THE FUTURE

Jamestown Water Committee Community Presentation January 9, 2017

COMING SOON!

Reduced Turbidity
Reduced Corrosivity
Increased Capital Improvements Reserve
Increased Resiliency (well, this one maybe not so soon)

Turbidity reduction

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FILTER MATURATION TREND

***** 2015: turbidity exceeded regs 11.5 weeks highest NTU = 4.7* 2016 turbidity exceeds regs 5 weeks 60% improvement highest NTU = 2.645% improvement Maybe we'd meet regs if we did nothing!

GRANULAR ACTIVATED CARBON

- More Porous: more surface for growth
- Greater Adsorption: concentrates nutrients
- Surface Charge: activated surface enhances microbe growth
- <u>Column Test</u> scheduled as one of CDPHE funded pilot tests

SCHMUZDEKE SEEDING

Introduce Schmuzdeke from elsewhere and seed at Jamestown Water Plant

Column test: scheduled as one of CDPHE funded pilot tests

SMALL DIAMETER SAND MEDIA

Layer of finer sand to sit on top of filter medium

Column test: scheduled as part of CDPHE funded pilot test

Nutrient Feed

 Introduces nutrients to top of sand filter to enhance growth of biotics
 Column test: scheduled as part of CDPHE funded pilot test

Canisters

✤ Plan A: Coagulent → 5 or 10 microns

✤ Plan B Coagulent → 5 or 10 mics → 1 micron

Coagulent reduces neg. charge of the colloidal particles

Last resort in 2018; expensive.

Heating water

At 46 degrees F growth improves
35 degrees?

Growth increase?
Recovery time decrease?

Column test: not scheduled but might be explored

Decrease pH

Calcite feeder

- Increases pH
 - \circ pH 7.2 or higher
- Reduces corrosivity
- Improves taste
- Lower pH possibly aid to schmuzdeke & other biota growth

Improve Resiliency

✤ Wish list, not yet funded

- Deep well would be the best resiliency measure for drought and fire that we can imagine
 unfunded
- (Presently our resiliency is much improved because of new Infiltration Gallery & increased flood resistance measures at plant)