

SOLID WASTE DIVISION CAPITAL IMPROVEMENT PROGRAM

Introduction to Program, Goals and Highlights

The 2009 Executive Proposed CIP Budget for the Solid Waste Division is \$75,225,000. The total 2009-2014 proposed budget plan is approximately \$397 million.

The purpose of the Solid Waste Division capital improvement program (CIP) is to maintain the transfer and disposal system's ability to meet service demands. The program also ensures that these facilities are maintained and operated in accordance with applicable regulations and in a safe and environmentally responsible manner.

The 2009 capital program request includes the staged closure of Refuse Area 6 at the Cedar Hills Regional Landfill. Construction of Cedar Hills Refuse Area 7 is anticipated to start in 2008 and Area 7 will become operational by 2009. New waste handling facility projects recommended in the *Solid Waste Transfer and Waste Management Plan* are continuing for northeast Lake Washington and the south King County areas. Design for the Bow Lake Recycling and Transfer Station project is ongoing with site preparation planned for late 2008. Construction of this new facility is scheduled to begin in 2009. Construction of the replacement Shoreline Recycling and Transfer Station (formerly the First Northeast Transfer Station) began in mid-2006 and was completed in early 2008. Design of the replacement Factoria Recycling and Transfer Station and upgrades to the Houghton Transfer Station are continuing. Roofs have been replaced at two sites to address safety and seismic concerns and funding is available for a similar upgrade at the Houghton Transfer Station. These projects represent important steps in the process of providing safe, efficient service, and maintaining a competitive waste disposal business environment.

Project Prioritization Methodology

Solid waste projects are assigned the highest priority in order to comply with legal requirements such as the King County Board of Health Code (King County Code Title 10), Washington State Minimum Functional Standards for Solid Waste Handling (WAC 173-3-4), and Department of Labor and Industries mandates. The methodology used by the Division is based on the following criteria: regulatory mandates, the nature of the projects, and planning documents such as the Comprehensive Solid Waste Management Plan and the Cedar Hills Site Development Plan. In addition, annual site inspections are performed to determine items to consider in capital project planning or for incorporation into the Capital Asset Maintenance Program (CAMP). The timing of new landfill areas and transfer station development and construction are based on facility conditions from these inspections, tonnage projections, and policy direction. Construction is planned to minimize impact on the Division's customers and operations. The replacement or rebuilding of "rolling stock", funded through the Capital Equipment Replacement Program (CERP) fund, is based upon periodic evaluations of maintenance history and projected economic life.

Growth Management and Comprehensive Plan Issues

The CIP program of this division is affected by the Growth Management Act (GMA) and the King County Comprehensive Plan in the following ways: the Division has no specific issues relating to the GMA and concurrency. Projects requested in the Division's 2009 CIP are necessary to address environmental issues for facility safety enhancements and modernization.

Financial Planning and Policy Overview

Revenue sources supporting the six-year capital program vary by fund and include the following:

The Landfill Reserve Fund (LRF) collects dedicated per-ton fees from waste disposal activities and is used to develop future landfill areas and landfill closure projects. The financial planning for this fund involves identifying future needs at Cedar Hills, then adjusting the per-ton contribution to the LRF to provide the resources necessary to meet these needs. The LRF includes post-closure reserves required for maintaining the site for 30 years after it closes. Projects at the landfill will be fully funded by the per-ton contribution.

The Environmental Reserve Fund is used to fund investigation and remediation costs related to active and closed solid waste handling facilities. The fund was created with a \$17 million transfer from the former Energy Resource and Recovery Reserve Fund and covers its costs with fund balance and accumulated interest earnings. These activities are complete and most of the remaining budget has been disappropriated. In 2009 the approximately \$3.3 million of remaining funding is being proposed to be transferred to the Solid Waste Construction Fund 3901. The transfer of these monies will help to offset future bond sales. The lower debt requirements will reduce the amount of debt service ultimately paid by ratepayers.

The Construction Fund supports capital improvement projects, primarily in the transfer system, through contributions from the Operating Fund and the proceeds of various bond issuances. The debt service costs of these bond issues are paid through revenues in the Operating Fund earned from disposal fees.

To determine the present value of a project, each year's nominal cost estimate is discounted back to the present using an interest rate that reflects what the funds could earn in the private sector. Because this rate is applied to inflation-adjusted future costs, the rate itself should reflect inflation as well. Therefore if the real pre-tax return in the private sector is 4% and the expected annual inflation rate over the construction period is 3%, a discount rate of 7% would be used. In addition, to explore the sensitivity of the present value calculation, several additional computations are made using discount rates both higher and lower than the initial value.

2009 Significant Project Highlights

The following table displays project requests over \$1,000,000.

| Significant Projects Solid Waste Capital Improvement Program | 2009 Executive Proposed Budget | Continuation of Existing Project |
|--|---|-------------------------------------|
| Factoria Recycling & Transfer Station | (\$4,177,000) | X |
| Bow Lake Recycling & Transfer Station | \$52,523,000 | X |
| Cedar Hills Area 7 Development | \$3,299,000 | X |
| Harbor Island Safety Improvements | \$1,511,000 | |
| Fund 3901 Contingency | \$3,428,000 | X |
| CERP Equipment Purchase | \$3,710,000 | X |
| Cedar Hills Area 6 Closure | \$6,054,000 | X |
| ERF Transfer to Fund 3901 | \$3,300,000 | |

Factoria Recycling and Transfer Station: (\$4,177,000)

The 2009 Executive Proposed Budget includes a net reduction for amounts authorized for property acquisition. Additional property acquisition is anticipated for wetlands mitigation and has been factored into the current request. Selection of a design consultant is planned for late 2008 or early 2009. The permitting, design and environmental review for a new transfer and waste processing facility to replace the existing Factoria Transfer Station will also begin. Based on current scope and cost estimates, the total projected cost of this project is \$78,628,000 in the six-year capital plan.

Bow Lake Recycling and Transfer Station: \$52,523,000

The 2009 Executive Proposed Budget will allow the facility construction contract to be signed and construction to begin. An important requirement of the Bow Lake Recycling and Transfer Station is that it meets the building standard of immediate occupancy following a large seismic event and can continue to operate as a vital public facility. Construction will be in two contracts, one for Site Preparation and one for Site Facilities. Site preparation work is scheduled to begin in late 2008. The site facilities portion of the project is currently in the design phase. Based on current scope and cost estimates, the total projected cost of this project is \$85,297,000 in the six-year capital plan.

Harbor Island Safety Improvements: \$1,511,000

This new project for 2009 is composed of numerous items which are necessary to operate the property in a safe manner, including meeting current City of Seattle fire codes, maintaining leased buildings safely by eliminating asbestos and lead based paint exposure risks related to unsafe building conditions, opening rentable space, and improving the structural integrity of the buildings. Based on current scope and cost estimates, the total projected cost of this project is \$1,511,000 in the six-year capital plan.

- Deconstruction of the condemned Head House 2 building
- Deconstruction of brick building #3 (sack storage and powerhouse)
- Fire sprinkler extension at the administrative office building
- Warehouse "E" dock and floor cracks repairs

Cedar Hills Area 7 Development: \$3,299,000

This project consists of the development of a 4.0 million-ton capacity Cedar Hills Regional Landfill Refuse Area 7. The work includes:

- Preliminary and final design,
- Hydrogeologic investigations,
- Preparation of contract documents,
- Preparation of permit documents,
- Construction of underliner, and
- Construction of landfill gas, leachate, contaminated surface water, erosion and surface water control facilities.

To maintain a smooth transition of landfill operations, Area 7 will be completed between 2008 and 2009 and begin accepting waste in 2009. The next two project milestones to be completed are: Phase 1 excavation construction (2008 - 2009), and Phase 2 final construction (2009). Closeout of contract services is scheduled for 2010. Based on current scope and cost estimates, the total projected cost of this project is \$14,794,000 in the six-year capital plan.

NE Lake Washington Recycling and Transfer Station: \$133,000

S. King County Recycling and Transfer Station: \$747,000

These projects will site, permit, design, and construct new transfer and waste processing facilities to replace the Houghton and Algona Transfer Stations. The NE Lake Washington project (Houghton), primarily serves the cities of Redmond, Kirkland, Woodinville, and Kenmore. The South King County project (Algona), serves the cities of Federal Way, Kent, Auburn, and Algona. The milestones to be completed in the 2008-2009 time frame are the advertisement and award of design contracts.

These replacement projects have been identified in the *Solid Waste Transfer and Waste Management Plan* (Plan) approved by the King County Council. The plan was developed jointly with the Metropolitan Solid Waste Management Advisory Committee and the Solid Waste Advisory Committee.

NE Lake Washington Recycling and Transfer Station status: The project is in the planning phase. The cost estimate of \$103,692,000 in the six-year capital plan, was developed by consultants, is conceptual in nature, and based on similar experiences the consulting firm has had with other transfer station projects in the region.

S. King County Recycling and Transfer Station status: The project is in the planning phase. The cost estimate of \$98,450,000 in the six-year capital plan, was developed by consultants, is conceptual in nature, and based on similar experiences the consulting firm has had with other transfer station projects in the region.

Fund 3901 Contingency: \$3,428,000

This project implements the flexible CIP contingency budget approved by the King County Council. This request is for 7.5% of estimated total appropriation at the start of the budget year. Because the contingency is calculated as a percent of the annual appropriation request, it has the potential to fluctuate over time.

Environmental Reserve Fund Transfer to Fund 3901: \$3,300,000

This project proposes to transfer the majority of the remaining cash in Fund 3831 – Environmental Reserve to the Solid Waste Construction Fund 3901. There are no additional activities planned in this

fund and the remaining cash is surplus to fund needs. This funding transfer will help to partially offset future bond sales needed to implement the *Solid Waste Transfer and Waste Management Plan*.

Capital Equipment Repurchase Program (CERP) : \$3,710,000

The Solid Waste Division will delay the scheduled procurement of significant equipment replacement until 2010 due to the focus on constructing new, state-of-the-art recycling and transfer stations. The new facilities will, in some cases, require different equipment. The Solid Waste Division is minimizing new expenditures and maintaining existing equipment to be cost efficient when investing in equipment.

The division maintains an equipment replacement plan and provides long-term financing by making annual contributions to the Capital Equipment Replacement Fund which supports the 2009 proposed investment of \$3.7 million in equipment replacement purchases.

CIP Program Accomplishments and Completion Lists

Projects Completed in 2007

| | |
|--------|--------------------------------|
| 013072 | CH SERVICE SUPPLY IMPROVEMENTS |
| 013330 | CH AREA 5 CLOSURE |
| 013331 | CH AREA 6 DEV |
| 013333 | CH SW IMPROVEMENTS |

Construction Projects to be Completed in 2008

| | |
|--------|--|
| 013071 | ENUMCLAW TS SEISIMC RETROFIT |
| 013074 | SKYKOMISH ROOF REPLACEMENT |
| 013091 | SHORELINE RECYCLING & TS |
| 013339 | CHLF ENV SYS EVALUATION & IMPLEMENTATION |
| 013340 | CH-PUMP STATION & CONVEYANCE FACILITY |

Construction Projects to be Completed in 2009

| | |
|--------|---------------------------|
| 003093 | TS ROOF REPLACEMENTS |
| 013005 | CH FACILITY IMPROVEMENTS |
| 013015 | LFG TO ENERGY |
| 013020 | HOUGHTON TS MITIGATION |
| 013334 | CH AREA 7 DEVELOPMENT |
| 013337 | CH-RELOCATE FLARE STATION |