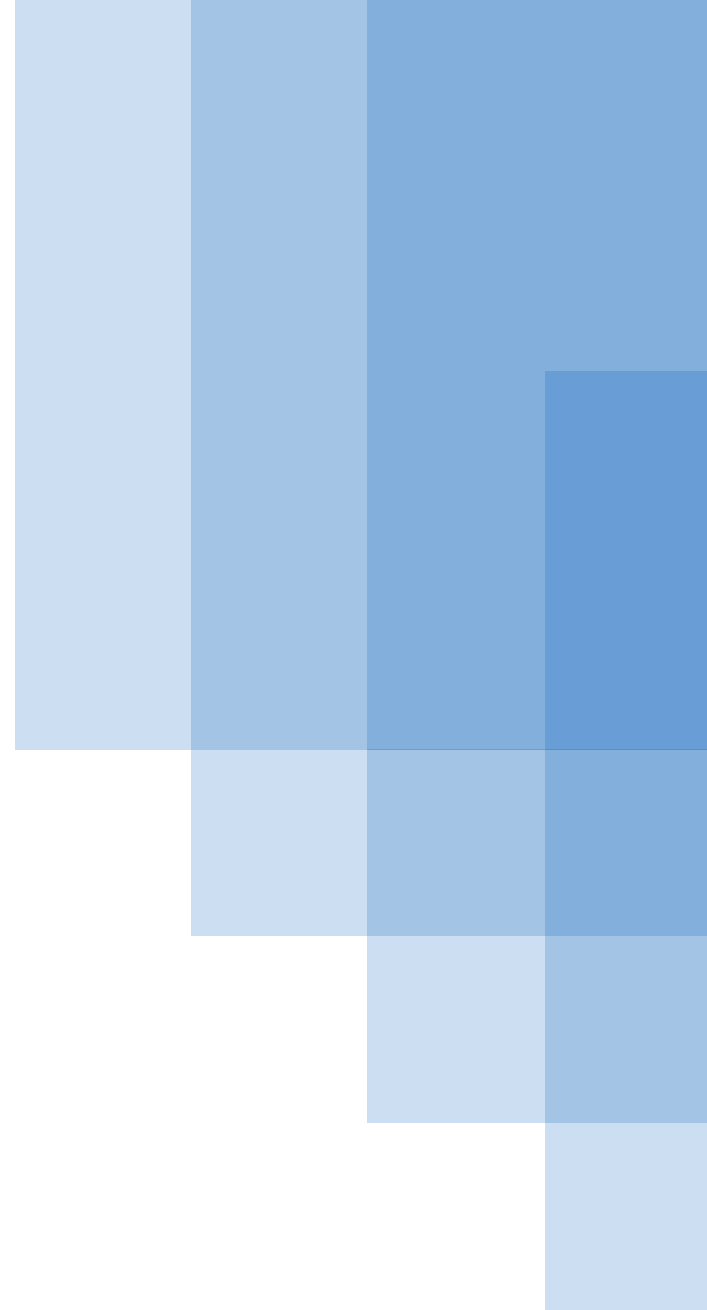




Teedon Pit CLC Meeting #2

April 3, 2018



Agenda

- Discussion on Terms of Reference
- Approve Minutes from March 5, 2018 meeting
- Mapping of Concerns & Comments
- First Nations Concerns
- Teedon Pit Update
- Permit to Take Water
- Next Steps

Discussion on Terms of Reference

Approval of Minutes from March 5, 2018



Mapping of Issues Raised During First CLC Meeting

	Macro	Legacy/ Trust Issues	Water	Operations (Safety, Noise, Dust, etc.)	First Nations
Ongoing	<ul style="list-style-type: none"> Aggregates are important, but does the value of the aggregate resource justify the potential for damage to the water resource? Does surface rehabilitation matter compared to the holes in the aquifer? 	<ul style="list-style-type: none"> The community did not enjoy a positive relationship with the previous operator of the Pit. Concerns and complaints were ignored by the previous operator. Questions asked during public meetings were left unanswered Original approval for the site was from the 1970s raised concerns that it might have been outdated. Issues with wells in the past. Concerns that the previous operator's wash pond on the site may not have been properly authorized. 	<ul style="list-style-type: none"> "World's purest" aquifer Precautionary principle Site 41 and the Alliston Aquifer Do levels of water taking run the risk of "running down" the supply of water? Does the wash pond, work, or silt in suspension contaminate the rest of the water? Is there a risk of spills? Does the Pit have an impact on neighbouring wells? Methodology/sufficiency of the well tests 1.5M buffer 	<ul style="list-style-type: none"> Noise and vibration Hours of operation Future rehabilitation Roads and intersections Safety for pedestrians Aquifer over aggregate 	<ul style="list-style-type: none"> Process Dufferin undertook to secure First Nations representation What consultation protocols were required with First nations, having regard to Treaty/Legislative rights and entitlements?
PTTW					
Expansion					

Teedon Update

- Week of March 26th, drilling began to install additional monitoring wells.
- Week of April 2nd, neighbourhood well survey being completed.
- Dufferin has been in contact with the First Nations and Metis:
 - Dufferin met with Metis Nation of Ontario.
 - Meetings will be held with Beausoleil First Nation and Rama First Nation.
- When overnight temperatures permit, production operations and washing will commence.
- An appeal was filed with the Township of Tiny regarding the Official Plan and Zoning Bylaw applications for the proposed pit expansion.

Permit to Take Water Renewal

- The Ministry of Environment and Climate Change (MOECC) issued CRH a Permit to Take Water for the Teedon Pit August 14, 2017. The PTTW expires April 29, 2018.
- Dufferin has applied for a PTTW renewal January 18, 2017. The application is posted on the EBR. The last day for commenting is April 23, 2018.
- The application is for the same pumping rates and volumes as the existing permit.
- Dufferin requested the MOECC to extend the comment period from the normal 30 days to 90 days.

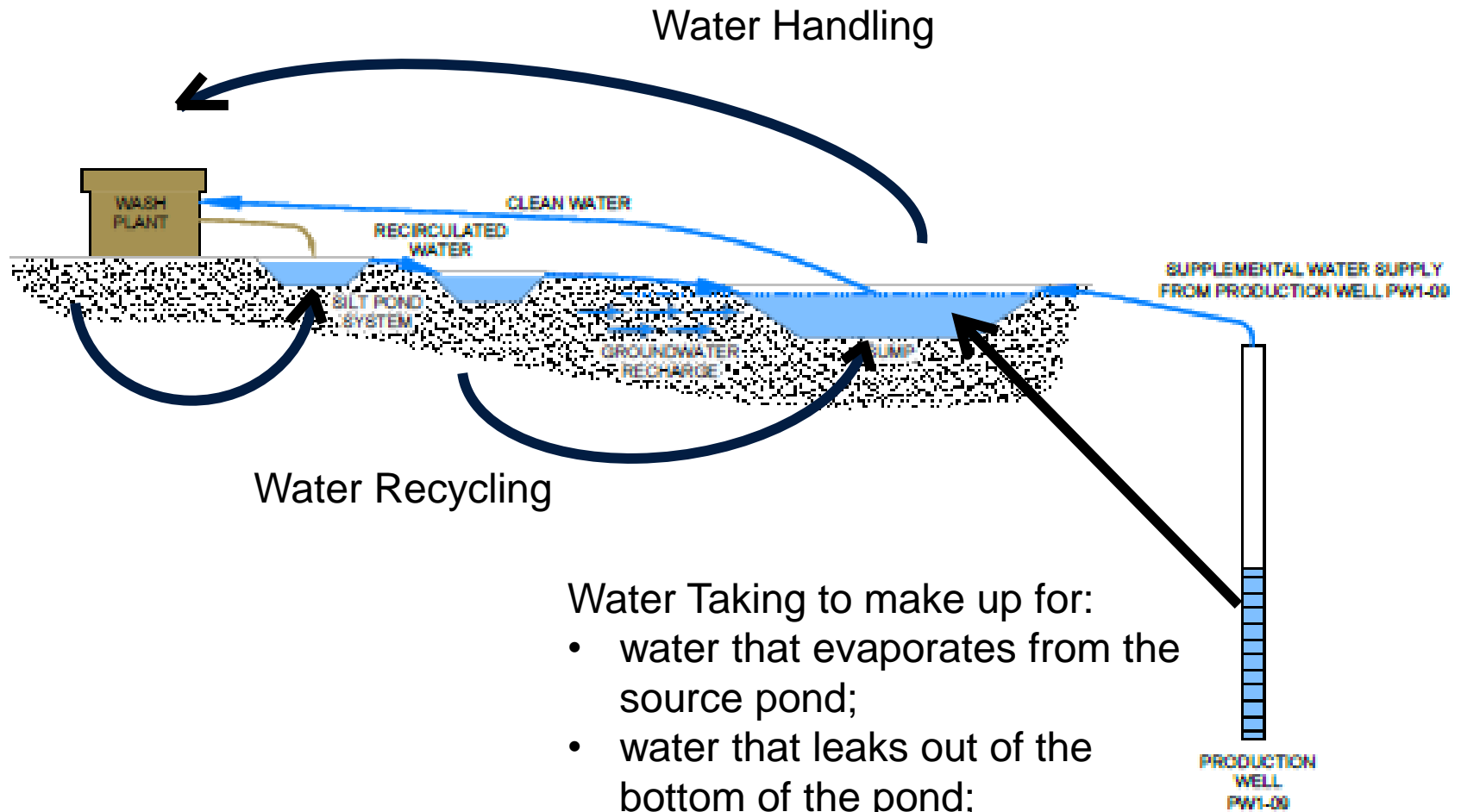


Permit to Take Water Renewal

- Aggregate washing consists of rinsing sand and or stone to remove the naturally occurring fine sand, silt and clay.
- The application and technical review plan for the maximum amount of taking, however, normal operations are below the maximum amount. It is a conservative assessment that provides some flexibility.

	Water Taking Source PW1-09	Water Handling Source Pond
Maximum rate/min	1,136	7,274
Maximum litres/day	1,635,840	5,237,280
Maximum hours/day	24	12
Maximum days/year	210	210
Timeline Taking	Jan 1 to Dec 31	Jan 1 to Dec 31

Permit to Take Water Renewal

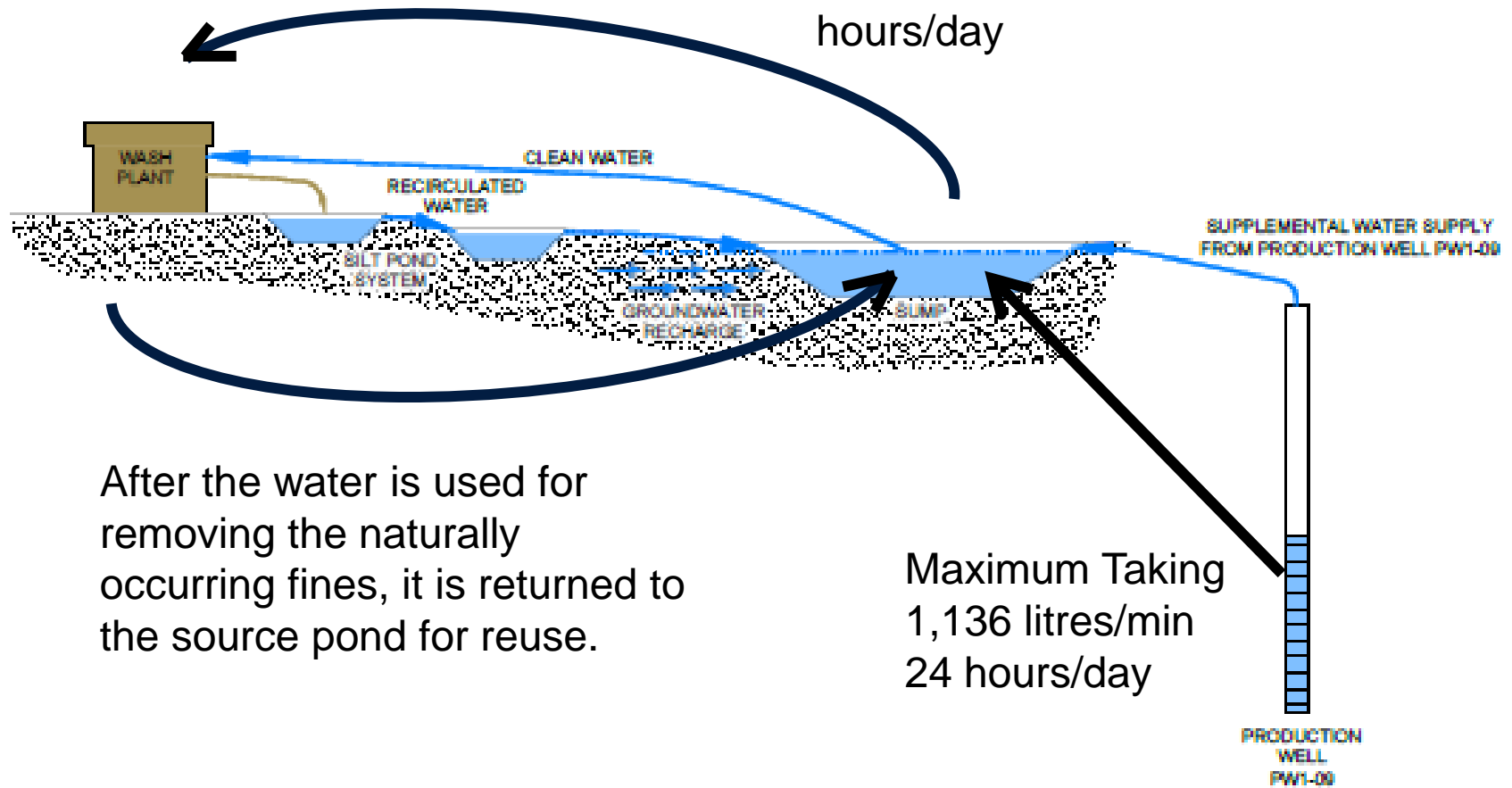


Water Taking to make up for:

- water that evaporates from the source pond;
- water that leaks out of the bottom of the pond;
- water that stays on the washed aggregate

Permit to Take Water Renewal

Maximum Handling
7,274 litres/min 12
hours/day



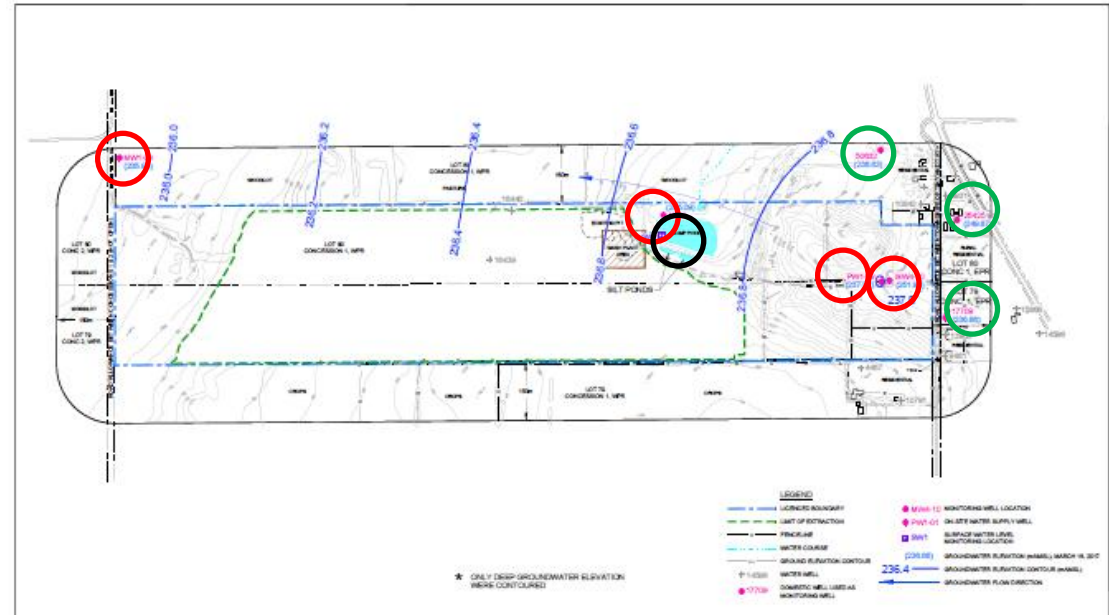
After the water is used for removing the naturally occurring fines, it is returned to the source pond for reuse.

Maximum Taking
1,136 litres/min
24 hours/day

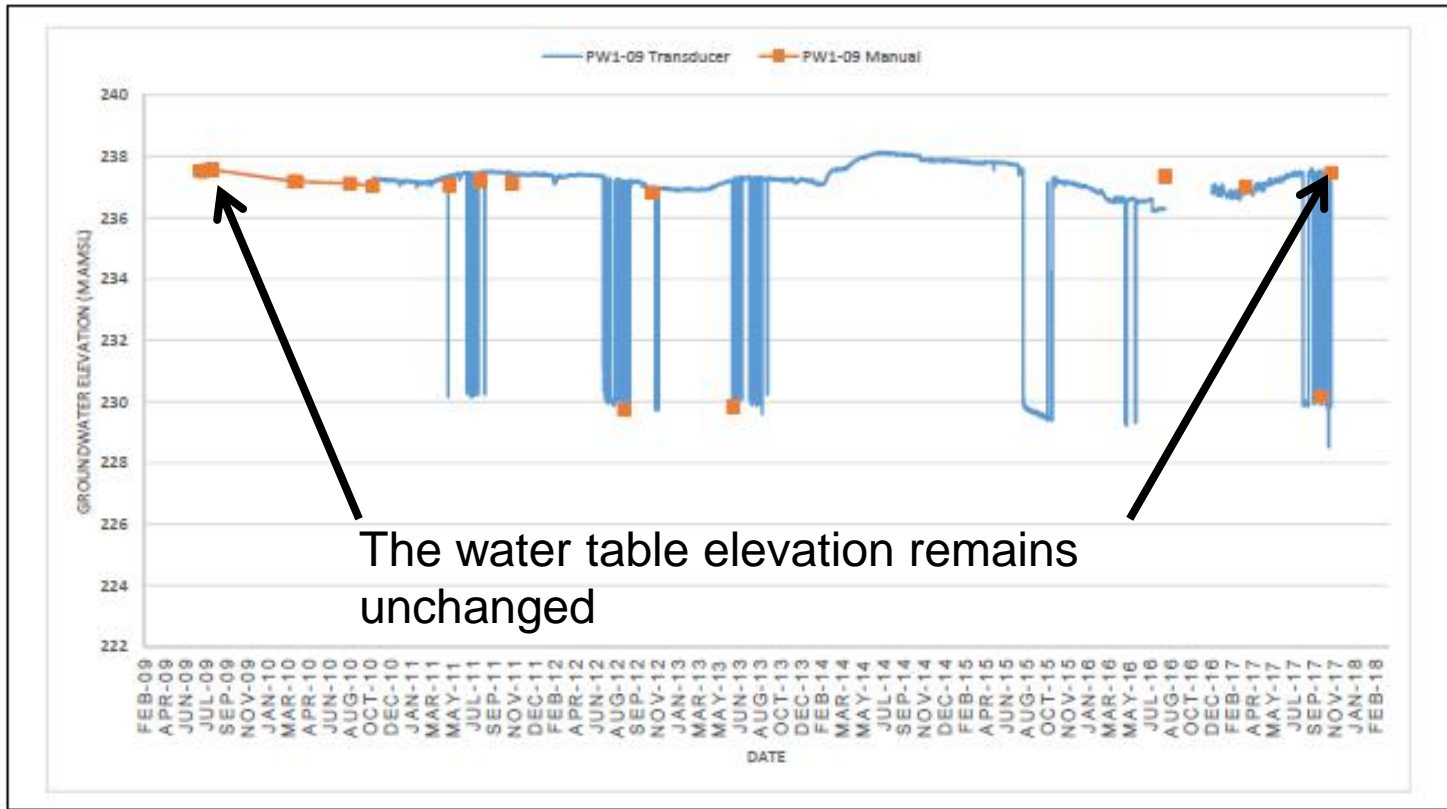
Permit to Take Water Renewal

- Dufferin will continue to monitor ground water levels, the water level in the well where the water is proposed to be taken and the water level in the source pond:

- 4 wells on site ○
- 1 surface water body on site ○
- 3 domestic wells ○



Source Well Hydrograph



Dufferin Paris Pit
North 1/2 Lot 79, South 1/2 Lot 80, Concession 1 WPR
Township of Tiny, County of Simcoe

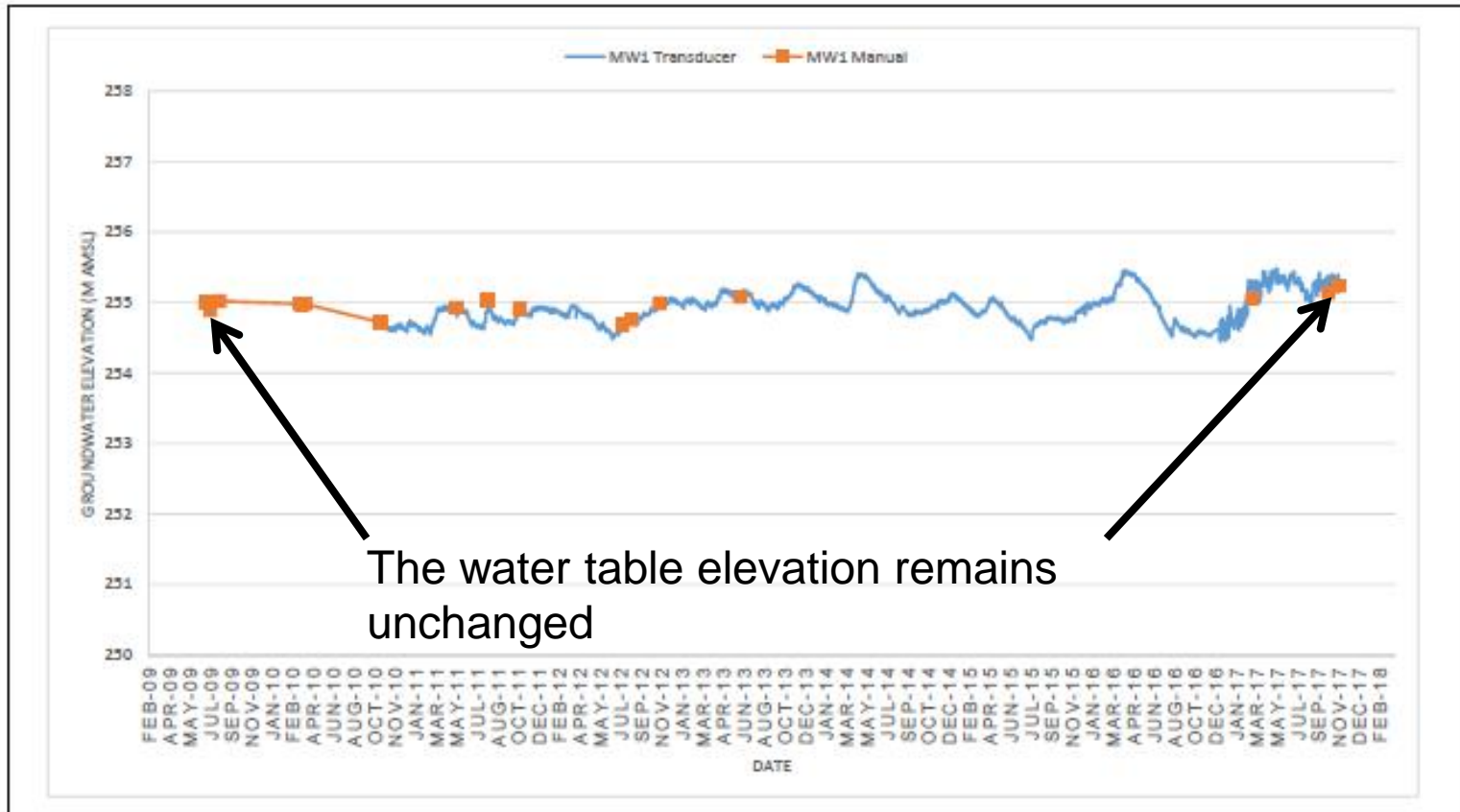
PW1-09 Hydrograph

11155365

4-Jan-18

FIGURE 1

MW1 Hydrograph



Dufferin Paris Pit
North 1/2 Lot 79, South 1/2 Lot 80, Concession 1 WPR
Township of Tiny, County of Simcoe

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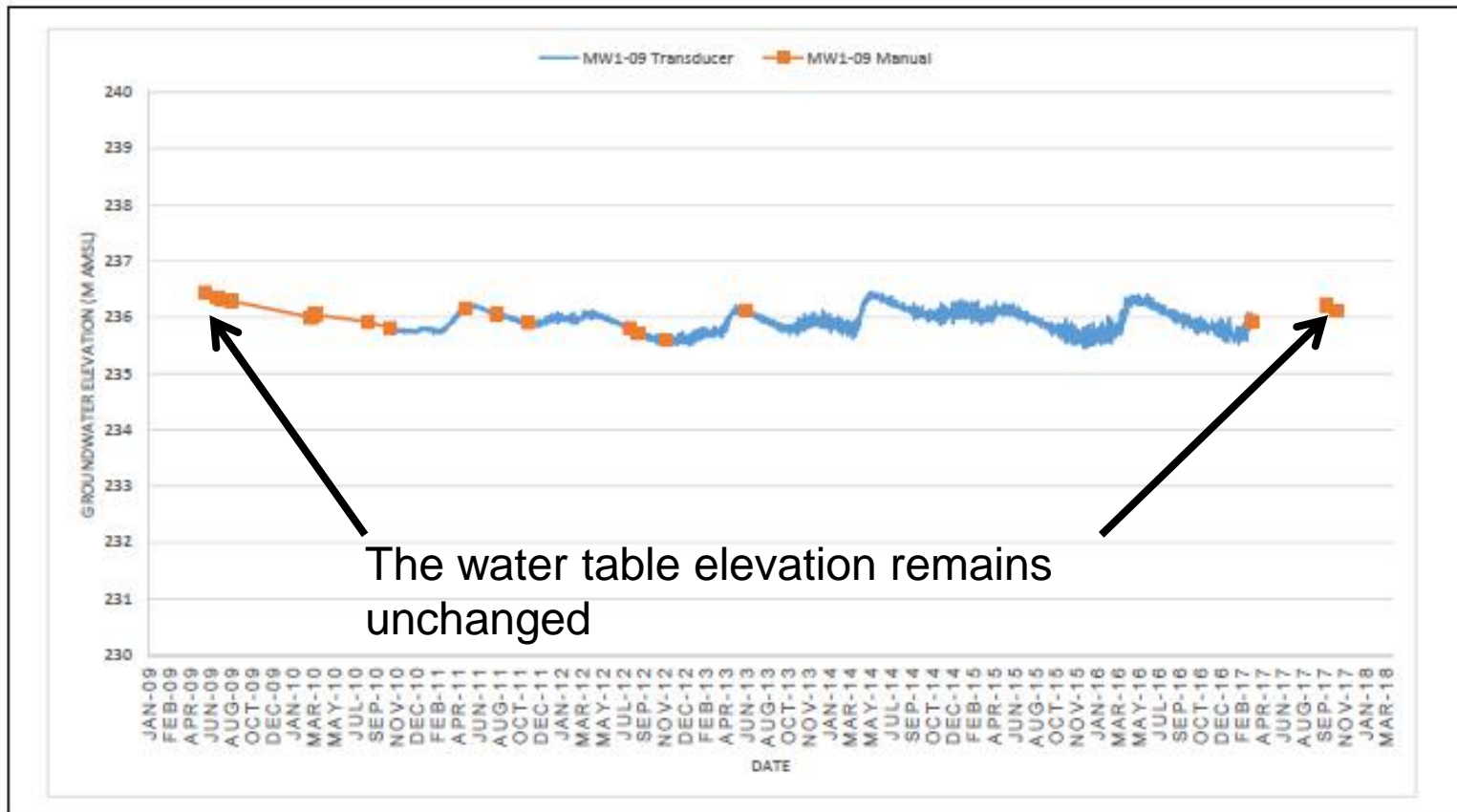
4-Jan-18

MW1 Hydrograph

FIGURE 3



MW1-09 Hydrograph



Dufferin Paris Pit
North 1/2 Lot 79, South 1/2 Lot 80, Concession 1 WPR
Township of Tiny, County of Simcoe

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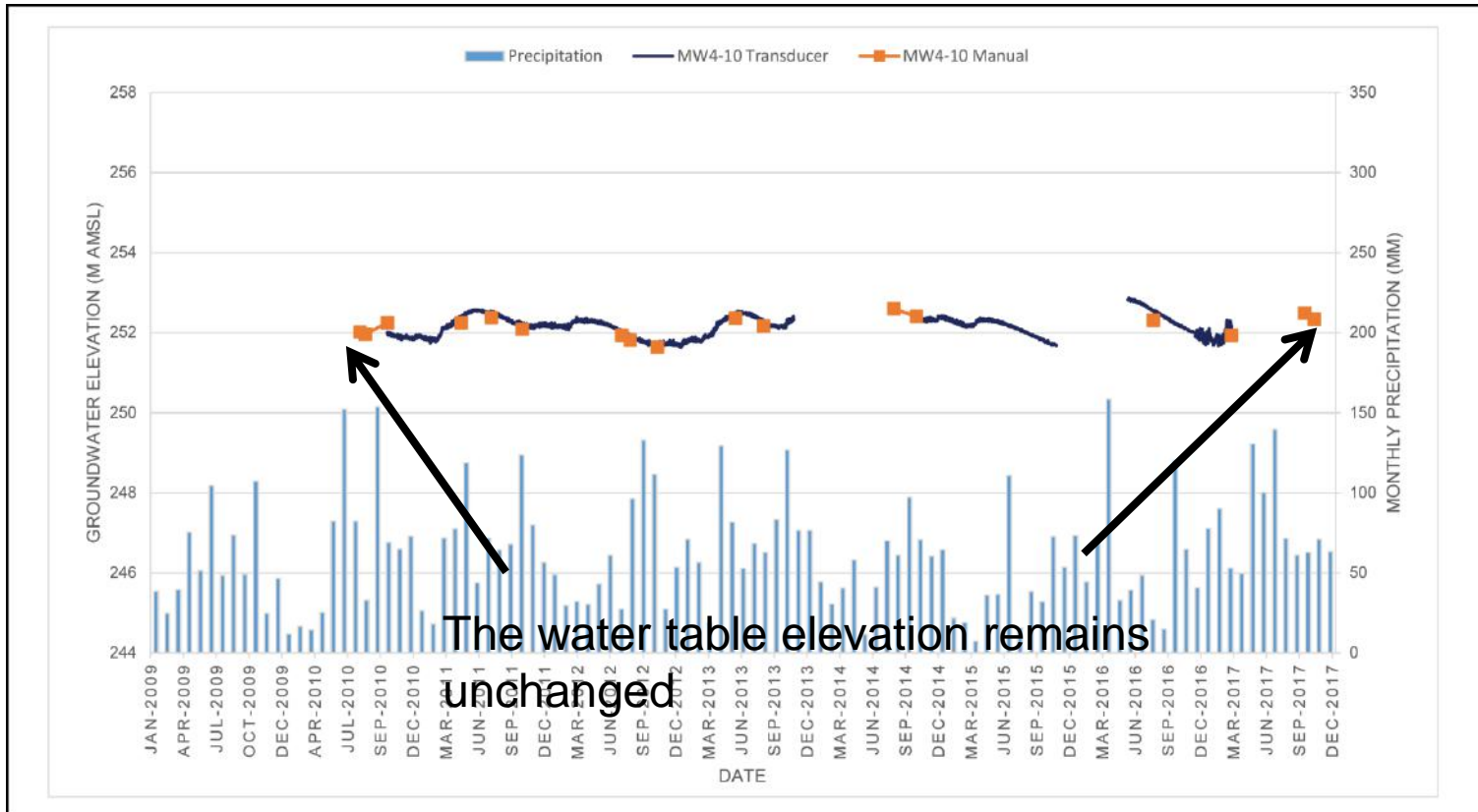
4-Jan-18

MW1-09 Hydrograph

FIGURE 4



MW1-09 Hydrograph



Dufferin Teedon Pit
Township of Tiny, County of Simcoe, Ontario

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1/17/2018

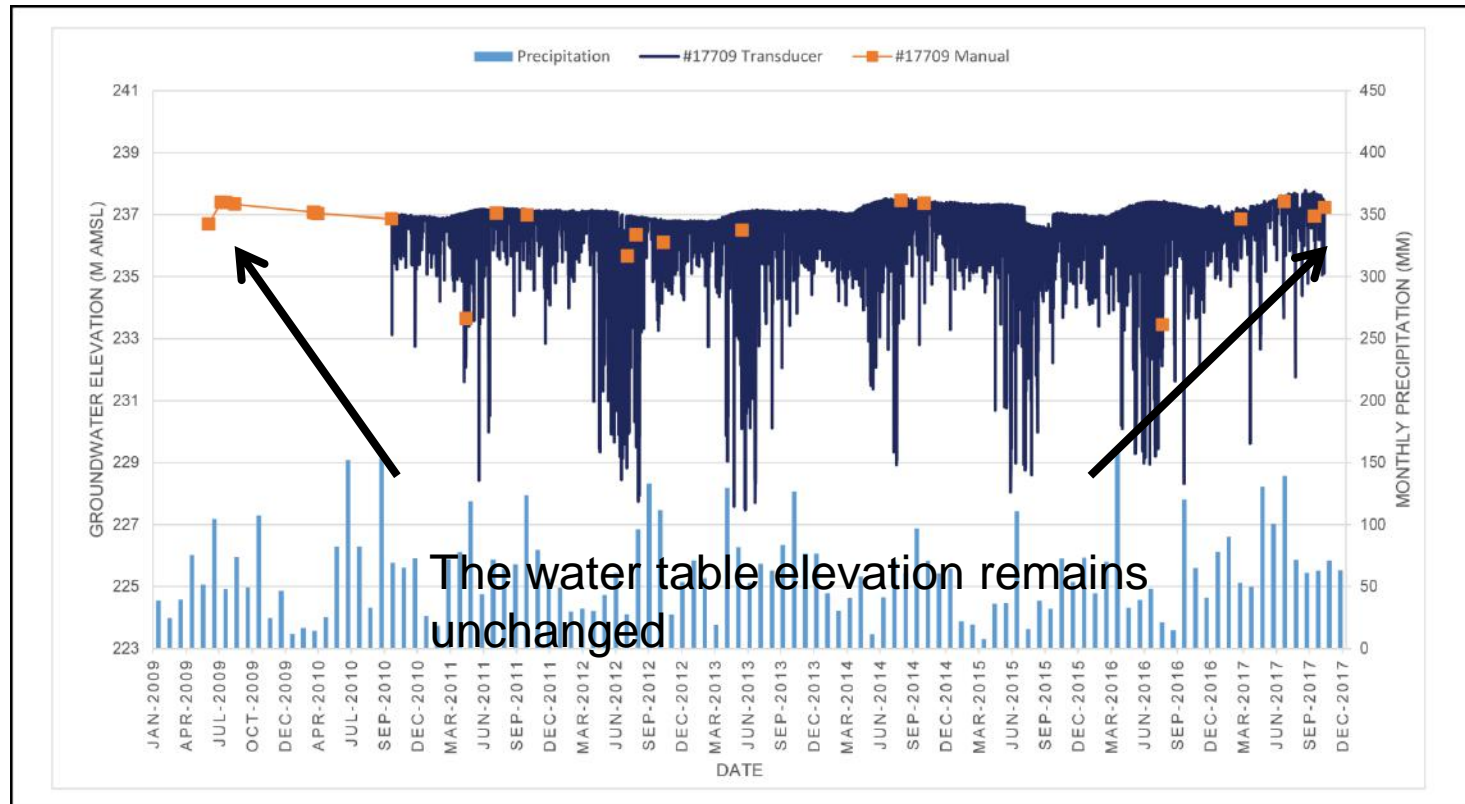
MW4-10 Hydrograph

FIGURE 2

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MW1-09 Hydrograph



The water table elevation remains unchanged



Dufferin Teedon Pit
Township of Tiny, County of Simcoe, Ontario

#17709 Hydrograph

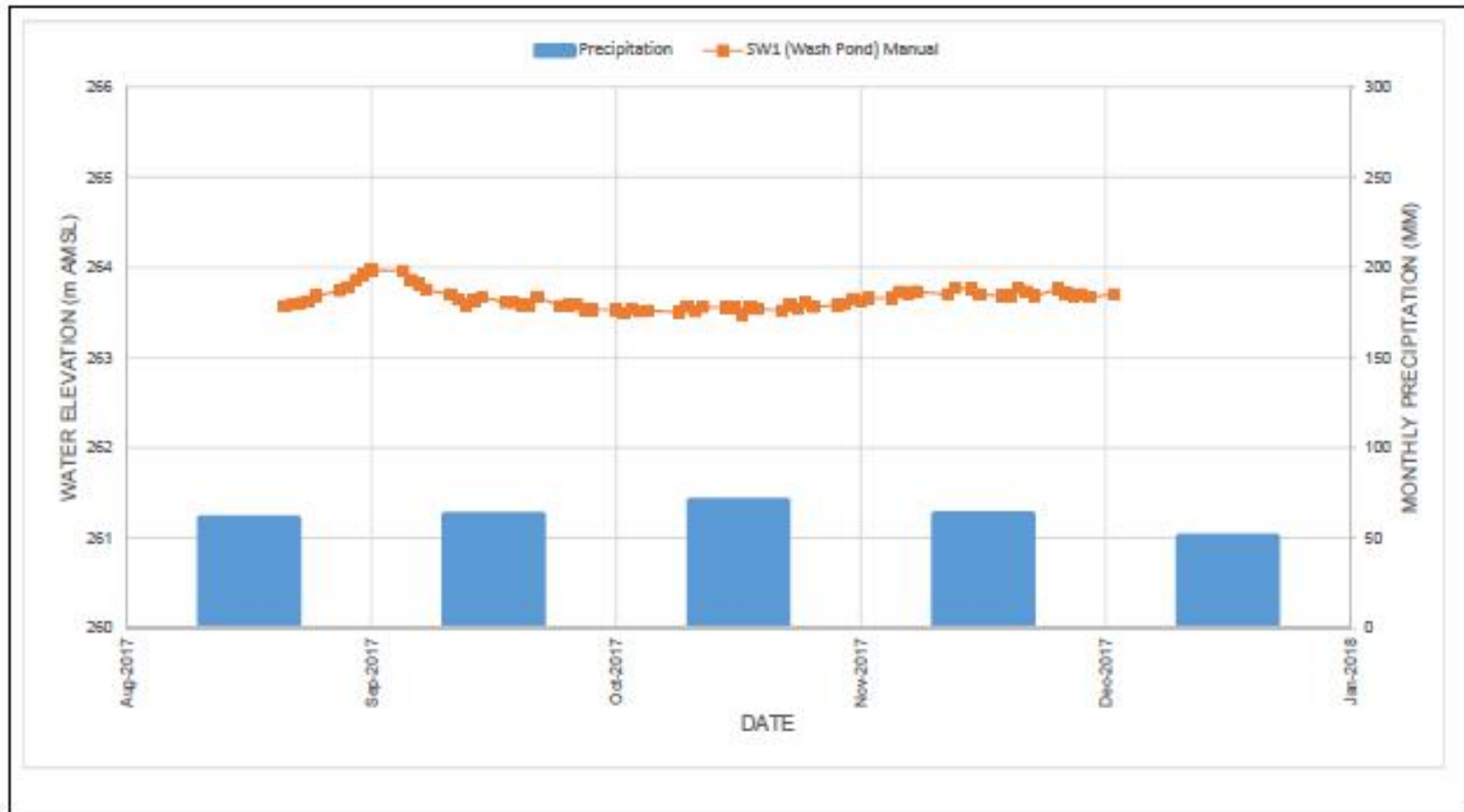
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1/17/2018

FIGURE 7



Source Pond Elevations



Aggregate Washing & Water Quality

- No chemicals are used for aggregate washing.
- After Dufferin purchased the Teedon Pit, 5 neighbours contacted the company to express concern that aggregate washing was causing sediment in their wells. This concern had also been brought to the attention of the previous owner.
- The previous owner and the MOECC concluded that aggregate washing was not the cause of the sediment in the wells.
- In the fall of 2017, Dufferin sampled the wells and provided the owners with a copy of the water quality testing.

Closing

- Date for next meeting:
 - June 12, 13 or 14
- Topic for next meeting?