

## **Water Technical Committee - Capital Projects**

### **Water Project Phase II**

2017 saw the start and substantial completion of Phase II of the SPID water system. Construction started in early spring and was scheduled for completion by the end of July . The project included the upgrade of the main and the household connection all along Tozer ,Michaels Place, Ships Point Road from Tozer to the second Baynes intersection ,the south Baynes loop and Park Rd .Also included as a loop from Tozer to Wentz Way that will vastly improve the fireflows available and will improve the water quality by increased circulation.

As with most construction projects we did run into several minor issue but there was a major issue that extended the substantial completion date to the end of the year. This issue involved inadequate cover over the top of the main pipe .The general level of cover required in the contract was 1000mm and the cover along Tozer was as little as 500mm in some places. This lack of cover would present a long term problem in terms of road maintenance and frost protection.

The solution to this issue took many discussions with Ships Pont Improvement District , MCSL (consultant), Hazelwood (contractor ), VIHA and the Ministry of Transport ( MoTI). The final solution agreed to was to move the drainage ditch further away from the road in the area of Tozer where the pipe cover was inadequate . This work was taking place well into the fall and affected the completion of the project.

We recently did a deficiency review with the consultant and what was a \$17 K deficiency list is now about \$8K. In addition we have warrantee protection items such as grass seeding as it is not considered complete until two mowings have been done.

You may have seen the problem with the drainage at the end of Tozer. This is a difficult issue to resolve as it is ultimately the responsibility of MoTI but for historical reasons they are reluctant to undertake repair . SPID is still in discussions with MoTI to resolve

I would like to thank all the residents for their patience. This has been a trying project for some of you and we hope take learnings on this Phase of the total upgrade to the next stage

I would also like to thank the board for their continuous support and especially the Public Liaison Team or PLT as we called it. It included Jackie Ainsworth , Dave Henderson and Allyson Roy. For some reason, I was not allowed on the committee. Probably because of my smooth communication style. From my perspective this group did a magnificent job in maintaining reasonable relations with ratepayers in some really trying situations.

They did get some help though –from our water operator Dave Shepherd . Dave was the face of SPID on the jobsite. He solved technical issues, communication issues and relationship issues that easily could have become serious issue if allowed to fester. I also am in debt to Dave for his active monitoring of the construction players .

You have seen in a previous report the project financials. The project came in near or under budget so the next issue is Phase III.

### **Phase III**

No . I do not know which side of SPR the new pipe will go on – but lessons learned from Phase II will be applied

We are going to take a little rest for several reasons .We have not had any major leak issues with the section that has not been replaced. In addition a several year hiatus will improve our financial position and not require as much debt to move forward

Our current plan is to tender the consultant contract in 2019.It will be divided into three sections but only issued to a single consultant

A -Initial survey and design

B—Tender and permits

C—Construction supervision and quality management

A will be done in 2019 and B&C will be priced to include delays of 1,2,3,and 4 years .This will allow the project to be “shovel ready” in order to apply for grants .If grants do become available we will start the project according to the timing of the grant which could be as early as 2020. If we do not get a grant we would start the project some time after 2022.

SPID will be setting up a grant soliciting committee . Any grant that we obtain reduces the financial strain on the district

## Water Technical Committee - Operations

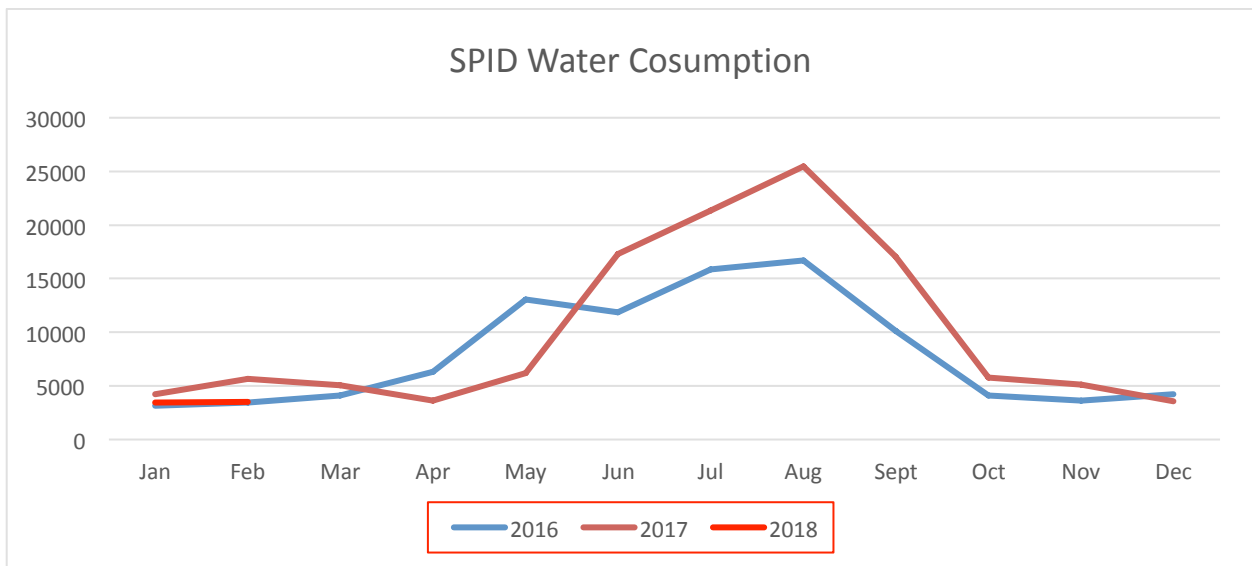
### Personnel:

Bob Beedle and Jack Wilson retired as water operators in 2017. The SPID board had a small retirement party and provided gifts to show our appreciation for all the years of support that both of these folks provided .

Bob and Jack have been replaced by Dave Shepherd on contract as the SPID main water operator. He is supported by volunteer Mike Mesford and contractor Dave Henderson . We are very appreciative of the work that these folks have been doing improving operation of the system and responding to the emergency messages that have a nasty tendency of being sent out from the pumphouse in the middle of the night.

### Consumption

Our water consumption for 2017 is up over 20% compared to 2016 . This represents an average individual consumption of 1.2 M<sup>3</sup> per household per day compared to the Canadian average of 0.25 M<sup>3</sup>. Although the water supply as defined by well levels remained robust we are never certain what the high water uptake is doing to the aquifers. We monitor for possible saline intrusion and so far we have seen no evidence of a problem . The monthly consumption graph for 2016 and 2017 is attached and demonstrate our high consumption for the summer months . This was a very hot and dry period in 2017 and caused high irrigation usage . Although our system held up well we would ask the ratepayers to exercise restraint particularly in the use of water for irrigation . We have no meters so we have depend on the ratepayers to be responsible or their own consumption.



## **Performance :**

We had no unplanned water shutdowns other than a construction incident . The generator came on automatically for all the power outages and maintained flow and pressure as required

The alarm call outs have been responded to by the water operator or his supports. Most of these callouts have been for chlorine disinfection issues and they have been resolved without issue .There are other alarms sent out but these have been for low or high pressure and have been caused by water use during fire training . These are expected and cause no response by the water tech team .

The water tech team has been actively developing Operating Guidelines to document all procedures that are required to operate the SPID water system .This effort will professionalize the operation of the water system , provide performance parameters for evaluation and provide continuity from operator to operator

## **VIHA**

We have recently had a meeting with the VIHA Drinking Water Officer who is responsible for the SPID water system .SPID asked for the meeting so that we could change our water testing protocol to reflect the changes in our test points with Phase II and the installation of a continuous residual chlorine meter . These changes were accepted and have been implemented . In addition the DWO did an inspection of our system and provided a “report card” .We are still preparing the SPID response but one of the more important requests was to update our well head protection plan. This is something that SPID has been aware of but will now become a priority.

## **FLNRORD**

Forest Lands Natural Resource Operations and Rural Development is a mouthful but it is the bureaucracy that issues our water license which is the permission to withdraw a certain quantity of water from an aquifer or a surface source . It is very strange but this ministry apparently has zero accountability for the quality of the water that we take under license or for protection of the sustaining watershed . This is somewhat incomprehensible given that this ministry is responsible for the Water Sustainability Act which includes watershed sustainability

## **Summary**

I have been exposed to other Improvement Districts and other water system operators and the SPID system compares with the best . The SPID water system is operationally robust and financially accountable and I hope that the residents of Ships Point appreciate the work of the SPID board in maintaining this position and continue to support the work of the board .