

Scott Point Waterworks District

Physical Plant Risk Assessment

Revised January, 2018

No.	Risk	Consequence	ERP action	Existing Mitigation Measures	Possible Additional Measures	Likelihood	Impact	Priority	
1	Fire at Pumphouse	loss of treatment, loss of production, cost of rebuild	Call 911, shutoff pumps if safe to do so,	Design and permitting of electrical work, insurance, multiple wells	Ensure electrical code compliance, SCADA monitoring	unlikely	low	4	
2	Wildfire	catatrophic loss to facilities, cost of rebuild, excessive water demand	Call 911	insurance	create firebreaks, de-ladder trees, thin tree crowns, fireproof outside of pumphouses	possible	med	3	easy
3	Flooding at Well	well contamination	Notify IH, issue BW advisory	Design of storm run-off, multiple wells	Check well casing ground seals	possible	med	3	easy
4	Backflow contamination	system contamination	Notify IH, issue BW advisory	double checks at meters, simple system	conduct cross connection survey,require install of BFPs at higher risk locations	possible	med	3	easy
5	Chlorination failure	system contamination, coliform growth	Notify IH, issue BW advisory	bi-weekly operator check	SCADA monitoring	probable	med	3	
6	Chemical spill	System contamination		Well1,4 are deep and above local ground, water diverted around well 3	Build spill dam at well3, Check well casing seals	unlikely	high	3	
7	Unchecked leakage	excessive water use, damage to aquifer		bi weekly operator check, resident awareness of reservoir level	SCADA monitoring, ROW clearing	probable	med	3	
8	Earthquake	damage to Main, loss at other facilities, total loss of water, cost of rebuild	Close Valve 1-B & Line Valves, assess damage		Auto-closure of tank valve, re-design facilities to post-disaster specifications	unlikely	high	3	hard
9	Intrusion at Pumphouse or Tank	well contamination, system contamination, damage to facilities	Call RCMP, notify IH, assess impact, issue notice	locks	better doors, alarms, fencing	possible	low	4	med
10	Falling tree	rebuild		insurance	Remove susceptible trees near Pumphouses	probable	low	4	
11	Equipment failure	Loss of production		multiple wells, capital replacement program	Purchase critical spares not stocked by suppliers	probable	low	4	
12	Extended power failure	loss of production, no chlorination		Res Capacity >5 days, BCH reliability, manual dosing of Reservoir	rent generator as necessary	probable	low	4	
13	New pathogen contamination	contaminated water to system	shutdown system, issue BW advisory	multi-barrier approach, trending of other groundwater systems	more extensive annual testing	unlikely	high	3	