

**Department of Public Utilities**

**Board of Public Utilities**

**FY19 & FY20 Budget  
Presentation**

**Wastewater Treatment (WT)**

**February 21, 2018**

## 1. EXPECTED EXPENDITURES WASTEWATER TREATMENT

- Major R&R expenditures in FY19 & FY20 are planned at the LA WWTP in lieu of a single CIP project with outside loan financing. FY19 & FY20 planned projects are upgrades or repairs to the influent screen, UV disinfection control system, R&R of pipeline deficiencies and compost facility safety/site upgrades.
- One major vehicle replacement is scheduled for FY19. (Dump Truck for bio-solids handling).
- Continued routine O&M for both WWTP's.
- Only major increase in the O&M area of the budget from FY18 to FY19 or FY20 is the \$250,000 per year described in item 1 above.

## 2. CIP PROJECTS – WASTEWATER TREATMENT

- White Rock WWTP Replacement Project. Design in FY19 & construction in FY20.

### 3. COST SAVING REFORMS WASTEWATER TREATMENT

- FY16: Replace one of the original three aeration blowers at the LA wwtp with a new more energy efficient blower. Initial cost for purchase and in-house installation = \$85,000. Annual energy efficiency savings = \$11,000.
- FY19: Deferral of the addition of filtration equipment at the LA WWTP until WR WWTP project is completed. Deferred CIP Expenditure = \$1,400,000.
- FY19: Defer a major vehicle replacement for a few years because vehicle still adequate for required use.

## 4. EXPECTATIONS OF MAJOR ITEMS WASTEWATER TREATMENT

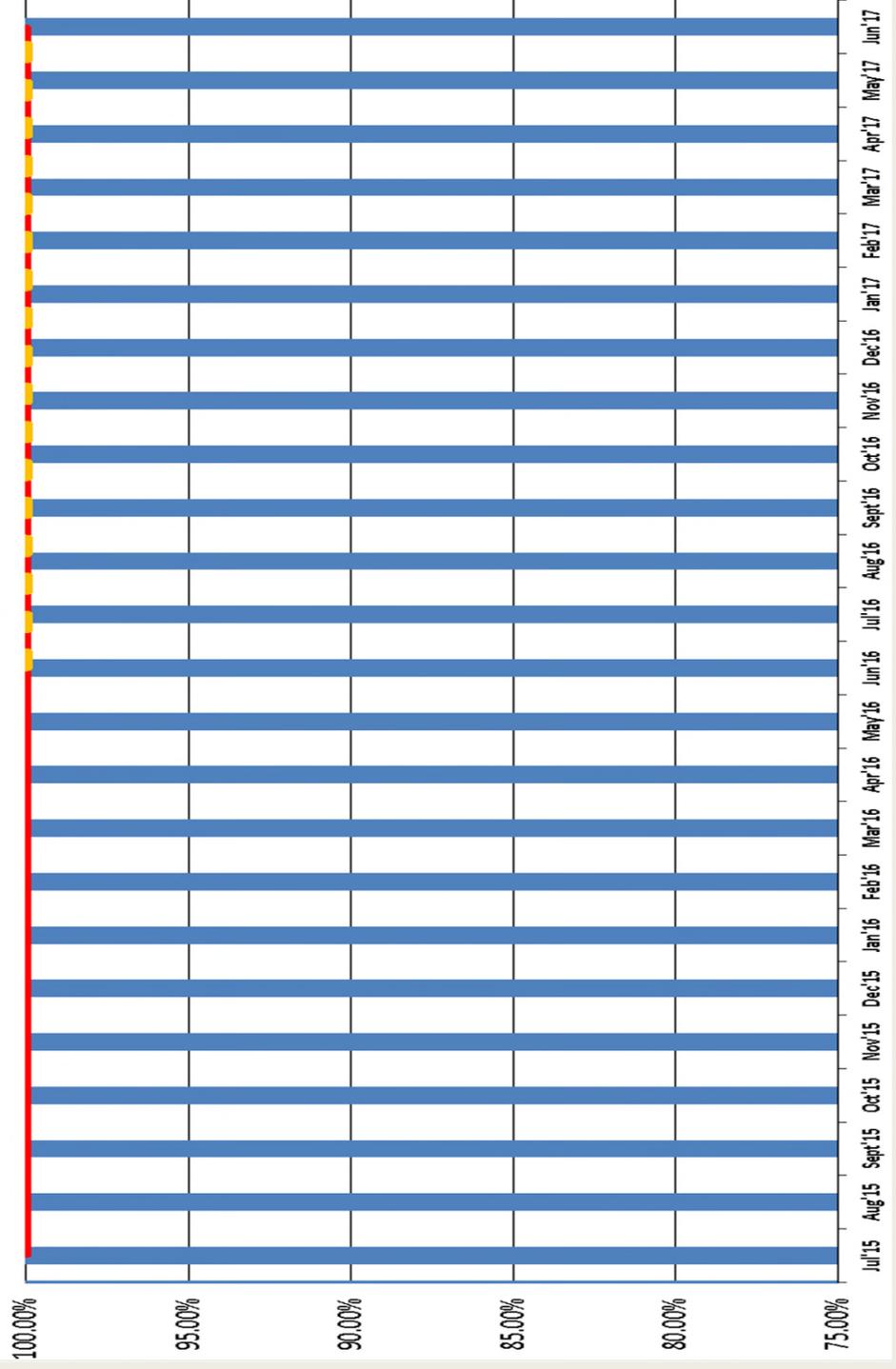
- Replacement of the White Rock wwtp is expected to take up a significant amount of new additional supervisory and engineering staff time in both FY19 & FY20.
- Conversion to the new Tyler MUNIS software system, through the PRISM project, is expected to take significant time for the field crews and supervisors to adjust to the new system – especially during the first half of FY19.

## 5. BENCHMARKED PERFORMANCE MEASURES WASTEWATER TREATMENT

- Graph 12 – WWTP Effectiveness / Compliance. AWWA national standard.
- Graph 13 – O&M Expenditures per Million Gallons Treated. AWWA national standard. 12-month moving average trend line moving in the correct direction. DPU will probably never meet or better this national standard due to having two relatively small volume wwtp's but this performance measure is a valuable tool to review the operational efficiency of both wwtp's.
- Graph 15 – Total Energy Consumption per Million Gallons Treated. AWWA national standard. Again – DPU will probably never meet or better this standard but still a valuable performance measurement.

# NPDES Compliance

GRAPH WT-12 / COMPLIANCE: WWTP EFFECTIVENESS - NO. OF DAYS IN FULL COMPLIANCE AS A PERCENT OF ALL DAYS



EXIT

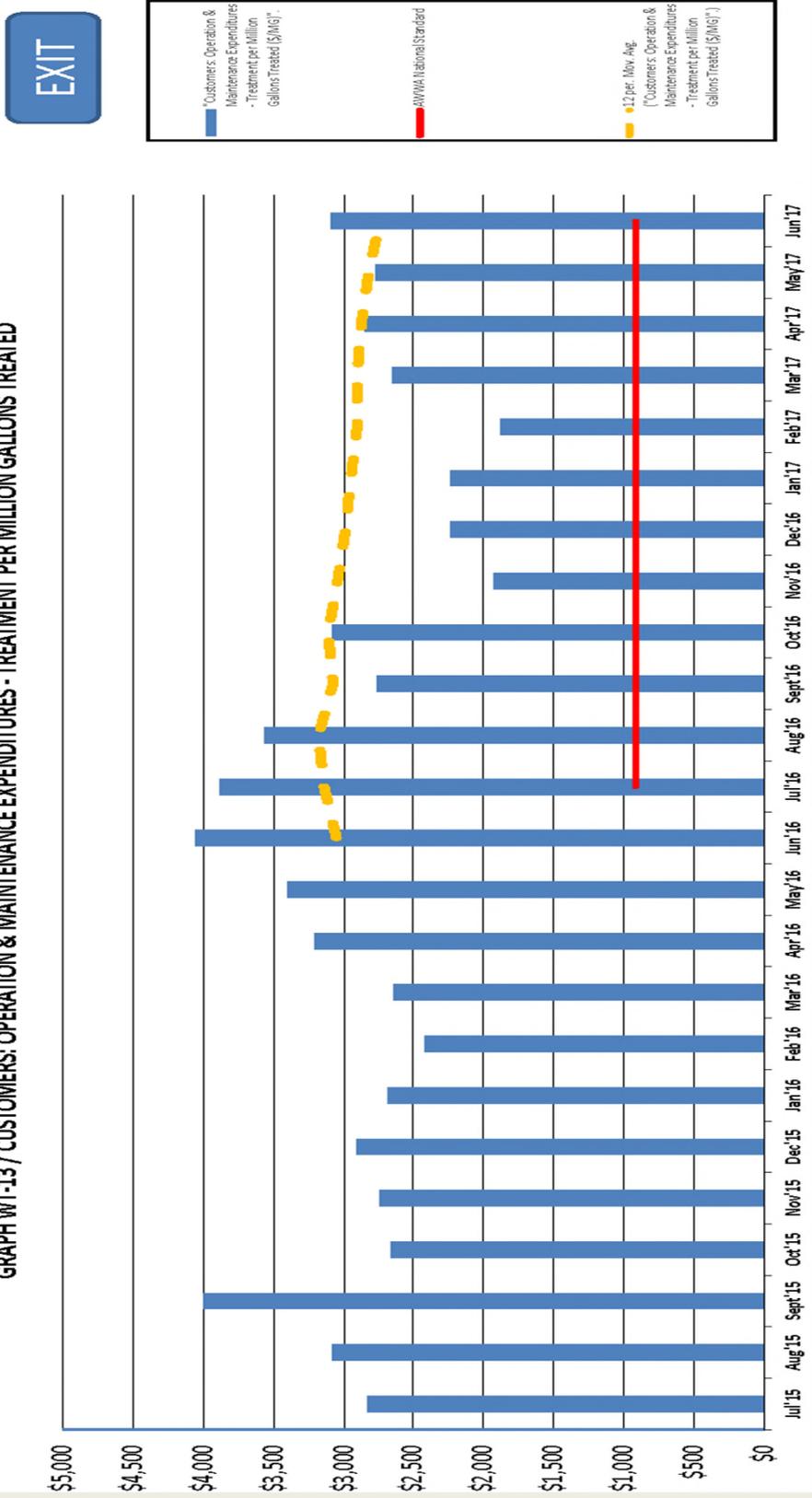
Compliance: WWTP Effectiveness - Number of Days in Full Compliance as a Percent of All Days for both WWTPs (%)

WWA National Standard

12 per. Mov. Avg. Compliance: WWTP Effectiveness - Number of Days in Full Compliance as a Percent of All Days for both WWTPs (%)

# O&M Expenditures per MG Treated

GRAPH WT-13 / CUSTOMERS, OPERATION & MAINTENANCE EXPENDITURES - TREATMENT PER MILLION GALLONS TREATED



# Energy Consumption per MG Treated

GRAPH WT-15 / CONSERVATION: TOTAL ENERGY CONSUMPTION - TREATMENT PER MILLION GALLONS TREATED (kWh/MG)

