



10.0 Administration, Funding, and Implementation

10.1 Introduction

The current solid waste management programs, as discussed in previous sections, are primarily administered and funded through various state grants, property taxes, and tipping fees. Departments within the County of Hawai'i develop their budgets on an annual basis. The budgets and funding are submitted by the mayor's office, and approved by the County Council.

This section describes current conditions of the existing administration and funding within Hawai'i County, identifies current issues and concerns, and presents options currently under consideration by the County and associated funding and administrative issues for options under consideration. A more detailed evaluation of County financial projections and potential impacts to the County annual budget associated with selected options will be provided in the Implementation Plan.

10.2 Review of 2002 Plan Update

The following is a summary of the recommendations put forth in the 2002 Plan Update relative to administration and funding, and a description of the actions taken to achieve each recommendation.

2002 Plan Update Recommendation	Status
Establish Solid Waste Division as Utility Enterprise	Not implemented
Establish Solid Waste Fees as Part of Property Tax Billing	Not implemented
Update of IRSWMP on 5-Year Schedule	In progress.
Waste Characterization of West Hawai'i Waste Stream	A field sampling study was conducted at the West Hawai'i Sanitary Landfill in 2008

The 2002 IRSWMP update also presented information regarding potential funding mechanisms including private financing of large-scale projects, line item charges on property tax bills, and increases in tipping fees.

10.3 Existing Conditions

The County accounts for revenues and expenses for solid waste management in its solid waste fund. Revenues are received from state and county sources. The State provides grants and subsidizes programs, such as glass recycling, used oil collection and disposal, and the beverage container deposit program (HI-5). State funding is generally allocated based on

County population or County's budgetary requests to the State for program administration. The sources of solid waste funding from the County primarily include revenues transferred from the general fund and revenues from fees associated with solid waste disposal at the landfills. In addition, the County typically finances large capital improvement projects with general obligation (GO) bonds.

Budgets for the solid waste fund and capital improvement program are created on an annual basis and approved after a review process by the mayor's office and the County Council that includes public testimony.

10.3.1 Solid Waste Fund Revenues

Exhibit 10-1 presents FY 07-08 actual and FY 08-09 budgeted revenues for the solid waste fund. The main sources of revenue are discussed below.

EXHIBIT 10-1
County of Hawai'i Solid Waste Revenue

Revenue Category	FY 07-08 Actual	FY 08-09 Budget
Federal Grants		
Total Federal Grants	\$27,260	\$0
State Grants		
Glass Recycling Program	\$155,000	\$155,000
Used Oil Collection/Disposal	\$67,500	\$67,500
Beverage Container Deposit Program	\$423,930	\$1,950,000
Solid Waste		
Landfill Tipping Fees ^a	\$8,333,010	\$7,456,000
Landfill Permit Fees	\$22,190	\$14,000
General Fund		
General Fund Balance From Previous Year	\$0	\$3,046,290
Transfer from General Fund	\$17,352,730	\$19,147,720
Miscellaneous Revenue		
Charges for Services – General Government	\$450	\$0
Sale of Equipment	\$30,740	\$0
Sundry Revenues – Current Year	\$430	\$0
Sundry Revenues – Prior Year	\$2,130	\$0
Total Solid Waste Fund	\$26,415,370	\$34,980,510

Note: Figures have not been finalized by the County and are pending approval.

^aFY 08-09 estimated by CH2M HILL based on revenues through March 2009.

A summary of the funding methods used in FY 07-08 and projected for FY 08-09 is shown in Exhibit 10-2.

EXHIBIT 10-2
Solid Waste Fund Revenue Summary, Percent of Total

	Percent of Total	
	FY 07-08 Actual	FY 08-09 Budget
General Fund	65%	65%
Tip Fees	32%	32%
Other	3%	3%
Total	100%	100%

10.3.1.1 State Programs

Glass Recycling. The glass recycling program consists of glass containers not included in the State Beverage Container Deposit Program. The program is administered through the State and is subsidized with an advance disposal fee (ADF), currently at one and half cents per container. The State allocates funds from this program to the counties based on the population size of each island and distributes these funds on a quarterly basis.

Used Oil (motor oil). The State receives funds from a petroleum tax levied on petroleum corporations on a per barrel basis. The collected taxes are placed in an environmental response revolving fund, which then may be allocated to county-based recycling programs. The funds are generally distributed to the counties based on historic needs of the island. The County used oil program allows residents to drop off used motor oil at convenient dropoff centers. The state requires each county to provide convenient dropoff sites and the County of Hawai'i contracts vendors to run the dropoff centers.

Beverage Container Deposit Program (HI-5). The Beverage Container Deposit Program is a state run program which places a 5¢ redeemable deposit on each beverage container, as defined under law. Consumers may then return the container to redeem their 5¢ at any redemption center. A 1¢ non-refundable container fee is assessed to support the costs of recycling and program administration. Any funds that are not redeemed by consumers may be distributed to county based programs. The County submits a list of requests to the State on annual basis, outlining budgetary needs for HI-5 projects and program administration. The County may request additional funds during the year for more redemption centers, shelters, bins, or public awareness programs.

10.3.1.2 County Programs

Landfill Tipping Fees and Permit Fees. The County generates revenue from solid waste disposal through landfill tipping fees and permit fees. Non-residential customers pay \$85 per ton of solid waste to the landfill, and for customers that dispose of waste on a routine basis, a \$25 one-time annual fee is assessed for account setup and administration costs. Customers may also pay special handling fees on non-routine disposal of solid wastes that

require additional personnel for disposal (for example, bulky wastes, disposal of sensitive wastes).

Transfers from the General Fund. The primary revenue source for County solid waste programs is transfers from the General Fund. Property taxes account for the largest portion of the General Fund. Other fund sources include hotel/tourism taxes, public service company taxes, interest on invested funds, and any carryover of the General Fund balance from the prior year. Each County department forecasts its budgetary needs for the year, and the mayor's office and County Council approve the budgets pending a review process.

10.3.1.3 Other Programs

Abandoned Vehicle Program. The abandoned vehicle program is funded directly from a portion of the vehicle registration fee. The program receives \$12 per registered vehicle to pay for program administration, towing companies, and scrap metal vendors.

Diversion Incentive Program. The County subsidizes the recycling program by paying vendors a price per ton of recyclable materials that have been diverted from the landfill. The diversion incentive is based on an average market price per ton of recycled material from the commodities market, such as corrugated cardboard, paper, plastic, and glass. In general, the diversion incentive program pays for costs of receiving, consolidation, transport of recycled materials to Ports, transportation to the Mainland, and further processing and marketing that exceed the prices received for the material from end users or brokers.

Residential Hauler Credit. Vendors that charge a fee for residential waste pickup may qualify for a residential hauler credit. To qualify, the vendor must have a physical address of each customer. The annual credit to the vendor is determined by the annual number of customer accounts multiplied by a factor of 1.5 (tons per year per customer) multiplied by the landfill tipping fee (\$85/ton).

10.3.2 Solid Waste Fund Expenses

FY 07-08 actual and FY 08-09 budgeted expenses for the County solid waste fund are shown in Exhibit 10-3. Expenses have been grouped into categories that reflect the main solid waste functions provided by the County. The expense groupings shown were prepared by an allocation process in which 500+ lines of expenditures were assigned to functions using appropriate, available data and professional judgment by County staff.

As shown, budgeted expenses for FY 08-09 are considerably higher than FY 07-08 actuals. Expenses are projected to increase because of inflation, waste stream increases, increased staffing at recycling and transfer stations, and substantial reductions in forecast prices received for recycled materials. With the recent downturn in the economy, it is quite possible that actual expenditures will be less than budgeted.

Exhibit 10-4 provides the Solid Waste Department's prioritized capital improvement funding request as submitted to the County Council (with the highest priorities listed first). These improvements have been included in the CIP forecasts shown later in this section. As shown, the County also has made provisions for closure and post-closure requirements for the South Hilo Landfill. Closure and post-closure requirements for the West Hawai'i Landfill are the responsibility of the County's contractor.

10.4 Issues and Concerns

As discussed in prior chapters, such as Source Reduction, the County is considering several different types of potential changes to the current waste management program. Some of the options and/or resolutions currently under consideration could be implemented relatively easily and integrated as part of the County's existing waste management system. Other options will require more significant changes including new infrastructure, new administrative positions within the County, coordination with other County agencies, community outreach, behavioral changes by the public (paradigm shift), and in some cases, will require passage of policies, ordinances, and legislation requiring public and commercial participation.

EXHIBIT 10-3
Solid Waste Fund Expenses

	FY 07-08 Actual	FY 08-09 Budget	Percent of Total	
			FY 07-08	FY 08-09
Administration	\$1,226,555	\$955,790	5%	3%
Recycling	\$4,297,674	\$7,487,882	17%	23%
Transfer Stations	\$8,797,808	\$10,249,068	34%	32%
South Hilo Landfill	\$3,556,342	\$4,737,647	14%	15%
West Hawai'i Landfill	\$7,657,945	\$8,377,370	30%	26%
Closed Landfills	\$250,000	\$470,000	1%	1%
Total	\$25,786,324	\$32,277,757	100%	100%

Note: FY 08-09 figures have not been finalized by the County and are pending approval. Totals may not add because of rounding.

A central issue for the County is determining the best policies and procedures to fund both existing and new waste management programs and initiatives. Currently, residential customers can deliver waste to County recycling and transfer stations at no charge, while commercial haulers must pay tipping fees at the landfills. As shown in Exhibit 10-2, the County general fund provides approximately two-thirds of the revenue used for funding current solid waste expenses (excluding debt financing for major infrastructure) with just over 30 percent of the necessary funds derived from landfill tipping fees. These percentages are unchanged from those reported in the 2002 IRSWMP update, which indicates that few changes to the overall funding structure have occurred during the past eight years in spite of the fact that tipping fees have increased from \$35/ton to \$85/ton during the past 5 years.

The funding mechanisms, administration, and types of programs and legislation required to implement modifications to the existing waste management program will depend on the options selected for implementation in this IRSWMP Update. It is likely that additional regulations will be necessary to successfully implement changes to the County's current program and to encourage changes in the current patterns of waste disposal by both the public and commercial businesses.

EXHIBIT 10-4
Projected Solid Waste Capital Improvements

Project	Estimated Cost (in thousands)					Total
	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	
S. Hilo Sanitary Landfill – H. Expansion	\$1,000	\$3,000	\$2,000			\$6,000
Rural Transfer Station Reconstruction	\$8,000	\$4,000	\$4,500	\$5,000	\$5,500	\$27,000
Equipment Maintenance Facility	\$1,000	\$8,000				\$9,000
Hilo Baseyard Facilities	\$2,000					\$2,000
West Hawai'i Materials Recovery (MRF)		\$7,000				\$7,000
Ocean View Recycling and Transfer St.		\$5,000				\$5,000
Old Closed Kailua Landfill Remediation			\$10,000			\$10,000
Remediate Old Kona Scrap Metal Yard			\$1,800			\$1,800
South Hilo Sanitary Landfill Closure					Beyond 2014	
	\$12,000	\$27,000	\$18,300	\$5,000	\$5,500	\$86,800

Note: Preliminary figures

Examples of legislation implemented in other jurisdictions that face similar issues to Hawai'i County were therefore evaluated as part of this IRSWMP update. Two key issues facing the County that may require legislative changes include:

- Moving toward zero waste by thinking of waste as a resource and reducing wasteful behavior.
- Minimizing or eliminating illegal dumping.

In addition to legislation and ordinances, community outreach and education will also be necessary to effect a change in public perception of the issues surrounding waste management, and thereby influence established behavior patterns. As community involvement and concern for waste-related environmental stewardship increase, it is expected that acceptance of additional fees and regulation regarding waste disposal practices will become more widely embraced by the public and commercial sectors.

As part of the IRSWMP update process, the County is evaluating potential options and setting both short-term and long-term goals for waste management. In order to successfully expand and adapt the current county-wide waste management program to meet its goals, the County will need to:

- Carefully evaluate the technology options currently available.
- Make decisions regarding the path forward for both the near-term and long-term.
- Take advantage of best practices and lessons learned from other jurisdictions regarding funding and administration mechanisms, and related legal and regulatory requirements.

The County must also consider the potential implications of various existing federal, state, and county regulations on the implementation of the waste management program. Depending upon which waste management technologies the County elects to implement, the steps necessary to achieve regulatory approval and compliance will vary. Because regulatory compliance could be a significant factor in the overall applicability of specific technologies, and could also significantly impact schedule and cost, an evaluation of regulatory requirements should be completed as part of the feasibility analysis for specific technologies.

10.5 Administration and Funding Options

Many of the options being considered in previous chapters of this IRSWMP Update would require changes to existing methods of administering and funding programs. Some administration and funding options for consideration follow.

10.5.1 Establishing Solid Waste as an Enterprise Fund

As discussed above, currently about two-thirds of the County's expenditures for solid waste management are funded by the County's general fund which is primarily supported by property taxes. There are some disadvantages associated with the current funding system, including:

- Property tax funding provides no financial incentive for residents to reduce waste.
- Using property taxes to fund solid waste services can be perceived as unfair because property tax collections are not correlated specifically with the types and volumes of waste generated, potentially leading to inequitable subsidization.
- It can be somewhat more challenging to manage solid waste programs based on funding allocation of money from the general fund, because the money in the general fund may be redirected towards other pressing county needs.

Another method of funding that is commonly used in many communities is to establish an enterprise fund for solid waste management that would be supported primarily by fees from waste disposal. Some advantages often cited for enterprise funds include:

- Promoting fairness by charging specifically for waste disposed
- Avoiding tax increases
- Requiring a higher degree of sensitivity to customer's needs
- Allowing managers more discretion, but holding them accountable to customers
- Running government more like a business

The main disadvantage cited for enterprise funds is that they can be regressive and place a burden on the poor by increasing the amount they must pay for an essential service like waste management.

If the County were to establish an enterprise fund and accept no revenues from the general fund, the tipping fee (based on FY 07-08 County budget data) would have to be approximately \$120 per ton. If that rate were extended to residential deliveries at the

transfer station, the required fee (again, based on FY 07-08 data) for each 25 pound bag would have to be approximately \$2.15 to fully fund solid waste services.

10.5.2 Separating Solid Waste Management as a Line Item on Property Taxes

The County could provide additional information to customers about the cost of managing solid waste by adding a separate line item on property tax bills outlining the amount of the tax fee used to fund solid waste services. A possible breakdown might include the six categories of expenses shown in Exhibit 10-3.

10.5.3 Establish PAYT System at County Recycling and Transfer Stations

As discussed in Sections 3.0 and 8.0, there are a number of ways that the County could implement a PAYT system at recycling and transfer stations. Two methods that would minimize staffing requirements at the stations include a “tag” or “bag” system. In a tag system, property owners would be issued tags along with their semi-annual property tax bills that could be used as “currency” for delivering waste, and extra tags could be available for purchase at County offices or retail outlets. Arrangements would need to be made for renters not served by a building collection service.

A bag system would consist of requiring all residents to put waste into a standard type of plastic bag that would be available for purchase at County offices and/or retail outlets.

There would be many implementation challenges associated with this system. An extended phase-in period would be necessary accompanied by an intensive public education program.

10.5.4 Illegal Dumping Prevention

Illegal dumping of household and commercial can have a variety of potential negative impacts. Hazardous chemicals generated from illegally dumped waste can contaminate groundwater and surface water, potentially affecting both human health and aquatic habitats. Flooding can result from blockage of streams and drainage culverts. Property values can be affected by illegal dumping, and economic impacts resulting from costs of clean up can affect County resources. Additional efforts to prevent illegal dumping would be particularly important if the County were to implement a PAYT program or dramatically increase the tipping fee.

The current Hawai'i County code (Chapter 20) contains provisions that prohibit littering. These provisions cover the materials commonly encountered in the municipal waste stream, and prohibit discarding or disposing of these materials on either public or private property. Violators may be fined up to \$1,000 and/or not more than 200 hours of community service for each offense. Cost recovery for clean up is also allowed under the current County code.

However, there have historically been areas where various types of waste have been discarded illegally, including along roadways in more rural areas, on vacant lots, and in gulches with major roadways crossing them or near industrial facilities. Enforcement of existing litter laws is challenging due in part to the rural nature of Hawai'i County. The County DEM is eventually responsible for clean up and disposal of the discarded waste materials.

Currently enforcement of the County code is the responsibility of the Hawai'i County Police Department (HCPD). Because littering is not one of the higher priorities for HCPD, many of the violators who litter are not caught or penalized. DEM staff do not have the training or legal authority to enforce litter laws. The County would increase its potential liability if it required DEM employees to enforce policy, even within the confines of County transfer station properties.

It is anticipated that passing ordinances or legislation that requires the public to pay for waste disposal on a per unit basis may, in the short term, increase the occurrence of illegal dumping. Studies conducted in rural areas of Kentucky concluded that when additional fees were implemented for public waste disposal, illegal dumping increased, especially in areas where a higher percentage of the population had low or poverty-level incomes. However, the majority of jurisdictions implementing programs such as PAYT reported only short-term increases in illegal dumping, and a decline to pre-implementation rates of incidence within the first 1 to 2 years after implementation. Exhibit 10-5 presents four programmatic areas the EPA has suggested focusing on for preventing illegal dumping.

EXHIBIT 10-5

Four Programmatic Areas for Preventing Illegal Dumping (EPA, 1998)

Cleanup Efforts. Cleanup projects will require a coordinated planning effort to ensure that adequate resources and funding are available. Once a site has been cleaned, signs, lighting or barriers may be required to discourage future dumping. Signs should indicate the fines and penalties for illegal dumping, and a phone number for reporting incidents. Landscaping and beautification efforts may also discourage future dumping, as well as provide open space and increase property values.

Community Outreach and Involvement. This may be the most important tool in ensuring that this practice is effective. The organization of special cleanup events where communities are provided with the resources to properly dispose of illegally dumped materials increases the understanding among residents of illegal dumping impacts and supplies opportunities to correctly dispose of materials which may otherwise be illegally dumped. Integration of illegal dumping prevention into community policing programs or use of programs such as Crime Stoppers may also be an effective way to increase enforcement opportunities without the additional cost of hiring new staff. Producing simple messages relating the cost of illegal dumping on local taxes and proper disposal sites will aid in eliminating the problem. Having a hotline where citizens can report illegal activities and educating the public on the connection between the storm drain and water quality, and other potential hazards associated with dumping refuse into streams or drains will decrease disposal of waste into streams or storm drain inlets.

Targeted Enforcement. This tool involves the use of ordinances to regulate waste management and eliminate illegal dumping through methods such as fines, cost recovery penalties for cleanup, and permit requirements for waste management activities, to name a few. These fines and penalties can be used to help fund the prevention program or to provide rewards to citizens who report illegal dumping activities. Other recommendations for this tool include training of staff from all municipal departments in recognizing and reporting illegal dumping incidents, and dedicating staff who have the authority to conduct surveillance and inspections, and write citations for those caught illegally dumping.

Tracking and Evaluation. This tool measures the impact of prevention efforts and determines if goals are being met. Using mapping techniques and computer databases allows officials to identify areas where dumping most often occurs, record patterns in dumping occurrence (time of day, day of week, etc), and calculate the number of citations issued and the responsible parties. This allows for better allocation of resources and more specific targeting of outreach and education efforts for offenders.

Other jurisdictions in most cases have implemented litter ordinances similar to those that currently exist in Hawai'i County. In some areas, tougher penalties are in place for more egregious violations. For example, Pennsylvania laws against littering and illegal dumping

include civil penalties up to \$25,000 per incident for illegally hauling waste anywhere other than to a permitted facility, and up to \$10,000 per incident for dumping waste into streams. In Texas, civil penalties similar to those in Pennsylvania, and criminal penalties ranging from misdemeanor to felony level are in place for illegal dumping violations, depending on the severity of the violation.

A combination of passing more severe penalties for illegal dumping, targeted enforcement actions by HCPD, establishment of new community outreach and participation programs, and other actions found to be successful in other jurisdictions may help to curb illegal dumping in Hawai'i County.

Potential actions that may be considered for Hawai'i County include:

- **Civil and criminal penalties:** The County could develop legislation that sets more severe civil and criminal penalties for illegal dumping activities. Legislation could be worded such that the penalties increase with the egregiousness of the violation, and based upon a weight, volume, or types of material that are dumped, and location of illegal activity (that is, higher penalties for dumping into streambeds). Legislation could require violators to pay for consequential damages and cleanup costs resulting from specific violations.
- **Targeted enforcement:** the County could work in conjunction with the community and the HCPD to develop a targeted enforcement program. Incentives could be offered for monitoring and reporting of illegal dumping to authorities, and methods could be developed for periodically evaluating illegal dump sites for evidence of the identity of the violators. Legislation supporting prosecution of violators based on the evidence of ownership at the time of the violation derived from dumped materials may need to be developed to effectively implement such a program.
- **Community education, outreach, and involvement:** develop programs with school and community groups or organizations to conduct periodic clean ups of illegal dump sites, in order to raise community awareness and involvement in reducing illegal dumping activities.
- **Installation of signage at problem areas:** The County could install signage at areas where illegal dumping typically occurs listing the more severe civil and criminal penalties for violators in order to curb future dumping.

10.6 IRSWMP Recommendations

This Plan recommends continuing the County's current system of funding most operating expenditures using property taxes and tip fees, along with implementation of a PAYT system at County recycling and transfer stations. Major capital expenditures would continue to be funded through general obligation bonds.

The Plan also recommends allowing up to 3 years of planning, research, and outreach prior to implementation of PAYT. This should include research into ways to limit the potential for illegal dumping.

10.7 Recommended Implementation Plan and Financial Analysis

This section provides three perspectives on plan implementation: new solid waste fund operating expenses, new CIP expenditures, and forecast revenues and expenses for the County's solid waste operating fund.

10.7.1 New Solid Waste Fund Operating Expenses

The new operating expenses recommended in this Plan are provided in Exhibit 10-6. The expenses are organized by Plan section, with a page number reference to indicate where the recommendation is discussed in the Plan. Programs that the SWAC felt were a high priority for implementing early in the 5-year planning cycle are denoted with an "H" in the High Priority column of the exhibit.

10.7.2 Capital Improvement Fund Expenditures

Recommended CIP expenditures are shown in Exhibit 10-7. Those expenditures are generally consistent with the County's most recent CIP funding request, with a few new additions recommended in the Plan (such as investigations related to developing a new landfill in the quarries adjacent to the SHSL site).

10.7.3 Projected Solid Waste Fund Revenues and Expenses

Projected solid waste fund revenues and expenses are shown in Exhibit 10-8. This information relies on projections of ongoing programs made by the County solid waste division through FY 09-10, with the addition of the new programs shown in Exhibit 10-6.

The net revenues shown are revenues minus expenses. As indicated, additional funding beyond revenues projected from the PAYT system will be necessary to pay for the programs outlined in the Plan. The Plan recommends making up the shortfall using a combination of property tax and/or tipping fee increases. For reference purposes, if no property tax funds were used, a tipping fee increase of approximately \$25 per ton (to about \$110 per ton) would result in revenues equaling expenses throughout the 5-year implementation period. The exact mix of property taxes and tipping fee increases would be determined during the course of Plan implementation.

EXHIBIT 10-6
Implementation Plan for Operations

Program	Page No.	High Priority	Year 0 FY 09-10	Year 1 FY 10-11	Year 2 FY 11-12	Year 3 FY 12-13	Year 4 FY 13-14	Year 5 FY 14-15
Source Reduction								
Ordinance: waste reduction plans for building permits	3-17	H	\$0	\$11,000	\$0	\$0	\$0	\$0
Develop Extended Producer Responsibility (EPR) policy	3-17		\$0	\$0		\$0	\$32,000	\$0
EPR for difficult-to-recycle campaign	3-17		\$0	\$0		\$0	\$0	\$32,000
County government source reduction program	3-17	H	\$0	\$32,000	\$0	\$0	\$0	\$0
Business waste audit and education program	3-18		\$0	\$32,000	\$32,000	\$33,000	\$34,000	\$35,000
Visitor industry education and promotion	3-18		\$0	\$0	\$0	\$33,000	\$0	\$0
Pay-As-You-Throw at Recycling/Transfer Stations	3-17	H						
Program design			\$51,000	\$0	\$0	\$0	\$0	\$0
Education and outreach campaign			\$0	\$105,000	\$108,000	\$110,000	\$113,000	\$56,500
Outreach to retail businesses			\$0	\$53,000	\$0	\$0	\$0	\$0
Purchase and deliver bags/tags			\$0	\$0	\$804,000	\$1,607,000	\$1,647,000	\$1,688,000
Pilot program (free bags/tags, implement and evaluate)			\$0	\$0	\$55,000	\$0	\$0	\$0
Staff training			\$0	\$0	\$55,000	\$0	\$0	\$0
Implementation, monitoring and evaluation			\$0	\$0	\$0	\$220,000	\$100,000	\$50,000
Reuse								
Expand reuse facilities – more services; more facilities	3-18	H	\$0	\$61,000	\$94,000	\$193,000	\$198,000	\$203,000
Reuse education, outreach, and public awareness	3-18	H	\$0	\$26,000	\$0	\$0	\$0	\$0
Public-private partnership with NGOs (e.g., Goodwill)	3-18		\$0	\$0	\$27,000	\$0	\$0	\$0
Education, Outreach, and Public Awareness								
3-year education and social marketing plan	5-11	H	\$0	\$79,000	\$0	\$0	\$85,000	\$0
Zero waste education and public awareness coordinator	5-11		\$0	\$53,000	\$54,000	\$55,000	\$57,000	\$58,000
Implement communitywide social marketing plan	5-11	H	\$0	\$0	\$81,000	\$83,000	\$85,000	\$87,000
Recycling								
Establish differential tip fee ordinance	4-31	H	\$0	\$26,000	\$0	\$0	\$0	\$0
Establish mandatory source separation and recycling ordinance	4-31	H	\$0	\$26,000	\$0	\$0	\$0	\$0
Establish opportunity to recycle legislation	4-31	H	\$0	\$26,000	\$0	\$0	\$0	\$0
Establish County "buy recycled" policy	4-32	H	\$0	\$0	\$54,000	\$0	\$0	\$0
Explore State/Regional zero waste marketing and public policy	4-32		\$0	\$0	\$27,000	\$0	\$0	\$0
State, outreach: change school collection contracts to add recycling	4-32	H			No added cost			
Recycle art campaign	4-33		\$0	\$0	\$9,000	\$9,000	\$9,000	\$9,000
Commercial recycling	4-32							
Commercial recycling specialist			\$0	\$0	\$54,000	\$55,000	\$57,000	\$58,000
Education, outreach and awareness			\$0	\$26,000	\$27,000	\$28,000	\$28,000	\$29,000

EXHIBIT 10-6
Implementation Plan for Operations

Program	Page No.	High Priority	Year 0 FY 09-10	Year 1 FY 10-11	Year 2 FY 11-12	Year 3 FY 12-13	Year 4 FY 13-14	Year 5 FY 14-15
Added recycling at recycling/transfer stations (mandatory recycling)	4-32	H						
Improved signage			\$0	\$105,000	\$108,000	\$0	\$0	\$0
Education, outreach and awareness			\$0	\$26,000	\$27,000	\$28,000	\$28,000	\$29,000
Increased recyclable transportation, processing, and sales (less avoided cost)			\$0	\$0	\$0	\$2,245,000	\$3,068,000	\$4,716,000
Materials recovery facility for East Hawai'i (using existing re-load facility)	4-32	H						
Operations, labor (2 added FTE - County or private)			\$0	\$0	\$108,000	\$110,000	\$113,000	\$116,000
Maintenance and miscellaneous supplies			\$0	\$0	\$22,000	\$22,000	\$23,000	\$23,000
Materials recovery facility (baling/storage) for West Hawai'i	4-32	H						
Operations, labor (3 added FTE - County or private)			\$0	\$0	\$0	\$166,000	\$170,000	\$174,000
Maintenance and miscellaneous supplies			\$0	\$0	\$0	\$44,000	\$45,000	\$46,000
County park and public place recycling	4-33	H						
Planning			\$0	\$0	\$0	\$0	\$34,000	\$0
Bins			\$0	\$0	\$0	\$0	\$20,000	\$0
Operations			\$0	\$0	\$0	\$0	\$0	\$696,000
Event recycling	4-33	H	\$0	\$0	\$11,000	\$11,000	\$11,000	\$12,000
Organics								
Modify zoning rules/County code	4-33	H	\$0	\$32,000	\$0	\$0	\$0	\$0
Organics ban implementation study	4-33		\$75,000	\$0	\$0	\$0	\$0	\$0
Organics coordinator	4-33	H	\$0	\$53,000	\$54,000	\$55,000	\$57,000	\$58,000
On-site composting program (subsidized bins and distribution)	4-33	H						
Planning			\$31,000	\$32,000	\$0	\$0	\$0	\$0
Residences - dist. and education (3,000 units/yr, 25% penetration)			\$0	\$0	\$106,000	\$217,000	\$334,000	\$342,000
Businesses (similar level of effort to residential)			\$0	\$0	\$106,000	\$217,000	\$334,000	\$342,000
Certified master composter program	4-33							
Planning			\$0	\$0	\$32,000	\$0	\$0	\$0
Implementation			\$0	\$0	\$0	\$28,000	\$28,000	\$29,000
Training program and guides for farmers	4-33		\$0	\$0	\$0	\$66,000	\$68,000	\$70,000
Stop wasting food - program with local food banks	4-33		\$0	\$0	\$22,000	\$22,000	\$23,000	\$23,000
Add green waste dropoff locations at recycling/transfer stations	4-34	H	\$0	\$105,000	\$108,000	\$110,000	\$0	\$0
Partner to help establish compost demonstration gardens	4-33		\$0	\$0	\$36,000	\$37,000	\$38,000	\$0
Mobile tub grinder for recycling/transfer stations (contract or County)	4-34	H	\$0	\$263,000	\$269,000	\$276,000	\$283,000	\$290,000
Conduct pilot food waste composting project	4-34			\$105,000	\$108,000	\$0	\$0	\$0
Upgrade mulch facility to organics composting facility for West Hawai'i	4-34	H	\$0	\$1,066,000	\$1,093,000	\$1,120,000	\$1,148,000	\$1,177,000

EXHIBIT 10-6
Implementation Plan for Operations

Program	Page No.	High Priority	Year 0 FY 09-10	Year 1 FY 10-11	Year 2 FY 11-12	Year 3 FY 12-13	Year 4 FY 13-14	Year 5 FY 14-15
Collection and Transfer								
Licensing and recycling requirements for residential collection firms	8-30		\$0	\$0	\$0	\$33,000	\$0	\$0
Change permits to allow small commercial recycling at stations (<1 ton)	8-30	H			In progress - no added cost			
Full-time staffing and reduced operating hours	8-29	H			No added cost			
Operational efficiency analysis	8-30		\$128,000	\$0	\$0	\$0	\$0	\$0
Household Hazardous Waste (HHW) / Electronic Waste (E-Waste)								
Hire HHW / E-waste specialist	6-9		\$0	\$0	\$54,000	\$55,000	\$57,000	\$58,000
HHW/ E-waste education, outreach, and public awareness	6-9		\$0	\$0	\$27,000	\$28,000	\$28,000	\$29,000
Enhance E-waste take back programs with State and manufacturers/sellers	6-9		\$0	\$0	\$32,000	\$0	\$0	\$0
Develop E-scrap campaign (anything with a plug)	6-10		\$0	\$0	\$32,000	\$0	\$0	\$0
Explore legislative actions for takeback of hazardous products and packaging	6-10		\$0	\$0	\$32,000	\$0	\$0	\$0
Additional HHW collection events (10-12 additional per year)	6-10	H	\$0	\$140,000	\$215,000	\$442,000	\$453,000	\$464,000
Residuals Management								
Engage in dialog with State/Counties about joint solutions	9-31		\$31,000	\$0	\$0	\$0	\$0	\$0
Feasibility study of reclaiming old Kona landfill	9-31		\$0	\$263,000	\$0	\$0	\$0	\$0
Master plan for West Hawai'i Sanitary Landfill	9-31	H	\$256,000	\$0	\$0	\$0	\$0	\$0
Master plan for South Hilo Sanitary Landfill	9-31	H	\$256,000	\$0	\$0	\$0	\$0	\$0
Added operations for lined 7-acre cell at SHSL	9-30	H	\$0	\$0	\$0	\$0	\$312,000	\$320,000
Administration and Funding								
Illegal dumping program	10-10	H						
Research and enhanced education program			\$0	\$0	\$54,000	\$55,000	\$57,000	\$58,000
Signage			\$0	\$0	\$108,000	\$110,000	\$0	\$0
Change enforcement structure					Staff time, no added cost			
Total			\$828,000	\$2,746,000	\$4,245,000	\$7,923,000	\$9,177,000	\$11,377,500

Note: Assumes 2.5 percent annual inflation.

EXHIBIT 10-7
Implementation Plan for Capital Improvement Program (CIP)

CIP Costs in Year of Expenditure Dollars	Page No.	High Priority	Year 0 FY 09-10	Year 1 FY 10-11	Year 2 FY 11-12	Year 3 FY 12-13	Year 4 FY 13-14	Year 5 FY 14-15
Recycling								
Materials recovery facility for East Hawai'i (using existing re-load facility)	4-32	H						
Equipment (baler, bobcat, chassis)			\$0	\$0	\$400,000	\$0	\$0	\$0
Materials recovery facility for West Hawai'i	4-32	H			\$7,000,000			
Collection and Transfer								
Reconstruct one station per year ²	8-29	H	\$8,000,000	\$4,000,000	\$4,500,000	\$5,000,000	\$5,500,000	\$6,000,000
South Kona - Ocean View Recycling/ Transfer Station	8-29		\$0	\$5,000,000	\$0	\$0	\$0	\$0
Hilo baseyard facilities	8-30	H	\$2,000,000	\$0	\$0	\$0	\$0	\$0
Equipment maintenance facility	8-30	H	\$1,000,000	\$8,000,000	\$0	\$0	\$0	\$0
Residuals Management								
7-Acre Expansion	9-24	H						
Design and permitting			\$600,000	\$400,000				
Construction				\$2,470,000	\$3,800,000			
Quarry Expansion	9-25	H						
Geotechnical investigation				\$200,000				
Groundwater monitoring plan				\$250,000				
Design, permitting, cost estimates			\$170,000	\$170,000	\$180,000	\$190,000	\$210,000	\$0
Environmental review			\$62,000	\$105,000	\$151,000			
Land use approvals			\$51,000	\$53,000	\$54,000	\$55,000		
Old Kona Scrap Metal Yard Remediation	9-31	H			\$1,800,000			
Old Closed Kailua Landfill Remediation	9-31				\$10,000,000			
South Hilo Sanitary Landfill Closure								Beyond 2015
Total			\$11,883,000	\$20,648,000	\$27,885,000	\$5,245,000	\$5,710,000	\$6,000,000

Note: Assumes 2.5 percent annual inflation.

EXHIBIT 10-7
Implementation Plan – County Operating Revenues and Expenses

	Actual FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15
Solid Waste (Operating) Fund								
Revenues								
Federal Grants	\$27,260	\$0	\$0	\$0	\$0	\$0	\$0	\$0
State Grants								
Glass Recycling Program	\$0	\$155,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000
Used Oil Collection/Disposal	\$0	\$67,500	\$59,390	\$59,390	\$59,390	\$59,390	\$59,390	\$59,390
Beverage Container Deposit Program	\$423,934	\$940,809	\$996,108	\$996,108	\$996,108	\$996,108	\$996,108	\$996,108
Landfill Tipping Fees and Permit Fees	\$9,213,574	\$7,564,000	\$7,456,000	\$8,281,000	\$8,444,000	\$8,314,000	\$8,247,000	\$8,170,000
Pay-as-You-Throw at Transfer Stations	\$0	\$0	\$0	\$0	\$0	\$10,555,000	\$10,470,000	\$10,372,000
General Fund								
General Fund Balance From Previous Year	\$0	\$3,046,293	\$0	\$0	\$0	\$0	\$0	\$0
Transfer from General Fund	\$17,352,726	\$19,147,721	\$22,083,604	\$22,154,401	\$21,938,697	\$21,938,697	\$21,938,697	\$21,938,697
Miscellaneous Revenue	\$33,767	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Additional Tip Fee or Property Taxes	(\$1,264,939)	\$1,356,677	\$1,330,898	\$3,132,101	\$5,482,805	(\$446,195)	\$1,487,805	\$4,715,305
Total Solid Waste Fund	\$25,786,323	\$32,278,000	\$31,981,000	\$34,678,000	\$36,976,000	\$41,472,000	\$43,254,000	\$46,306,500
Expenses								
Administration	\$1,226,555	\$956,000	\$999,000	\$992,000	\$1,179,000	\$1,207,000	\$1,125,000	\$1,153,000
Reduction, Reuse, Recycling	\$4,297,674	\$7,488,000	\$7,332,000	\$9,837,000	\$11,621,000	\$15,451,000	\$16,727,000	\$19,116,500
Recycling and Transfer Stations	\$8,797,808	\$10,249,000	\$9,254,000	\$9,354,000	\$9,588,000	\$9,861,000	\$10,074,000	\$10,326,000
South Hilo Sanitary Landfill	\$3,556,342	\$4,738,000	\$4,923,000	\$4,784,000	\$4,904,000	\$5,027,000	\$5,153,000	\$5,282,000
West Hawaii Sanitary Landfill	\$7,657,945	\$8,377,000	\$8,968,000	\$8,930,000	\$9,153,000	\$9,382,000	\$9,617,000	\$9,857,000
Closed Landfills	\$250,000	\$470,000	\$505,000	\$781,000	\$531,000	\$544,000	\$558,000	\$572,000
Total Operating Expenses	\$25,786,323	\$32,278,000	\$31,981,000	\$34,678,000	\$36,976,000	\$41,472,000	\$43,254,000	\$46,306,500
Net Operating Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Based on Solid Waste Division forecasts for ongoing programs through FY 09-10, and Plan implementation. Assumes 2.5 percent annual inflation.