



City of Flint Water Improvements

| DATE | IMPROVEMENT | EFFECT | COST | STATUS |
|------|--|--|--------------------|--------------------|
| Nov. | Increased flushing efforts (as weather permits) | Reduced time of water in the system | | Planned for Summer |
| Nov. | Adjusted operational softening to no less than 80% | Reduce chlorine demand | | In Process |
| Dec. | Started hydraulic modeling of distribution system | Helps to identify locations of bad valves | \$80,000 | In Process |
| Dec. | Started evaluation of different polymers | Removal of organic carbon | | In Process |
| Dec. | Started SCADA upgrades inside of Water Plant | Improvement of internal software controls | \$424,000 Budgeted | In Process |
| Jan. | Hired vendor to upgrade efficiency of the ozone system | Better oxidation and disinfecting | \$7,200 | Complete |
| Jan. | Started jar testing | Assists in dosage amounts and polymer aids | | In Process |
| Feb. | Hired consultant Veolia for process review | Professional recommendations | \$40,000 | In Process |
| Feb. | Leasing a TTHM analyzer | Increased internal testing ability | \$8,000 | |
| Feb. | Adjustments to reservoir level to match demand | Reduce time of water in system | | Ongoing |
| Mar. | Implement process controls | Professionalism / efficiency | ~\$300,000 | Evaluating |
| Mar. | Utilize Granulated Activated Carbon Filtering | Large reduction in TOC | \$1,500,000 | Evaluating |
| Mar. | Increase ferric chloride / reduce ozone feed rate / reduce lime dosage | Reduction in hardness | ~\$600,000 | In Process |
| Mar. | Build hydraulic model | Assists in identifying locations of bad valves | Budgeted | Complete |
| Mar. | Communication program | Community awareness | ~\$80,000 | Evaluating |