



**Water Quality  
Facility  
Rehabilitation  
Program**



**Problem Statement**

The City of Tigard currently maintains 167 public water quality treatment facilities. It is estimated that 35% to 50% of them have reached an age where significant work is needed to re-establish treatment function.

Problems vary by facility but generally include:

- Significant silt build up.
- Trees that have grown too large and are either too close together or producing enough shade that emergent plants and shrubs can no longer survive in treatment areas.
- Facilities that need replanting.
- Early facilities that were designed improperly and provide no treatment or detention.

- Facilities that have lost function from erosion, burrowing rodents, and other factors.

The City’s newly-established Green Team is tasked with maintenance of water quality facilities but lacks funding to cover the costs of significant repairs.

The above photos show before and after views of a water quality facility rehabilitation.

## Recommendations

The recommendation is to implement a plan to assess water quality facilities and develop a prioritized rehabilitation plan. Professional services will be used to produce a comprehensive plan to assess all water quality facilities, identify all needed repairs, and prioritize repairs.

At completion of the plan, rehabilitation projects anticipated to cost more than \$100,000 for construction will be transferred to the Capital Improvement Project (CIP) Program for rating and ranking. The CIP program is managed and implemented by City of Tigard Engineering.

Complete repairs of water quality facilities anticipated to cost between \$25,000 and \$100,000 will be addressed under the Storm Drainage Major Maintenance Program.

Rehabilitation projects anticipated to be less than \$25,000 will be implemented by the Green Team at a rate of approximately two per year.

## Cost Estimate

The cost estimate assumes water quality facility rehabilitation is an ongoing effort supplemented by new spending for services and materials.

It is assumed that professional services will be used in the first year of the program.

In subsequent years, the cost estimate assumes approximately two facilities per year will be rehabilitated by the Green Team using existing staff or existing budget for contractors. The cost estimate does not include costs of existing staff or existing budget for contractors.

### One-Time Costs

Professional Services	\$50,000
Project Administration, 15% of Services	\$7,500
<b>One-Time Total</b>	<b>\$57,500</b>

### Annual Costs

Items	Qty	Unit	Unit Price	Total
Materials and Dump Fees per Facility	2	LUMP SUM	\$25,000	\$50,000
Project Administration, 15% of Services				\$7,500
<b>Annual Total</b>				<b>\$57,500</b>

