tender.

Tareq Islam: No we go to public tender,

Male Voice: I've noticed the same contractor for years and years who does all the work for the Regional District. The same guy, the company has always done all the same work. I find it very unique that the Regional District does this. I know a lot of municipal work and that's done for jobs that are like fifty thousand dollars, a hundred thousand dollars, not multi-million dollar projects where there's a lot of money that you guys control. You know what I mean? It's very unique.

Tareq Islam: Just to give you an example, I will give you two examples; one is the Hatzic Prairie Water system, initially when we built it we went to public tender. The cost of public tender; that includes your construction, equipment and material, it was a million dollars over the value of the money that we had. So what we did was we looked at it and said, OK we can't do this job, the tender cost was a million dollars above. So what we decided was we can do it ourselves. . . . .

Male Voice: You're not doing it yourselves; you're being the general contractor. It's liability and insurance only.

Tareq Islam: We are hiring the labour and equipment but we are buying all of the product, that's part of the contract as well. A contractor will buy that product; pipe or building material whatever it is; they will buy that and whatever price they want, they want . We went to public tender for that and the price came in at more money than we had. We completed the Hatzic project and we saved several hundred thousand dollars. Just to give you an example. Another example is in Boston Bar, we did the project for water. We went to design build, totally from A to Z was design build, and we had 2.5 million dollars to spend and the lowest bid was 2.5 million dollars. We couldn't do that. You are talking about municipalities and municipalities are different

Male Voice: It's a government body.

Tareq Islam: Yes but they are way bigger in terms of us. When you are talking about our service area, you're talking about only a hundred homes or a hundred and fifty homes. We are like not even a village compared to municipalities. We don't have those resources so what we do, our projects are very minute compared to those in municipalities, so in the Boston Bar example, our project was 2.5 million, that's the total amount for the project, and the lowest bid was 2.5 million so we did the same process. We went to the market and asked for labour and equipment and we got that selected based on the lowest cost. If we get the contractor, it goes to public, it goes to BC Bid and we get the price.

Male Voice: And that contractor gets a certain amount of years guaranteed work form you guys.

Tareq Islam: In the past we've done this every year but this year we've had so much work that we went for two years. Every equipment operator has the opportunity to bid if they want. And it's not in our control, it's a public process.

Male Voice: They bid saying my backhoe is going to be this much an hour, my guys are this much an hour, one guy is a dollar less, he's got the contract, if I'm getting this right, so he gets any work you guys have, he gets the job.

Tareq Islam: Whoever is the lowest gets the job.

Dir. Boucher: OK guys let's get back on topic.

Male Voice: I don't think it's off topic. Tender, it's public money. I think we have a right to know where it goes. Am I right?

Dave Roblin: It goes to 4 different contractors. They are hired at an hourly rate.

Male Voice: I would love to know what that is, I don't know what that is, I don't know who got the job.

Dave Roblin: Do you want to know our four contractors that we have? (Yes) Yeoman Services, Strohmaier's, Mission contracting and Sandpiper are the four that submitted in the public process.

Sterling Chan: Basically it was all done through BC Bid, it was public procurement; give us your price per hour for a class 6 excavator. . .

Male Voice: For this job not . . . .

Sterling Chan: No, just in general, give us your rate for your foreman, your trucks etc. Give us your price and whoever's got the lowest price is number one priority. But that's also how they bill us. None of our jobs are done lump sum; they're all done by the hour.

Male Voice: I understand that completely.

Sterling Chan: Except for the fact that our staff is on site to supervise them, we're in the trench with them. This isn't just go do the job and we walk away and see how it's done; we are there all the time.

Pete Chapman: We're covering the meterage daily.

Sterling Chan: Like Tareq said, if you looked at our past performance we've done extremely well. We beat market prices all the time. If you want to talk about it further, we can show you all our contractors, we can show you their rates, its public information. Its public procurement it's all available if you want. Grab my card and we'll talk about it later.

Pauline Peters: Good evening. It's been a really good meeting, I'm glad to see so many faces here. My name is Pauline J. Peters and I'm the president of the Rate Payers Association and really glad to see so many people here. I want to thank the people; Sterling and Arnd for coming here and being somewhat prepared for the numerous questions. I do want to say that the Rate Payers Association, there's been a group of people that have been here for a very long time and they have a long history here and this is one community that has a lot of communications and liaises with a lot of government agencies and so receiving; you indicated that you only like to give three weeks' notice, well we have a lot of keeners in this valley; we're all very concerned about where we live and take care of it. So three weeks is not sufficient notice for us and given that we have a Rate Payers

Association that deals with this, that's another mechanism to provide the information and interface with the community. Ray Boucher is our electoral officer for this area and that is also a mechanism, a person who represents the community and we need to utilize these entities that are already here. What I wanted to ask you, there was a lot of questions and there is a lot of technical data that's really difficult to understand, and I don't believe we all need to become engineers and hydrologists to get the jist of what's happening. I know that people would be in support if they knew that all of their concerns are being answered appropriately and that their livelihoods aren't going to be impacted, that other people aren't going to be, special interests or some people may consider special interest groups, aren't going to be superseded over the regular community, the citizens that live here. And one of the things that Mr. Islam, I'm not sure, I've forgotten what your first name is, but you said that you were going to do three things; one, you were going to reduce the flow by 50% is what you were going to look at with your team and you were also going to; Sterling had indicated that you were going to enhance or supplement the draft report so that might be including the phrase or the terms that indicate that we don't have something to be concerned about with the people living above the aquifer as well as the thing with the Durieu School. Groundwater At Risk of Pathogens. That there isn't any concerns now but there might be in the future especially given climate change, flooding and all the other activities that happen that impact our community or the actual environment. I understand that the Department of Fisheries and Ministry of Forests have their hands in this because it's actually administered through them so I have some sense of confidence that things would not happen if it wasn't safe for the fish bearing streams. You did not however, indicate you were going to request a; the third thing you said you were going to see if you could get an extension for the grant program. Will the grant program actually assist you in actually building the infrastructure? And so does that also include the management as well or is it only the actual physical operations to get the infrastructure in place?

Sterling Chan: Just construction capital only.

Pauline Peters: OK so what you did not indicate is would you ask for a suspension, not a suspension but I guess suspension; suspend the application because there are so many other variables here which is the community consultation that has not happened.

Sterling Chan: You are referring to the water license application right? (Yes) So going back to my response to Hugh's question, I'm going to look at it and if we can do it I will. I just have to know that I'm not going to go behind 20,000 other applicants who have wells. I need to get a sense of that. If we can, absolutely.

Pauline Peters: OK. You also indicated that the water people were here.

Sterling Chan: No they were planning on attending but they ended up electing not to come on account of the weather.

Pauline Peters: Ok. So would it not be useful to have them a part of the next meeting so that this is something that we can; because it's not like you guys are going to get the application; it's not like you are going to get the OK tomorrow. It's not going to be like you're going

to get it next month so is it not possible to have those people in the discussion; like in this meeting room with them so they can understand that we are not necessarily saying no to this project, we need more information to make us feel comfortable to help make help you guys carry out your work; you can get the suspension and they can understand why; because we are individuals and we're not infrastructure, we're not things, we are living beings and we live here. So those are always the things that are not considered. You know we do think about the frogs and the other things but we are people. So that needs to be factored in to that.

Sterling Chan: So I'm going to forward to them all the meeting minutes, everything that we transcribe, I'm going to forward to them. I'll invite them to the next meeting; I suspect that they are going to insist on attending.

Pauling Peters: That's great. Now I also wanted to ask you about what are the ramifications if you guys discuss holding off, like seeing if you can get an extension for the project past the March 31st date, what are the implications of you guys getting that? Are you going to continue, are you going to cease and desist the work tomorrow?

Sterling Chan: Nothing would make me happier; I have 6 other capital projects that I am working on right now. If I can direct my attention towards them and put this on the shelf for a couple months while we sort this out and direct my efforts towards the other ones that also have deadlines, that would be great.

Pauline Peters: Ok, I just want to make it very loud and clear that we expect more consultation and that means that we should have been consulted as a community because one thing that happens up here, it affects everybody. You may not think so but it affects everybody. So when you only contact people across the street or within that one kilometer, well it isn't just the one kilometer it affects. So we would like to as a group, as a community we have the association, the Hatzic Prairie Ratepayers Association, and we also have the McConnell Creek Farmers Institute and both of those community groups are pretty much all the same people so there's no excuse for not being able to bring that information to us like you do other things, whether it's dog licensing or more fire trucks or whatever. I want to make that clear that there's no reason why you guys can't not be bringing us long before things happen, long before you're shovel ready. Thank you.

Sterling Chan: Thank you.

Robert Demerse:
One quick question. On the well is there a cap on how much water you can pull out of there?

Sterling Chan: Yes, it's capped by our water license.

Robert Demerse:
I think if there was some guarantee that that's all the water that you're going to take out of it, that would make a lot of people happy. That would preserve the rest of the aquifer for McConnell Creek.

Sterling Chan: Yes, absolutely.

Earl Babich: Hi guys. Thanks for doing such a great job. For people who don't know me, I'm Earl Babich and I have been aware of this project, with Ray, when the project started in 2012, it got its first pass through the board in Chilliwack. So this project, as a rate payer, has been discussed in the ratepayers' meetings for years. So for people to come to this meeting and say that they are unaware of the problems with the water source in Hatzic Prairie, that's sort of not true. I was also given a unanimous vote from the McConnell Creek Ratepayers to try and stop the closure of the school. Now this water source is a much better water source than the current water source which is at the school. And if we were ever to open that school again, having a quality water source is something that would be essential for the Board of Trustees to look at and say that there is not a water issue within our community. So as an overall project which has been monitored, which has been looked at by the Regional District, due diligence, it's been looked at by the province, it's been looked at by the federal government; this project is a really good project for the community as a whole and it's not the people in Hatzic Prairie fighting against the people in McConnell Creek; it's about all of us as a community saying that yes, this is an infrastructure project for our community that is beneficial in the long run. And the cost is only being burdened by 14 residences and it was a democratic vote which is the process that existed under the law. I just want people to know that the discussions of the quality of water and the contamination potential of the Hatzic Prairie Aquifer has existed for years; and people should know about it and I'm kind of disappointed that people are saying that the Regional District has been doing this process blind. People are just not communicating correctly. I do really appreciate everybody that provided questions because it's a good process, I'm very pleased about it but let's attend the ratepayers meetings, seriously, if we're going to want to communicate about stuff like this. Cause I attended for years, I probably haven't attended in the last year because people get more done as private citizens than they do as a ratepayers group. I'm happy to see the really great turn out and to see this meeting but let's not blame the Regional District for something that's been going on in the public eye for years. We can all go and look at the minutes of the Regional District, all their meetings; this has been a public process from the get go. Thank you.

Krys De Bartolo:

Hi I'm Krys De Bartolo, and I just wanted to clarify that the ratepayers have known for years about the well that has been at the school and it has been discussed but what we have been referring to has been the new well and the new water way, whatever you call it, so what Ray is saying is untrue and I think Ray you need to come at the October meeting and you said the well was pumping water and everybody there assumed that you were talking about it being a well that would provide water for his subdivision. Nobody had any inkling that it was to do with providing all the other properties with water.

Dir. Boucher: Thanks Krys. Peter's not putting in a subdivision. So if anybody thinks that he's going to develop his land. If anything where that well's located is the top part, Peter has four ten acre lots up there and he's thinking maybe he's going to build on that top one and in exchange for having the well there he would have water on that particular property.

That's the only plan that's in the future. If you thought that I indicated that Peter was going to subdivide all the land, no he isn't.

Krys De Bartolo: Because I went through all my old minutes, as far as I could because my computer was stolen a few years back, and I asked people who were in the ratepayers if they had any idea that this was going on, and nobody had even heard of this, so I think we are talking about two different issues between what Earl is saying.

Dir. Boucher: That could be.

Krys De Bartolo: That's it. Thanks.

George Kocsis: I'm George Kocsis and I live close by here on the same aquifer and what I'd like to see you guys do, if you could do this is pick a benchmark, maybe this well , the whole well, right, and monitor that and then we all benefit from it. If we're losing water we're not going to point and say it's you, you, you but we all know something, right? And I don't think that's too hard or costly for you to deal with. And I know it takes years, you don't just say "Oh it's up or down". Could you consider that? (applause)

Unidentified Speaker: Just one quick comment. At the Ratepayers Association I don't believe there was any mention at all of the new well. There was some discussion about the school wells but the first that most people heard about the new well was when they saw the water mains along Stave Lake Road. So this was done without any even informing the ratepayers let alone consulting. So any thought opined by people who didn't attend the meeting that the ratepayers were informed all along is quite mistaken.

Dir. Boucher: Anybody else? Going once. You know traditionally at meetings you are only allowed to speak once and for five minutes.

Krys De Bartolo: Well this is an informational meeting and we didn't start with that at the beginning.

Dir. Boucher: I know we didn't set the rules at the start.

Krys De Bartolo: No you didn't set the rules at the beginning, Murphy's Law. I've just got a question. Of the subdivisions or the red line going down, the expansion line, can you bring up that and then overlay it with the one you had with the potential for subdivisions to see what is there?

Unidentified Speaker: It's the last two properties on the south end on the hill side, so there are two properties there with proposals. One's a Chinese investor and (unintelligible)

Krys De Bartolo: So there's a seven and a three lot. They are five acre lots.

Unidentified Speaker: So if those subdivisions got completed so there would be five more lots. So rather than divide the cost by 14 people you would be dividing it by 19 people.

Krys De Bartolo: My question was of those two subdivision lots has anybody been pushing for that extension to go through? Is there anybody who is going "I want that to go through, what can we do?" Has there been any one person doing that? Can I ask that question?

Sterling Chan: As I mentioned before, we sent out a petition process, so we sent out . . . .

Krys De Bartolo: I understand that. What I'm saying is before you went out to that petition process, as this gentleman said he knew about it going back for whatever, it just seems funny that you've gone down to 14 homes, 14 properties and you've stopped it at the bottom of where the subdivision is you said (yes) so why did you make the rational there, was the person who owned those properties at the end pushing for that water main to go through?

Sterling Chan: Yeah we absolutely had interest from people in that area for having a water main there…

Unidentified Speaker: They're not going to name them.

Krys De Bartolo: That's OK, that's what I wanted to find out.

Simon Gibson: Hi folks I'm the MLA here and I just wanted to thank you for being able to be here. It's really been an interesting meeting and I've talked to some of these folks in my office and I just want to say that I believe Ray's doing a good job representing you and I've worked closely with Ray and I just want to say thank you very much for allowing me to be here and I appreciate all the work you're doing for McConnell Creek.

Dir. Boucher: Thanks Simon, I'll pay you later. OK, if there's nothing else, we might as well pack it up.

Unidentified Speaker: Can we get a deadline on the next consultation meeting?

Dir. Boucher: Yeah, I think they were talking about three weeks or maybe close to four but certain things have to happen first so as soon as that gets done, then we'll find a date and we'll all meet again.
Thanks folks.