# **OC Waste & Recycling**



# 2010 Business Plan Michael B. Giancola Director



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#### **EXECUTIVE SUMMARY**

2009 has been a year of change for Orange County - a year of unprecedented financial challenges and realities for residents, businesses, the county, the state and the nation as a whole. On a local level, OC Waste & Recycling has felt the impacts of the fiscal crisis and is facing the challenges associated with managing a premiere waste disposal system on a revenue stream that is declining in-step with the economy's impact on tonnage levels. Despite the consistent nature of OC Waste & Recycling's core business, 2009 has brought significant change to the department related to how it manages its business in the face of declining tonnages, reduced revenues and everincreasing regulatory requirements. Add to that the conflicting mandates inherent to OC Waste & Recycling core functions – the fact that successes in recycling further reduce tonnage levels yet at the same time benefit the OC environment – and you have a year full of change and challenges. One that has led OC Waste & Recycling to achieve more than anticipated and positions the department well to face further opportunities as they arise.

OC Waste & Recycling's vision is to be the best waste disposal system in America. In support of this vision, OC Waste & Recycling is committed to meeting the solid waste disposal needs of Orange County through efficient operations, sound environmental practices, strategic planning, innovation and technology. This mission is directly aligned with Orange County's overall strategic initiatives, and OC Waste & Recycling endeavors each day to make these goals a reality. The department's core services include providing for solid waste disposal for Orange County residents at the three active landfills owned and operated by the County, managing former waste disposal sites, coordinating county-wide waste programs and providing solid waste collection and recycling services in the County unincorporated areas. While these core services remain consistent to the department from year to year, the opportunities for success in 2009 were unique and noteworthy.

In 2009, OC Waste & Recycling successfully renegotiated ten-year Waste Disposal Agreements with Orange County cities, sanitary districts and facility operators which commits their non-recyclable waste to be delivered to the County disposal system in exchange for a fixed disposal rate. These contracts will ensure a long-term waste flow sufficient to financially support the operation of the disposal system, and provide a market competitive waste disposal rate for our customers. The Department's goal of maintaining a competitive rate for waste disposal in Orange County is one example of how the department aligns itself with the County Strategic Initiative to build for the future.

Another noteworthy success was achieved as the Department successfully renegotiated ten-year Franchise Agreements for solid waste collection and recycling in the County unincorporated areas that will extend through June 2020. OC Waste & Recycling provides solid waste and recycling services for residents and businesses in the unincorporated areas throughout Orange County. The Agreements benefit the majority

of residents in these areas with rate reductions, as well as reliable, waste collection services from experienced waste haulers. The goal to provide the County Unincorporated areas with quality waste collection and recycling services provides an essential health and safety service for these communities and directly aligns with the County Strategic Initiative to build for healthy communities.

Despite the challenges that faced the department, the opportunities for success were significant. From achieving the 2009 Challenge Award from the California State Association of Counties for implementation of the AB 939 Surcharge (an economic pricing incentive to encourage self-haulers to use material processing facilities to remove recyclable materials before taking waste to the landfill) to breaking ground on the County's first green building which will debut at the Prima Deshecha Landfill Site Office in 2010, the progress is undeniable. The department made significant strides working with the business community, as OC Waste & Recycling entered into a public/private partnership with the Discovery Science Center to develop an interactive exhibit to educate the public about environmentally sound practices. public/private partnership success resulted in the launch of a privately operated Materials Recycling Facility located on the Prima Deshecha Landfill, which allows selfhaul customers to increase the collection of recyclables and reduce the volume of waste entering the landfill. OC Waste & Recycling committed resources to develop compensatory habitat to ensure a healthy eco-system at the landfills and invested time in its employees by introducing the Leadership Development Program: Passport to Your Future, to offer employees the opportunity to develop their skills and learn leadership techniques. The Department also initiated the Safety First Reward Program to raise awareness, reduce accidents and sustain a safe work environment. Both of these initiatives are aimed at building for the future of our employees, our agency and our community.

The successes of 2009 are measureable and can be directly attributed to the dedicated employees of OC Waste & Recycling. In the coming year, this dedication will be even more important and, teamed with tenacity and innovative business strategies, the department will move forward to face the challenges of 2010. One notable change in the department's forthcoming approach will be the adoption of a revised department mission statement in 2010 and the development and implementation of Balanced Scorecard performance measures. Implementation of this model will aid the department in demonstrating how core services and strategies align with County Strategic Initiatives. Additionally, the performance measure will afford the department the ability to more closely evaluate the effectiveness of the core service delivery and target areas for improvement.

2009 has been a year of change, bringing with it challenges and opportunities. OC Waste & Recycling has met the challenges and used them as opportunities to grow business delivery in a new and innovative way. Many opportunities still lie ahead and, through the development and ingenuity of staff coupled with prudent business strategies, OC Waste & Recycling will develop into a stronger more sustainable enterprise.

## Section I – Agency Overview

# VISION STATEMENT To be the best waste disposal system in America

#### **MISSION STATEMENT**

To MEET THE SOLID WASTE DISPOSAL NEEDS OF ORANGE COUNTY THROUGH EFFICIENT OPERATIONS, SOUND ENVIRONMENTAL PRACTICES, STRATEGIC PLANNING, INNOVATION AND TECHNOLOGY.

#### **CORE SERVICES**

The Orange County community generates millions of tons of waste each year—approximately 2.9 million tons of Orange County waste was disposed of in Orange County landfills in fiscal year 2008-09. Careful disposal of the County's waste is fundamental to preserving public health and safety and is regulated at the federal, state and local levels. As the entity charged with providing waste disposal services for the County, OC Waste & Recycling recognizes that its primary stakeholders are cities, residents, and businesses as well as federal, state and local regulators.

OC Waste & Recycling's core services are to provide solid waste disposal, manage former county waste disposal sites, coordinate countywide waste-related programs and provide for unincorporated area collection and recycling services. OC Waste & Recycling's core services align with the County's mission and vision to "make Orange County a safe, healthy and fulfilling place" and to deliver outstanding, cost-effective regional public services for County residents.

#### **Provide for Solid Waste Disposal**

OC Waste & Recycling operates and maintains the County's three active landfills: Frank R. Bowerman (FRB), Olinda Alpha and Prima Deshecha. Conveniently located throughout the county, the landfills provide disposal capacity for all residents. In 2008, based on tonnage received, Olinda Alpha and FRB were, respectively, the third and fourth most active landfills in California, and the twelfth and seventeenth most active landfills in the United States. OC Waste & Recycling manages the only landfill system in the nation that operates two landfills that are in the top twenty, based on the volume of solid waste received.

In a time when jurisdictions throughout the country are scrambling to meet local disposal needs, Orange County currently has approximately 50 - 55 years of remaining

permitted landfill capacity available. Final permit approval is pending for the Olinda Alpha Landfill expansion through 2021; FRB is permitted through 2053 and Prima Deshecha through 2067.

#### Manage Former County Waste Disposal Sites

OC Waste & Recycling is responsible for protecting the environment at its active landfills and is committed to being a steward of its closed sites as well. OC Waste & Recycling provides post-closure maintenance at Coyote Canyon and Santiago Canyon Landfills and performs a range of required monitoring activities at 10 of its 19 former disposal sites. The County operated all of these disposal facilities but owns only four. OC Waste & Recycling has established both post-closure maintenance funds and an environmental fund to address closed site monitoring, liability and maintenance needs. These funds help protect the County funds from exposure.

#### **Coordinate Countywide Waste-related Programs**

County residents generate household hazardous wastes that cannot be disposed of in landfills. In response to the need to properly dispose of household hazardous waste, OC Waste & Recycling manages and operates the four household hazardous waste collection centers, conveniently located throughout the County. At these centers, Orange County residents may dispose of household hazardous wastes free of charge. The household hazardous waste centers play a pivotal role in keeping household hazardous waste out of County landfills, and thus in protecting the environment.

OC Waste & Recycling has also assumed a leadership role in countywide efforts to comply with the State Waste Management Act of 1989 (AB 939) by recommending and implementing various programs designed to encourage diversion and recycling efforts.

#### **Provide for Unincorporated Area Waste Collection and Recycling Services**

OC Waste & Recycling is charged with the responsibility of ensuring that unincorporated area residents and businesses are provided with quality solid waste collection and recycling services. To this end, OC Waste & Recycling is responsible for securing and managing contracts to effect solid waste collection, disposal and recycling for the 122,032 residents of the unincorporated areas and their businesses. OC Waste & Recycling is also responsible for meeting state-mandated waste diversion goals for County unincorporated areas. As such, OC Waste & Recycling has established new contracts that will maintain the high quality of service that the community has come to expect and provide for enhanced recycling programs. The contracts will be in effect from July 1, 2010, through June 30, 2020.

## **SECTION II – Operational Plan**

#### A. ENVIRONMENT

#### **CLIENTS:**

<u>Orange County Cities</u> – Orange County cities are responsible for administratively directing where the majority of their waste is disposed. In accordance with the terms and conditions of Waste Disposal Agreements (WDAs), each city in Orange County has agreed to deliver solid waste generated within its jurisdictional control to Orange County landfills. Through these Agreements, OC Waste & Recycling addresses the solid waste needs of Orange County cities by assuring disposal capacity at a competitive rate.

<u>Waste Haulers</u> – Commercial waste haulers transport ninety percent of residential, commercial and industrial waste generated throughout Orange County to OC Waste & Recycling landfills. OC Waste & Recycling provides service to the haulers by ensuring disposal capacity for in-County solid waste, providing competitive rates and addressing industry needs as they arise.

<u>Businesses & Residents</u> – Residential and small business customers who self-haul waste to the landfills dispose of approximately ten percent of total in-county waste. Some businesses and residents transport their waste directly to the landfills themselves rather than having it picked up by a commercial waste hauler. This group includes contractors, roofers, gardeners, landscapers and residents. These customers' needs are addressed through locally available disposal sites.

<u>Importation Waste Haulers</u> – Commercial waste haulers have entered into Waste Disposal Agreements with the County of Orange in order to secure stable rates and disposal capacity. These customers agree to deliver a contracted amount of out-of-county waste to Orange County landfills. These importation agreements provide revenue that is transferred to the County General Fund to be used for bankruptcy recovery obligations.

<u>Orange County Government</u> – OC Waste & Recycling transfers funds from importation revenues, less operating expenses, to the County's General Fund to be used for bankruptcy debt payment. The General Fund provides a multitude of programs that benefit Orange County residents and businesses. In fiscal year 2008-09, \$11,366,414 was transferred to the County General Fund to support bankruptcy recovery.

<u>Unincorporated Area Residents and Businesses</u> – OC Waste & Recycling is responsible for providing solid waste management services for the unincorporated areas of Orange County. OC Waste & Recycling contracts with commercial haulers to collect and recycle waste from the unincorporated areas and deliver it to Orange

County's landfills. OC Waste & Recycling is also responsible for AB 939 compliance activities for the unincorporated areas of Orange County.

#### **CHALLENGES:**

#### **Competing Waste Disposal Systems**

OC Waste & Recycling operates in a competitive marketplace, comprised of many competing public and private waste disposal systems. As such, comparable disposal rates must be offered to attract and retain landfill customers. In order to assure competitive rates for Orange County customers, OC Waste & Recycling secured a predictable waste stream. This was accomplished through the establishment of WDAs, committing Orange County cities to deliver their non-recyclable waste to County landfills. This predictable waste stream provides the financial stability necessary for short- and long-term capital improvements.

In order to continue meeting the challenges presented by a competitive environment, OC Waste & Recycling has negotiated new agreements with Orange County cities and waste haulers to replace the current WDA's which will expire on June 30, 2010. These new agreements will ensure a steady stream of revenue through the year 2020.

OC Waste & Recycling will continue to monitor disposal rates within the Southern California regional solid waste market to ensure that its disposal rates for contracted waste remain competitive.

#### Variability in the Economy

Variations in the local economy impact the amount of tonnage received at landfills. Generally the stronger the economy, the greater the amount of tonnage received, while a weaker economy results in less tonnage. OC Waste & Recycling has experienced an approximate 26% decrease in system wide tonnage since FY 2004-05. As a result of the tonnage decline, the department has experienced a corresponding reduction in revenue received.

OC Waste & Recycling anticipates a continuation of the decrease in tonnage and corresponding revenue, followed by a leveling off and then a resumption of slight annual increases thereafter. The Department will continue to regularly monitor relevant economic indicators and changes in regulations for potential impact to its long range financial plans.

#### **Urban Encroachment**

As development of Orange County continues and open space dwindles, it is inevitable that residential development will continue to be constructed closer to the County's landfill sites. When residential development is in close proximity to a landfill, management of the landfill becomes more challenging due to resident's concerns about traffic, noise, odor, and safety/regulatory compliance issues. OC Waste & Recycling will continue in its efforts to be a good neighbor by responding to city representatives and resident's concerns, by proactively meeting regulatory compliance challenges, and by

providing educational information via meetings, public outreach, landfill tours and the Internet.

#### **Closed Site Maintenance**

OC Waste & Recycling provides post-closure maintenance at Coyote Canyon and Santiago Canyon Landfills and performs a range of monitoring activities at 10 of its 19 former disposal sites. The County operated all of these disposal facilities but owns only four. Property owners of land previously used for municipal solid waste disposal now view these parcels as residential and commercial development opportunities. As the former disposal facility operator, the County may be impacted by a current landowner's proposed land use changes. Also, property owners often look to the County to address environmental and financial issues that may arise from current land uses that did not take into consideration the property's previous use for municipal solid waste disposal. To resolve these potential challenges, OC Waste & Recycling develops appropriate negotiation strategies with property owners, municipalities, and developers.

#### **Increased Regulatory Requirements**

California statutes governing solid waste are some of the most stringent standards in the nation. OC Waste & Recycling is responsible for complying with regulations that are enforced by such agencies as the California Integrated Waste Management Board, Local Enforcement Agency, South Coast Air Quality Management District, Regional Water Quality Control Boards, Army Corps of Engineers, United States Fish and Wildlife Service, and the California Department of Fish and Game.

The regulations often overlap with one another, which makes compliance challenging. Even though regulators may have the same goals and purposes, each requires that their issues be addressed separately. In addition, the level of regulatory scrutiny has greatly increased with the heightened awareness and growing demand for environmental protection. This requires that OC Waste & Recycling meet with multiple regulators for each project, which can result in lengthy and complex approval processes and mitigation costs.

#### **Hazardous Waste Designation**

The Household Hazardous Waste Program continues to inform residents through public outreach, and assistance from solid waste haulers and cities, that unwanted electronic products (e-waste), and universal waste materials (fluorescent lights, household batteries, mercury thermometers and thermostats, and electronic waste), along with all other types of household hazardous waste (paints, solvents, automotive fluids, garden chemicals, cleaners, pool chemicals, etc.) are not to be disposed of in the landfills. California Code of Regulations, Title22, Chapter23, designates e-waste as universal waste. The County provides four permanent Household Hazardous Waste Collection Centers (HHWCCs) for the proper disposal of all these waste materials: Anaheim, Huntington Beach, Irvine, and San Juan Capistrano.

In order to meet this challenge, public education and outreach will continue in an effort to keep hazardous waste out of the landfills, sewers, and storm drains. OC Waste &

Recycling continues to educate the cities and the public about the landfill ban on household needles, effective September 2008, and is encouraging the cities and haulers to establish programs for collection and proper disposal. OC Waste & Recycling will also continue to monitor proposed legislation to determine the impact on the landfills, HHWCCs, and environmental programs.

#### **Natural Community Conservation Plan (NCCP)**

The County is a party to the 1996 Natural Community Conservation Plan (NCCP) for the Central Coastal Sub-Region of Orange County. The primary objective of California's program is to conserve natural communities at the ecosystem scale while accommodating compatible land use. The purpose of the Orange County NCCP is to allow growth and development to occur within the County while ensuring the preservation of significant natural habitat for future generations. Under the NCCP Implementation Agreement, the County estimated the number of acres of habitat that would potentially be disturbed or impacted by the construction of public infrastructure, such as roads, flood control facilities, landfills, etc. Through this Agreement, estimated acreage is set-aside in a "bank" for habitat preservation. The amount of available acreage is reduced from this bank in exchange for planned development. Both public and private property owners are parties to the Agreement.

#### **Managing Habitat Mitigation Areas**

OC Waste & Recycling is challenged with managing mitigation areas to ensure habitat restoration success. For a mitigation site to be successful, it requires regular monitoring and maintenance to eliminate invasive weeds, replacement of plant materials that have not survived, erosion monitoring and repair, and annual reporting to the Resource Agencies. There are three primary resource agencies that monitor and enforce mitigation requirements (U.S. Fish and Wildlife Service, California Department of Fish and Game, and the Army Corps of Engineers). Depending on the project, any or all of these agencies may have mitigation requirements to offset impacts to plants and animals. creeks and streambeds.

OC Waste & Recycling's on-site Biological Resources Monitor continues to ensure that mitigation areas are in compliance with resource agencies' requirements.

#### **Beneficial Use of Landfill Gas**

OC Waste & Recycling is challenged with maintaining regulatory compliance with landfill gas emission requirements, and increasing the conversion of landfill gas as a renewable energy source. Landfill gas collection, control and conversion are achieved through landfill gas leases with private entities at each of OC Waste & Recycling's active landfills. OC Waste & Recycling works collaboratively with its landfill gas lessees to overcome regulatory challenges while maximizing the beneficial use of landfill gas.

#### **Impacts on Continued Importation**

OC Waste & Recycling transfers funds from importation revenues, less operating expenses, to the County's General Fund to be used for bankruptcy debt payment. The General Fund provides funding for a multitude of programs that benefit Orange County

residents and businesses. The availability of imported waste, notwithstanding existing Importation Agreements, is affected by fluctuations in the economy and changes in the waste hauling companies' business priorities.

Under the Agreements, companies have the option to terminate their contracts and pay liquidated damages to the County. These contracts are referred to as "put or pay" contracts, whereby haulers are required to deliver an agreed upon minimum tonnage, or pay the County the difference resulting from any tonnage shortfall, to ensure that there is no loss of revenue to the system.

#### **Meeting State Mandated Diversion Requirements**

The Integrated Waste Management Act of 1989 (AB 939) mandates that jurisdictions within the State of California must divert 50% of their waste from landfills. OC Waste & Recycling is responsible for achieving 50% diversion of waste for unincorporated areas within the County. In addition, as a regional leader, OC Waste & Recycling works with other jurisdictions within the County (cities and sanitary districts) to achieve 50% diversion in order to maximize landfill capacity so that County provided disposal is available in the long-term.

#### **RESOURCES:**

#### **Landfills**

OC Waste & Recycling manages three active landfills conveniently located in the northern, central and southern regions of the County: FRB Landfill is located near the City of Irvine, Olinda Alpha Landfill is located near the City of Brea and the Prima Deshecha Landfill is located partially in County unincorporated area, the City of San Juan Capistrano and the City of San Clemente. Together these landfills provided safe disposal for approximately 3.8 million tons of waste in 2008-09 (includes both in-county and imported waste).

#### **Household Hazardous Waste Collection Centers (HHWCCs)**

OC Waste & Recycling operates four regional HHWCCs located in the cities of Anaheim, Huntington Beach, Irvine, and San Juan Capistrano. HHWCCs offer convenient access for the public, meet all regulatory requirements, provide more storage capacity, and include Materials Exchange Program (MEP) area for residents to reuse qualified materials. These programs are an effective way to manage household hazardous waste while reducing illegal and improper hazardous waste disposal.

#### Workforce

OC Waste & Recycling is comprised of a highly trained and professional workforce. OC Waste & Recycling staff are skilled in operational efficiencies, engineering, planning, project management, information systems and regulatory requirements. In a collaborative effort, OC Waste & Recycling staff develop and implement the best industry practices designed to protect environmental resources and maximize landfill capacity.

The Department recognizes that its diverse workforce is its greatest resource. Our employees are committed to continuous learning which is dependent upon the Department's long-term commitment to providing developmental opportunities for employees at all levels of the organization. This commitment is demonstrated in many ways, including continuing communication with employees to ensure that they are informed about the Department's Business Plan goals and priorities, and that employee performance goals are aligned with Department goals and priorities. Recently OC Waste & Recycling introduced the Leadership Development Program: Passport to Your Future to provide employees with the opportunity to their develop skills and learn leadership techniques. The Department also introduced the Safety First Reward Program to reduce accidents and sustain a safe work environment.

#### **Funding**

No County General Fund tax dollars are used to support the waste management system. OC Waste & Recycling is funded solely by disposal fees. These disposal fees are a user fee (per ton disposal charge) established at a level to support the waste management system. Revenue is maintained in an Enterprise Fund separate from the County General Fund.

OC Waste & Recycling also garners revenue from the AB 939 surcharge on self-hauled waste. In 2006, the surcharge was implemented to reduce the disposal of recyclable materials in Orange County landfills through an economic incentive based on the rates charged by private Material Recovery Facilities. This strategy encourages self-haulers to use material processing facilities rather than taking their waste to directly County landfills. Self-haulers increase the recovery of recyclable materials and take less waste to landfill. The amount of self-haul tonnage disposed at County landfills has decreased 74% as compared with FY 2005-06. Those who do not use material processing facilities pay a surcharge at the landfill. These funds must be applied to programs aimed at promoting diversion of recyclable and reusable materials from landfills. In FY 2008-09, \$3,250,000 of surcharge funds were used for public education and outreach.

In addition, OC Waste & Recycling generates additional revenue beyond operating expenses, which is used for bankruptcy debt repayment. In FY 2008-09, \$11,366,414 was transferred to the County General Fund to support bankruptcy recovery.

#### **Waste Disposal Agreements**

In 1997, ten-year Waste Disposal Agreements were negotiated between the County and Orange County cities, sanitary districts and waste haulers. These contracted entities were obligated to direct municipal solid waste collected within their jurisdictions to County landfills in exchange for a stable disposal rate through June 30, 2007. The Agreements were amended in 2004, extending the term for three years through June 30, 2010. In 2009, the Board of Supervisors approved the new Waste Disposal Agreements for a ten-year term effective July 1, 2010, through June 30, 2020.

#### **Importation Contracts**

Two waste haulers have entered into long-term contracts with the County of Orange, agreeing to deliver a minimum amount of imported waste annually to County-owned landfills. These contracts are referred to as "put or pay" contracts, whereby haulers are required to deliver an agreed upon minimum tonnage, or pay the County the difference resulting from tonnage shortfall, to ensure there is no loss of revenue to the system. Importation contracts will expire on June 30, 2016.

#### **Finances**

OC Waste & Recycling's finances are dependent on the amount of solid waste tonnage received. Tonnage has declined and as a result, OC Waste & Recycling has had to carefully examine operations and make adjustments in order to accomplish our goals. For example, the department has rephased some of its capital projects and also held some staff positions vacant. All strategies and activities presented in this 2010 Business Plan can be fully funded with OC Waste & Recycling available assets, as documented in the annual Financial Statements and Independent Auditor's Report for the years ended June 30, 2008 and 2009. OC Waste & Recycling also monitors leading economic indicators to develop tonnage projections, prepares a 10-Year Financial Forecast, and properly manages cash, revenues and expenditures to maintain OC Waste & Recycling's financial integrity.

#### **Information Systems**

OC Waste & Recycling has implemented a state-of-the-art Wide Area Network, supporting highly automated landfill operations and business practices. OC Waste & Recycling maximizes the use of existing computer resources, while implementing new technology to streamline processes, reduce costs and improve customer service. The responsible stewardship of information technology strengthens OC Waste & Recycling's competitive advantage.

OC Waste & Recycling introduced an unattended fee collection system to expedite haulers through the disposal process.

#### County Stewardship and Local Control of the Disposal System

County ownership of the landfill system ensures that its customers have the access essential to participate and influence the future direction of the disposal system and the value it creates. County ownership provides the leadership and local control essential to ensure equitable rates and thoughtful stewardship of the landfill resource and the surrounding habitat.

#### **Waste Management Commission**

The Waste Management Commission is an 18-member advisory body to the Orange County Board of Supervisors. The Board of Supervisors established the Waste Management Commission on July 13, 1982. The purpose of the Waste Management Commission is to advise the Orange County Board of Supervisors on matters relating to municipal solid waste and hazardous waste management, operation and maintenance of the County's landfills, and other facilities related to the County's solid waste disposal

system. The Board of Supervisors has also designated the Waste Management Commission as the Local Task Force responsible for countywide waste reduction planning.

#### **B. ACTION PLAN**

#### STRATEGIC GOALS:

OC Waste & Recycling and its employees use the Department's Mission Statement to guide both daily operations and long-term planning efforts. The Mission Statement informs the Department's success in meeting the waste management needs of Orange County, while annual planning to meet strategic goals accomplishes the Department's mission and supports its core services.

OC Waste & Recycling has established three primary strategic goals to support its mission and core services:

#### Goal 1:

Maintain OC Solid Waste System competitiveness within the Southern California regional solid waste marketplace through efficient administration and management.

Given the charge of providing for Orange County's waste disposal needs, OC Waste & Recycling implements operational and administrative strategies to manage the County's landfill system in a manner that provides for a competitive disposal rate for Orange County residents.

#### **Strategies to Accomplish Goal**

Maintain local control of the County's waste management system through the management of the Waste Disposal Agreements and through prudent fiscal administration and best management practices. The WDAs provide OC Waste & Recycling with a predictable flow of solid waste to Orange County landfills and provide the financial stability essential for short- and long-term capital improvement and variable costs planning.

Plan for future disposal needs through short- and long-range strategic planning. Various strategic planning documents, including financial modeling based on landfill Master Development Plans, are used to achieve the most predictable, market competitive disposal fee for the long-term by evaluating system demand and capacity, costs and liabilities. One of the key components of this planning process is to maximize capacity at existing landfills. Olinda Alpha Landfill Implementation Project was approved and certified by the County Board of Supervisors on April 17, 2007. Pending permit approval and compliance with the permit conditions, the life of the landfill will be extended from 2013 to approximately 2021. To maximize capacity at the FRB Landfill, in 2006 OC Waste & Recycling completed the environmental documentation for its expansion. Final permit approval was granted which will allow for the horizontal and vertical expansion of the landfill extending FRB's life from 2022 to 2053. In 2004, Prima Deshecha's permit was extended to 2067.

<u>Use alternatives to soil as daily cover.</u> By using alternative daily cover materials, such as tarpaulins, OC Waste & Recycling can accommodate more waste in a given landfill space, thereby extending the life of its landfills and reducing operational costs related to purchase and transport of cover soil to landfill sites.

Research new and emerging conversion technologies which provide alternatives to <u>landfill disposal</u>. Conversion technologies, if found to be viable and cost effective, may reduce our reliance on landfill use and extend the capacity of our current disposal sites.

<u>Implement Landfill Master Development Plans</u> at each landfill to efficiently guide development of each site.

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PERFORMANCE N	PERFORMANCE MEASURE: Disposal fee comparison within Southern California Region							
WHAT: Comparisor	n of disposal rate cha	rged to users of the C	Prange County landfill	system with				
that of other landfills	s in the region.							
WHY: To ensure the	at Orange County res	sidents are provided a	competitive disposal	rate.				
FY 08-09	FY 09-10	FY 09-10	FY 10-11	How are				
Results	Plan	Actual or	Plan	we doing?				
		Anticipated						
		Results						
Disposal Fee -	Maintain \$22 per	The \$22 per ton	Effective July 1,	OC Waste &				
\$22 per ton for	ton disposal fee.	rate is a	2010, rates will be	Recycling				
contracted waste.	\$46 per ton for	· · · · · · · · · · · · · · · · · · ·						
\$46 per ton	self-haul waste.							
for self-haul		effect until June	Waste Disposal	for waste disposal				
waste.		30, 2010.	Agreements.	in Orange County.				

#### PERFORMANCE MEASURE: Number of years of remaining landfill capacity

**WHAT:** Measures whether Orange County meets state minimum standard of providing 15 years of landfill capacity.

**WHY:** To ensure that Orange County meets the state minimum standard and that the residents of Orange County are provided with adequate landfill capacity. Maintaining adequate long-term in-county landfill capacity enables the County to avoid expensive out-of-county disposal alternatives.

aitorriativoo.	altornativos:						
FY 08-09	FY 09-10	FY 09-10	FY 10-11	How are			
Results	Plan	Anticipate	Plan	we doing?			
		d Results					
Approximately 50-	Exceed state	Exceed state	Exceed state	OC Waste &			
55 years of	minimum standard	minimum standard	minimum standard	Recycling has			
permitted landfill	of providing 15	of providing 15	of providing 15	more than			
capacity.	years of landfill	years of landfill	years of landfill	adequate capacity			
	capacity.	capacity.	capacity.	to fulfill			
				requirement.			

#### Goal 2:

Protect the environment in the management of the Orange County Disposal System.

Committed to protecting the environment, OC Waste & Recycling constructs, operates and maintains environmental systems to protect water, air and habitat. These systems include: landfill gas monitoring, collection and reuse; ground water and leachate monitoring, extraction and treatment; and participation in, and compliance with, the Natural Community Conservation Plan to preserve valuable habitat.

#### **Strategies to Accomplish Goal**

<u>Construct, operate and maintain environmental protection systems</u> that include ground water monitoring, extraction and treatment; landfill gas monitoring, collection and conversion systems.

<u>Collect and control landfill gas.</u> Landfill gas is collected through landfill gas collection systems and used to generate electrical energy and liquefied natural gas (LNG) for sale to local electric utility companies and local LNG users.. Additionally, flares are also in place to manage landfill gas not used by on-site gas-to-energy plants.

Install liners to prevent liquids that have leached through the buried waste (leachate) from entering the ground water. Leachate is collected and removed by a system of pipes placed in a gravel layer constructed on top of the liner and under the waste and reused for dust control at the lined landfills or taken off-site for proper disposal to ensure ground water protection.

<u>Provide Waste Screening Programs</u> to prevent unacceptable materials from entering County landfills.

Ensure that OC Waste & Recycling employees continue to receive proper training in the latest landfill operations, environmental protection technologies, techniques and regulations to meet the Department's goal of protecting the environment.

Monitor and analyze proposed waste management legislation and regulations, and advocate positions that are beneficial to landfill operations and the environment.

Incorporate a long-term landfill system-wide strategy and proactively comply with the requirements of the Federal and State Endangered Species Acts through participation in the Central/Coastal and South Sub-Region NCCP to ensure that valuable habitat is established and preserved.

Monitor and analyze waste generation data through a Disposal Reporting System, which provides all participating jurisdictions with the necessary data required by the Solid Waste Management Act of 1989 (AB 939). The intent of AB 939 is to increase landfill avoidance by increasing and developing recycling markets and increasing public awareness and participation in recycling whenever possible.

**PERFORMANCE MEASURE:** Total volume of leachate and impacted ground water collected through the leachate collection and recovery system

WHAT: Measure the amount of leachate and ground water collected.

WHY: To protect water quality from the effects of leachate. This measure is important as it is

mandated by law and prevents local ground water from being impacted.

FY 08-09 Results	FY 09-10 Plan	FY 09-10 Anticipated Results	FY 10-11 Plan	How are we doing?
The total volume of leachate and impacted ground water collected through the leachate collection and recovery system during FY 2008-09 was 3,419,839 gallons.	Collect leachate and impacted ground water through the recovery system.	Leachate and impacted ground water will continue to be collected to help protect the environment.	Continue to improve landfill drainage and cover systems and optimize leachate and groundwater collection for water quality protection.	OC Waste & Recycling currently has collection and recovery systems in place at each landfill to collect leachate and impacted ground water for water quality protection.

**PERFORMANCE MEASURE:** Amount of landfill gas collected and put to beneficial reuse

**WHAT:** Collection of landfill gas and put to beneficial reuse that would have otherwise been emitted into the atmosphere.

WHY: To protect the air from the effects of landfill gas. This measure is important, as regulations

require that landfill gas be properly managed to protect air quality.

FY 08-09 Results	FY 09-10 Plan	FY 09-10	FY 10-11 Plan	How are we
FT 00-09 Results	F 1 09-10 Flan	Anticipated Results	FT 10-11 Plan	doing?
Olinda Landfill 2,338 million standard cubic feet (MSCF) of landfill gas was collected. Of this amount about 29% was put to beneficial reuse.	Olinda Landfill 29% of landfill gas will be put to beneficial reuse.	Olinda Landfill 29% of landfill gas will be put to beneficial reuse.	Olinda Landfill 29% of landfill gas will be put to beneficial reuse	OC Waste & Recycling currently has landfill gas-to- energy facilities at each of its active landfills although some have been on-line longer, are supported by
FRB Landfill 3,610,550 MSCF of landfill gas was collected. Of this amount about 10% was put to beneficial reuse.	FRB Landfill 10% of landfill gas will be put to beneficial reuse.	FRB Landfill 10% of landfill gas will be put to beneficial reuse.	FRB Landfill 10% of landfill gas will be put to beneficial reuse.	more developed infrastructure and are achieving higher reuse percentages
Prima Landfill 1,164 MSCF of landfill gas was collected. Of this amount about 94% was put to beneficial reuse.	Prima Landfill 94% of landfill gas will be put to beneficial reuse.	Prima Landfill 94% of landfill gas will be put to beneficial reuse	Prima Landfill 94% of landfill gas will be put to beneficial reuse	will continue to collect landfill gas and work to increase the amount that is put to beneficial reuse for protection of air quality.
Coyote Canyon Landfill (closed) 2,336 MSCF of landfill gas was collected. Of this amount about 80% was put to beneficial reuse.	Coyote Canyon Landfill (closed) 98% of landfill gas will be put to beneficial reuse.	Coyote Canyon Landfill (closed) 98% of landfill gas will be put to beneficial reuse.	Coyote Canyon Landfill (closed) 98% of landfill gas will be put to beneficial reuse.	OC Waste & Recycling has plans to install a gas to energy facility in approximately 2012 which will increase beneficial reuse at the site.

<sup>\*</sup>It is important to note that any gas collected, and not put to beneficial reuse, is "flared" or destroyed, in compliance with state and local regulations.

PERFORMANCE MEASURE: Number of habitat acres currently under restoration/mitigation

**WHAT:** Measures the number of landfill acres under restoration to recreate natural habitat disturbed by landfill operations.

**WHY:** To comply with the Natural Community Conservation Program (NCCP) and general environmental regulations, and to protect biological resources, both plants and animals, from the impact of landfill operations.

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FY 08-09 Results	FY 09-10 Plan	FY 09-10 Anticipated Results	FY 10-11 Plan	How are we doing?
FRB Landfill: Monitored and maintained 42.24 acres of habitat.  Purchased 80 acres of coastal sage disturbance credit.	FRB Landfill: Request buy-off on 11.29 acres of habitat.  Monitor and maintain 30.95 acres of coastal sage scrub (CSS).	FRB Landfill: Achieve buy-off on 11.29 acres of habitat.  Monitor and maintain 30.95 acres of coastal sage scrub.	FRB Landfill: Monitor and maintain 30.95 acres of coastal sage scrub.	FRB Landfill: OC Waste & Recycling anticipates receiving sign-off on one additional mitigation site.  Continued to work proactively with resource agencies resulting in a positive response from CA Dept. of Fish & Game and US Fish & Wildlife Service.
Olinda Alpha Landfill The Board of Supervisors approved the Agreement between the County and the Habitat Authority on March 3, 2009.	Olinda Alpha Landfill 5-year mitigation project to restore 15 acres of CSS habitat.	Olinda Alpha Landfill Monitor the progress of the 5- year mitigation project.	Olinda Alpha Landfill Work with OC Parks to restore up to 130 oak trees in Santiago Oaks Regional Park.	Olinda Alpha Landfill Secure pre- mitigation for the future expansion planned at the Olinda Alpha Landfill.

**PERFORMANCE MEASURE (CON'T):** Number of habitat acres currently under restoration/mitigation

**WHAT:** Measures the number of landfill acres under restoration to recreate natural habitat disturbed by landfill operations.

**WHY:** To comply with the Natural Community Conservation Program (NCCP) and general environmental regulations, and to protect biological resources, both plants and animals, from the impact of landfill operations.

impact of landfill ope				
FY 08-09 Results	FY 09-10 Plan	FY 09-10 Anticipated Results	FY 10-11 Plan	How are we doing?
Prima Landfill Sites A and B: Final (5 <sup>th</sup> ) annual riparian monitoring report submitted, finding that site acreage increased from 11.76 to 12.60 acres due to natural native recruitment.  Site C: Final (5 <sup>th</sup> ) annual CSS monitoring report submitted and shows continued maintenance and functionality of 13.86 acres with 92% cover.  Site D: Improved CSS and native grassland plant cover across 18.40 acres for pre- mitigation.	Prima Landfill Sites A and B: Continue maintenance of southern willow scrub (7.06 acres), mulefat scrub (3.00 acres), and freshwater/ alkaline marsh (1.70 acres) from impacts and receive sign-off.  Site C: Protect 13.86 acres of CSS from impacts and receive sign- off.  Site D: Maintain 18.40 acres as pre-mitigation.  Areas 1-3: Maintain container planted CSS (101.4 acres).	Prima Landfill Sites A-C: Resource agency sign-off of at least 11.46 acres of riparian habitat and 13.86 acres of CSS.  Site D: Improved CSS and native grassland plant cover across 18.40 acres for pre- mitigation.  Pre-mitigation (Areas 1-7): Successful maintenance and development of 215 acres of habitat containing CSS, native grassland, and riparian vegetation communities.	Prima Landfill Sites A-C: Preserve and maintain at least 11.46 riparian and 13.86 CSS acres in perpetuity, or request signoff for one or both of these habitats again if not successful in 09-10.  Site D: Maintain 18.40 acres as potential additional pre-mitigation.  Pre-mitigation (Areas 1-7): Maintain 215 (190.3 of CSS, 6.0 of riparian, and 18.7 of native grassland) acres of habitat to increase native cover and decrease invasive species cover on site.  Pre-mitigation "Buffer": Continue to maintain 9.11 acres around areas 4-7 to prevent intrusion of nonnative species.	Prima Landfill Existing riparian mitigation at sites A and B continues to expand and thrive. As of 2009, 2 pairs of least Bell's vireo are known to nest in parts of these areas and another 5 have at least established territories within the restored habitat.  Site C CSS mitigation is self- sufficient; more recruitment of gnatcatchers remains a goal.

**PERFORMANCE MEASURE (CON'T):** Number of habitat acres currently under restoration/mitigation

**WHAT:** Measures the number of landfill acres under restoration to recreate natural habitat disturbed by landfill operations.

**WHY:** To comply with the Natural Community Conservation Program (NCCP) and general environmental regulations, and to protect biological resources, both plants and animals, from the impact of landfill operations.

FY 08-09 Results	FY 09-10 Plan	FY 09-10 Anticipated Results	FY 10-11 Plan	How are we doing?
Prima Landfill Pre-mitigation (Areas 1-3): Restored 101.4 acres of CSS.  Pre-mitigation (Areas 4, 5, 7): Restored 88.9 acres of CSS and18.7 acres of native grassland, with some container planting.  Pre-mitigation (Areas 1, 2, 6): Restored 6.0 acres of riparian scrub.  Pre-mitigation "Buffer": 9.11 acres kept clear of non-native species.	Prima Landfill Areas 4, 5, 7: Maintain 88.9 acres of imprinted CSS and 18.7 acres of imprinted and container planted native grassland.  Pre-mitigation (Areas 1, 2, 6): Maintain container planted riparian scrub (6.0 acres).  Pre-mitigation "Buffer": Maintain 9.11 acres of CSS to prevent intrusion of non- native species.	invasive species	Prima Landfill Off-site pre- mitigation: Work with OC Parks to find a final site for additional wetland mitigation which may be necessary (acreage TBD).	Prima Landfill Successful start to pre-mitigation program (Areas 1- 7): eradication of weeds, irrigation system installation and container planting on approximately half of the site, and seed imprinting on the other half.

<sup>\*</sup>Habitat mitigation projects depend on variable natural conditions to become fully mature and self-sustaining. Therefore, it can take many years for OC Waste & Recycling to obtain mitigation site sign-off from federal and state biological regulatory agencies.

#### Goal 3:

Provide countywide leadership in Municipal Solid Waste Management.

#### **Strategies to Accomplish Goal**

<u>Operate Household Hazardous Waste Collection Centers</u> to provide residents with the opportunity to dispose of household hazardous waste. This service is an effective way to manage household hazardous waste while reducing illegal and improper hazardous waste disposal and preserving landfill capacity.

<u>Levy a surcharge on self-haul (non-WDA) waste</u> to encourage the delivery of waste to a material recovery facility for removal of recyclables prior to landfill disposal. This surcharge, known as the AB 939 Surcharge, generates funds that are used to support regional recycling programs within Orange County.

<u>Establish a public/private partnership</u> to open a Material Recovery Facility at Prima Deshecha landfill which allows self-haul customers to remove recyclables prior to landfill disposal. This will decrease the volume of material that enters the landfill thereby preserving capacity and extending the life of the landfill.

Establish programs that encourage waste diversion throughout the County.

Hold regular meetings with city and hauler stakeholders to discuss strategies for waste reduction, diversion and recycling.

<u>Implement a public education and outreach campaign that seeks to increase diversion</u> by enhancing recycling efforts.

#### PERFORMANCE MEASURE: Collect household hazardous waste

**WHAT:** Collect household hazardous waste from County residents at the Household Hazardous Waste Collection Centers.

WHY: Reduce illegal and improper household hazardous waste disposal.

FY 08-09 Results	FY 09-10 Plan	FY 09-10 Anticipated Results	FY 10-11 Plan	How are we doing?
Collected a total of 4,011 tons of household hazardous waste, which includes 1,633 tons of Universal Waste, from 115,014 participants utilizing the Household Hazardous Waste Collection Centers (HHWCC).	Collect at least 4,550 tons of household hazardous waste.	Collect at least 5% more household hazardous waste than the previous fiscal year.	Collect at least 5% more household hazardous waste than the previous fiscal year.	Participation at the HHWCC increased by 11%.  The County continues its public outreach efforts and directs residents to the HHWCC.

<sup>\*</sup>A decrease in tonnage for both household hazardous waste and electronic waste is consistent with the overall decrease of solid waste due to the economy. Other contributing factors are the opening of alternative collection locations for Universal Waste and the increase of one-day HHW events held by jurisdictions.

**PERFORMANCE MEASURE:** Coordinate county-wide recycling and diversion activities.

**What:** Number of programs promoted, established, or enhanced that serve to increase recycling and diversion activities.

Why: To comply with state mandated diversion requirements and to maximize landfill

capacity.

FY 08-09 Results	FY 09-10 Plan	FY 09-10	FY 10-11 Plan	How are we doing?
		Anticipated Results		
Four (4) programs /initiatives were developed:  Construction and Demolition Policy and Program  Reprogram Recovery Facility (MRF) at Prima Deshecha Reprogram Reprogram Recycling grant program	Implement or enhance at least 4 programs/ initiatives	Implement or enhance at least 4 programs/ initiatives	Implement or enhance at least 4 programs/ initiatives	CR&R built and opened a MRF at Prima Deshecha Landfill.  A Public Education and Outreach contract is in its second year and a messaging campaign has been developed.  A Conversion Technology Feasibility Study was conducted.  The second cycle regional waste reduction and recycling grant program was executed and funds approved to expand countywide public programs that will help divert waste from the landfills.

#### Goal 4:

Provide the County Unincorporated areas with quality waste collection and recycling services.

Tasked with providing waste collection and recycling services to County residents and businesses in the unincorporated areas, OC Waste & Recycling implements administrative strategies that are focused on providing quality service and meeting state mandates.

#### **Strategies to Accomplish Goal**

Administer exclusive franchise and non-exclusive franchise agreements to provide for permanent and temporary residential and commercial waste collection and recycling services and endeavor to create synergy between waste haulers and customers to meet state-mandated waste diversion requirements.

<u>Administer exclusive and non-exclusive franchise agreements</u> to ensure quality service at a competitive rate, and further enhance recycling requirements.

Monitor customer satisfaction by auditing customer complaint logs to ensure that customers are receiving quality solid waste collection and recycling services.

**PERFORMANCE MEASURE:** Customer satisfaction with waste collection and recycling services

What: Measure customer satisfaction with waste collection and recycling services.

**Why:** Ensure that customer are receiving quality waste collection and recycling and issues are addressed in a timely manner.

FY 08-09 Results	FY 09-10 Plan	FY 09-10 Anticipated Results	FY 10-11 Plan	How are we doing?
Franchisees reported less than 1% customer complaint rate for FY 2008-09.	Achieve less than 1% customer complaint rate as a percentage of total customers.	Achieve less than 1% complaint rate as a percentage of total customers.	Achieve less than 1% complaint rate as a percentage of total customers.	OC Waste & Recycling receives very few complaints directly from customers. The County's franchise agreements require that the franchisee maintain a complaint log. To better gauge customer satisfaction, OC Waste & Recycling audits customer complaint logs to monitor customers complaints.

# **Section III – Appendices**

**Appendix A – Organizational Chart** 

**Appendix B – Significant Accomplishments** 

**Appendix C – Other Critical Demographics/Service Expectations** 



# **Appendix B - SIGNIFICANT ACCOMPLISHMENTS**

#### **2009 Strategic Goals**

- Maintain a competitive rate for waste disposal in Orange County.
- Protect water, air and habitat in the management of the Orange County Disposal System.
- Provide countywide leadership in Municipal Solid Waste Management.
- Provide the County Unincorporated areas with quality waste collection and recycling services.

#### Progress made in achieving those goals:

- 1) Negotiated Waste Disposal Agreements with Orange County cities, sanitary districts, and waste haulers for a period of ten years, effective July 1, 2010, through June 30, 2020. These Waste Disposal Agreements will secure a long-term waste flow sufficient to fund operation of the Orange County waste disposal system, provide a market competitive disposal fee, improve the accuracy of disposal reporting, and increase diversion.
- 2) Contributed to the financial stability of the County by transferring \$11.6 million to the General Fund in FY 2008-09 for bankruptcy recovery debt obligations and continued to set aside monies in separate escrow funds to ensure that the system's long-term obligations, such as closure activities and post-closure maintenance, will be met.
- 3) Awarded the 2009 Challenge Award by the California State Association of Counties, for the AB 939 Surcharge Program. The benefit of the program has been an increase in diversion of waste from the landfill to recycling facilities.
- 4) Began work on initial construction for the installation of biological habitat within a 200 acre area at the Prima Deshecha Landfill. This pre-mitigation program, designed to compensate for the future biological impacts of landfill development, will install permanent native habitat at the site that includes wetlands, coastal sage scrub and native grasslands.
- 5) Collected a total of 8,022,000 pounds of household hazardous waste (fiscal-year 2008-09), of which 3,266,000 was Universal Waste from the 115,014 participants utilizing the Household Hazardous Waste Collection Centers (HHWCC).
- 6) Entered into a public/private partnership agreement with the Discovery Science Center to develop an interactive exhibit to educate the public about environmentally sound practices that lead to additional diversion and reduction of waste entering Orange County's landfills.

- 7) Broke ground on a showcase Green Building at Prima Deshecha which is expected to receive the Leadership in Energy & Environmental Design Silver certification from the US Green Building Council.
- 8) Began the Leadership Development Program: Passport to Your Future, to provide employees with the opportunity to develop skills and the potential for advancement. The Department also introduced the Safety First Reward Program to reduce accidents and sustain a safe work environment.
- 9) Negotiated Franchise Agreements to provide for solid waste collection and recycling services for residents and businesses within the unincorporated areas of Orange County for a period of ten years, effective July 1, 2010, through June 30, 2020. Customers will continue to receive quality waste collection services at market competitive rates.
- 10) Entered into a public/private partnership agreement and opened a Materials Recycling Facility (MRF) at the Prima Deshecha landfill for self-haul waste disposal that allows visitors to drop off their waste to increase collection of recyclables and reduce the volume added to landfills.

#### **Appendix C – Critical Demographics/Service Expectations**

Orange County is home to approximately 3,121,251 residents. Orange County residents expect that solid waste disposal will be conducted in a safe and environmentally sound manner. In 2008-09, OC Waste & Recycling met the solid waste disposal needs of these residents by providing disposal services at the County's three active landfills. The County landfills are conveniently located in the north, central and southern regions of the County:

- North: Olinda Alpha Landfill located near the City of Brea
- Central: FRB Landfill located near the City of Irvine
- South: Prima Deshecha Landfill located partially in County unincorporated area, the City of San Juan Capistrano and the City of San Clemente.

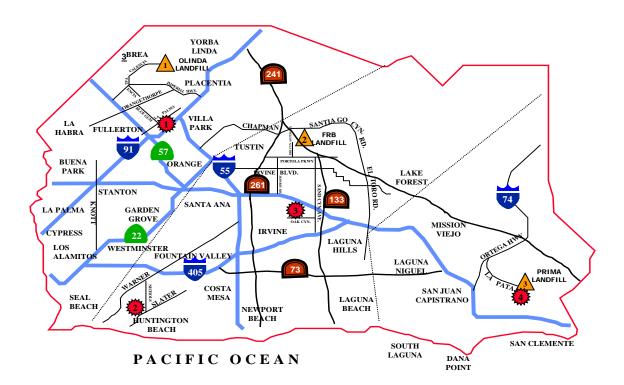
Together these landfills provided safe disposal for 3.8 million tons of Orange County waste and imported waste in 2008-09.

Orange County landfills also serve as a valuable resource to customers outside Orange County. Revenues realized from the imported waste are transferred to the County's General Fund, less departmental operating and administrative expenses for imported waste, in support of the County's Bankruptcy Recovery Plan. In 2009, 916,199 tons of imported waste was disposed of in County landfills.

OC Waste & Recycling also provides for the safe disposal of household hazardous waste. During fiscal year 2008-09, 115,014 participants utilized the Household Hazardous Waste Collection Centers (HHWCCs), collecting a total of 4,011 tons of hazardous waste, of which 1,633 tons was Universal Waste. In comparison with the previous fiscal year, this is an 11% increase in participation, even though there was an 8% decrease in total waste collected, and a 4% decrease in Universal Waste. This decrease in hazardous waste and Universal Waste volume is consistent with the overall decrease in Orange County's solid waste disposal volume.

The following map indicates the location of the County's landfills and the HHWCCs.

### **OC Waste & Recycling**





#### **Landfills**

- 1. Olinda Alpha Landfill
- 2. Frank R. Bowerman Landfill
- 3. Prima Deshecha Landfill



#### **Household Hazardous Waste Collection Centers**

- 1. Anaheim
- 2. Huntington Beach
- 3. Irvine
- 4. San Juan Capistrano