# **Cost Impacts**

# Statewide Cost Impacts of Phosphorus Removal Under the Proposed Technology Based Effluent Limits

## **Cost of Removal Analysis**

The cost impacts of TBLs on Utah's publically owned treatment works (POTWs) were assessed in October 2010 in the study titled Statewide Nutrient Removal Cost Impact Study http://www.waterquality.utah.gov/POTWnutrient/index.htm.



The cost of upgrading Utah's POTWs to achieve a TBL of 1 mg/L total phosphorus was the least costly alternative considered.

The study demonstrated that the cost of this TBL is affordable statewide, based of the State Revolving Fund loan affordability criterion of 1.4 percent of the median adjusted gross household income.



The study demonstrated, based on cost per pound of pollutant removed, that the proposed TBL regulation clearly provides the best "bang-for-the-buck" alternative for achieving significant near-term reductions in phosphorus discharges.

### Statewide Costs for Rule Compliance by Non-Lagoon Treatment Plants

- Capital Improvements Cost (2017):
  \$26.8 million
- Incremental Annual Operating Cost (2020): \$5.14 million
- 20-Year Life Cycle Cost (2020):
  \$128 million
- Statewide Monthly Sewer Bill Increase: \$1.34/month/household



#### Statewide Costs for Rule Compliance by Lagoon Treatment Plants

No capital improvement costs will be incurred by lagoon treatment plants. Discharging lagoon treatment plants will need to control phosphorus discharges if their phosphorus discharge exceeds 125% of the current amount.



Lagoon treatment plants will incur additional operating expenses for effluent monitoring required under the proposed rule. Depending on the plant size, these costs are estimated to be between \$250 to \$3,000 per year.

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