



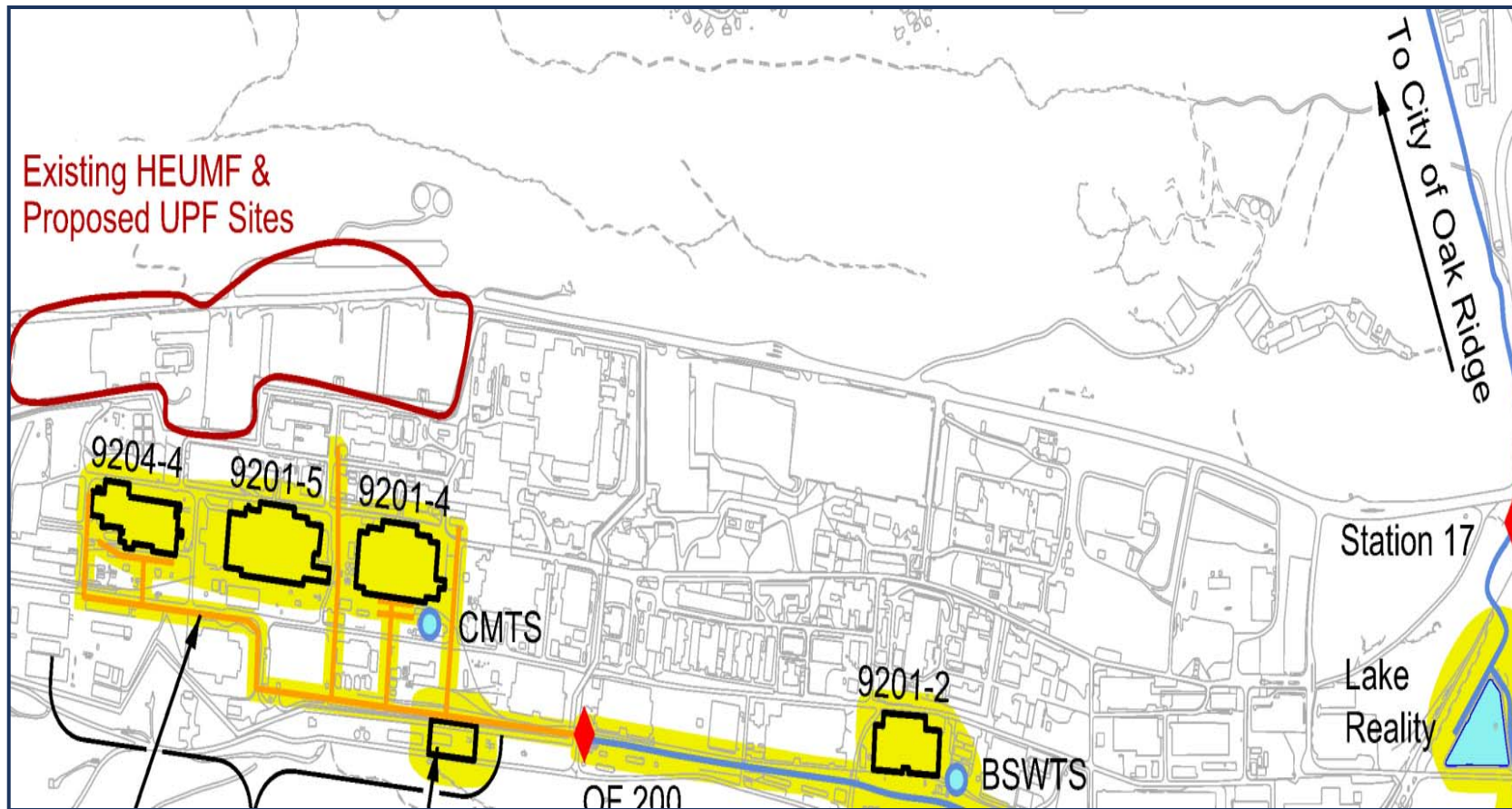
OF200 Mercury Treatment Facility Project Update

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Outfall 200 is the discharge point for WEMA storm water



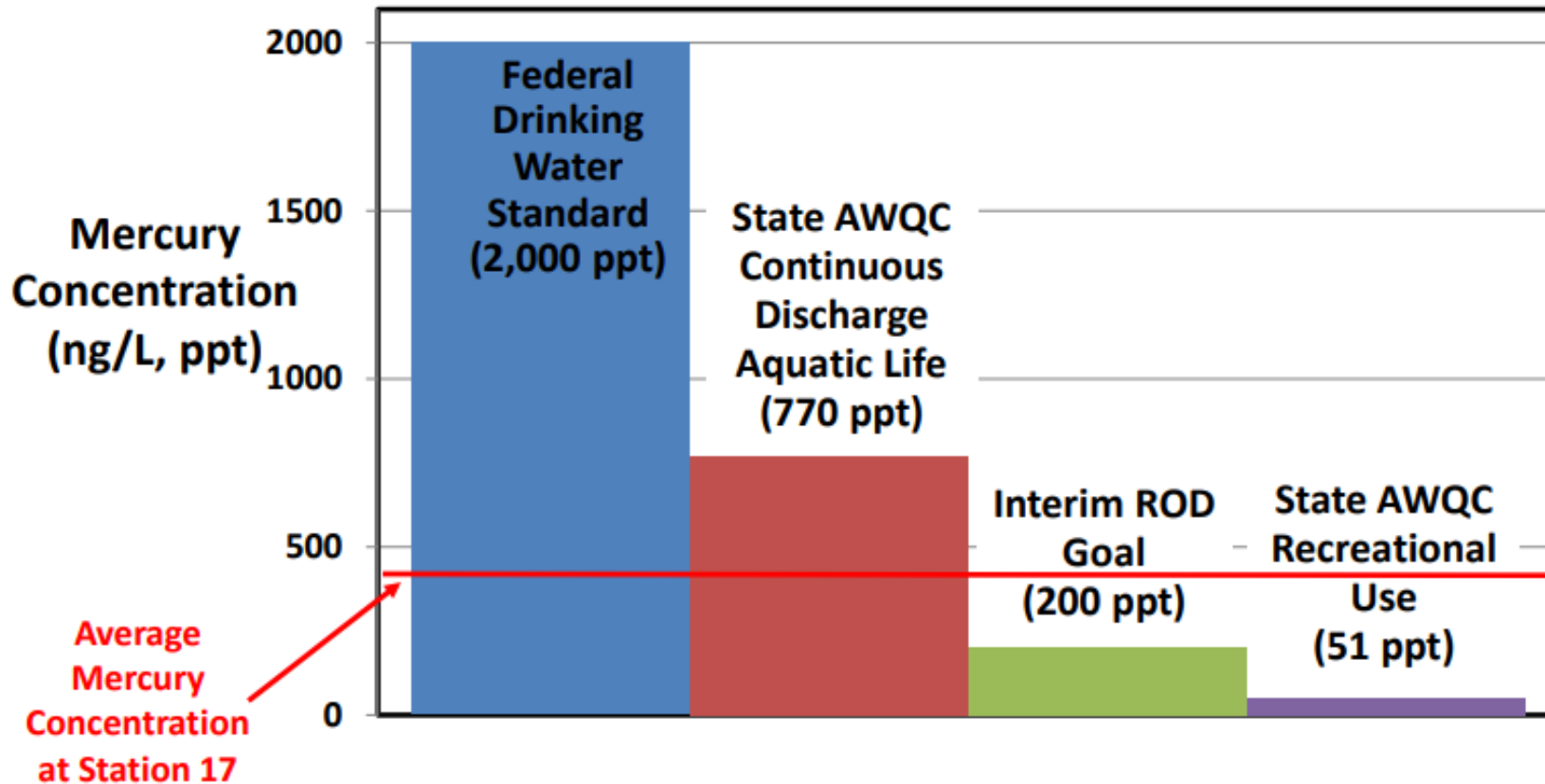
Mercury contamination originates in the West End Mercury Area, flows through storm drains, and enters Upper East Fork Poplar Creek at Outfall 200

The Mercury Treatment Facility is essential for large-scale demolition at Y-12

- It will reduce mercury releases into the East Fork Poplar Creek and provide a control mechanism for mercury disturbed during demolition in the West End Mercury Area
- The facility will treat up to 3,000 gallons per minute with 2 million gallon storage capacity for storm water
- Site preparation began in December 2017
- Contract award for Balance of Construction expected in Fall 2018



Safe concentrations of mercury depends on use



The project includes design/construction of headworks, treatment facility, and interconnecting pipeline



- Headworks area:
 - Collection and transfer components
 - Grit separation equipment
 - Stormwater storage tank
- Treatment facility:
 - Outdoor tanks, piping, and transfer and treatment equipment
 - Metal building (~22,000 ft²) to house weather-sensitive equipment and controls
 - Mercury removal unit operations:
 - Flow equalization
 - Chemical flocculation and precipitation
 - Clarification
 - Media filtration
- Utilities, foundations, parking, and fencing
- Total footprint ~74,000 ft²



Artistic Rendering of Headworks – Facing West



Artistic Rendering of Treatment Facility

Early Site Preparation Utilities Relocation

- Removed raw water piping and former Upper East Fork Poplar Creek flow augmentation structure
- Demolished abandoned utilities (including ACM insulated piping) and disposed at the ORR Landfills
- Completing water, storm drain, and electrical utility installations to the construction site boundary



Demolishing Existing Structures to Prepare for Headworks Construction



Constructing Secant Pile Wall to North and South of Headworks Area



OF200 MTF Headworks Artistic Rendering



OF200 MTF Treatment Plant Artistic Rendering



OF200 MTF Project Path Forward



- Contract requires construction completion within 4 years of award
- Facility is expected to be operational by FY24, or earlier depending on funding availability
- Facility operations are being included in OREM's follow-on clean-up contract for Y-12/ORNL
- Performance effectiveness will be monitored for an initial two-year period