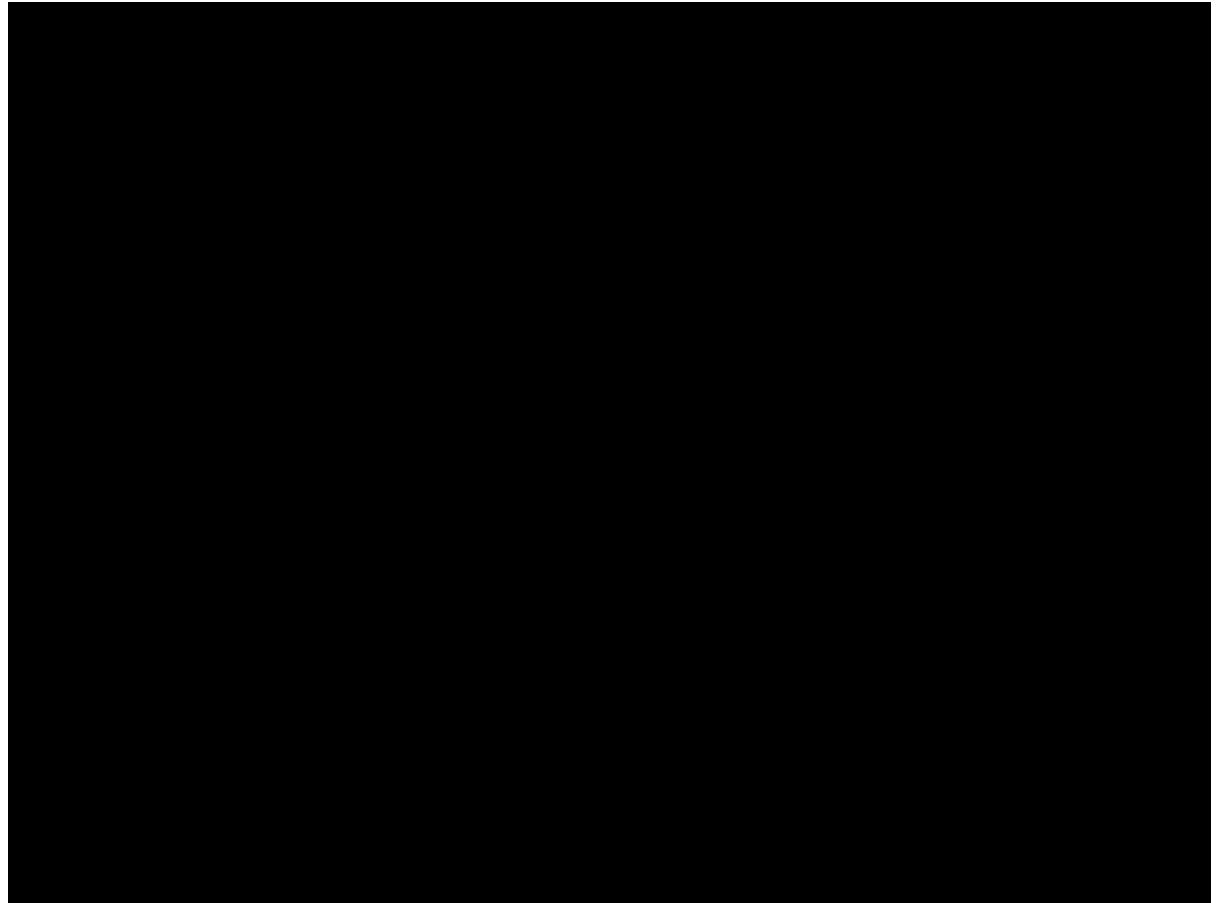


City of Nanaimo Flushing Program Then and Now

Why We Flush?



Old #1 Reservoir



Decommissioned and replaced with a new covered Reservoir and Energy Recovery Facility. Funded in part with government grants of \$5.8 M

How the Flushing Program has Evolved

1970's Conventional Flushing





Mid 1980's Moved to Unidirectional Flushing



Typical Hydrant Flushing Set- Up



Energy Dissipator with Sodium Thiosulphate Dispenser



Sodium Thiosulphate Pucks





Water Treatment Facility

- On-line December 3, 2015
- Treated water – 0.03 NTU
- Spring 2016 last full flushing of entire water distribution system



Dewatered Sludge



Why Do We Still Flush?

- Cast iron water mains
 - approx. 4% of distribution system*
- Asbestos water mains
 - approx. 24% of distribution system*
- Dead-ends
- Cul-de-sacs

* Per 2016 Asset Management Update

Typical Below Ground Flush-Out on a Cul-De-Sac





Initial Reading



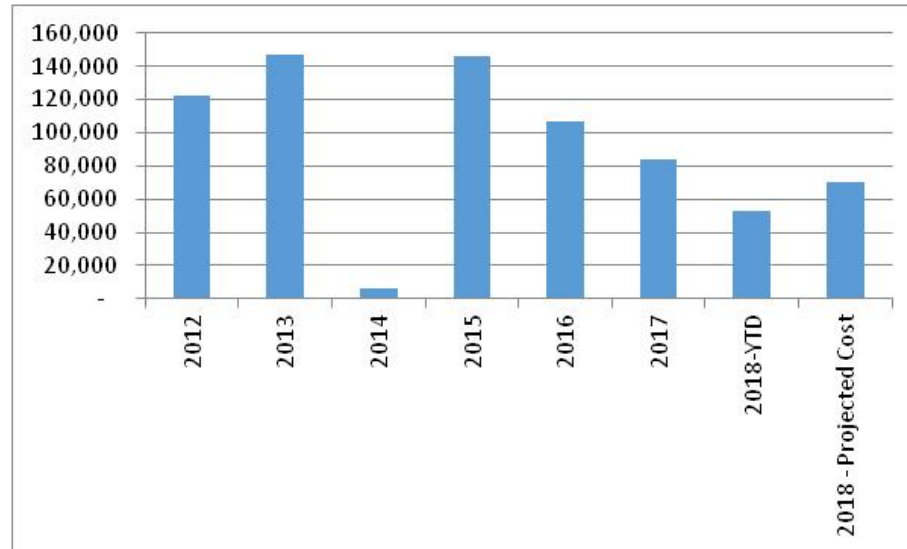


Final Reading



Flushing Facts & Figures

Annual Cost



- Three teams of two staff
- Starting first week of March
- Program before Water treatment 10 - 12 weeks, program now 6 - 7 weeks
- 2018 focus AC and Cast Iron

Questions?