

## Water Recycling

*This section discusses Water Recycling Efforts within Central Basin’s service area*



### 8.1 Overview

Recycled water is a cornerstone of Central Basin’s efforts to augment local supplies and reduce dependence on imported water. Since planning and constructing its recycled water systems in the early 1990’s, Central Basin has become an industry leader in water re-use. Recycled water is used for non-potable applications such as landscape irrigation, commercial and industrial processes, and indirect potable use through groundwater replenishment.

In 2005, recycled water M&I deliveries within Central Basin’s service area totaled 5,217 AF, representing 2% of the service area’s total water supplies. Recycled water sales are projected to reach 17,900 AF by the year 2030, representing 5% of expected total water supplies.

This section provides an overview of the District’s recycled water system and how the water is treated and distributed. In addition, this section includes a discussion of the District’s past, current, and projected sales, as well as the District’s system expansion projects and Master Plan. The section concludes with a brief description of the Cerritos, Lakewood and WRD recycled water programs within Central Basin’s service area.

### 8.2 Recycled Water Sources and Treatment

#### 8.2.1 Source Water

The source of Central Basin’s recycled water is the Los Angeles County Sanitation Districts (LACSD). LACSD operates one wastewater treatment plant and six water recycling plants in the Los Angeles Basin. These combined systems produce approximately 489 MGD of effluent, of which approximately one-third is available for re-use. Central Basin purchases a portion of this recycled water from two reclamation plants, Los Coyotes and San Jose Creek, located just outside of the District’s service area. Both of these plants provide approximately 55 MGD of tertiary-treated (Title-22) water for distribution. Below is a detailed description of the two recycling plants:

#### ***San Jose Creek Water Recycling Plant***

The San Jose Creek WRP provides tertiary treatment for 100 MGD of wastewater. The plant serves a largely residential population of approximately one million people. Approximately 35 MGD of recycled water is reused at 17



different reuse sites. These include groundwater recharge at the Montebello Spreading Grounds and irrigation of parks, schools and greenbelts. The San Jose Creek WRP was built in the early 1970's as part of Central Basin and West Basin MWD's Joint Outfall System. This system uses six water reclamation plants and the Joint Water Pollution Control Plant to serve a major portion of metropolitan Los Angeles County.

The goal of the LASCDC is to recycle as much of the reclaimed water from its water reclamation plants as possible. Approximately 35 MGD of the purified water from San Jose Creek WRP is sent to percolation basins for groundwater recharge. In 1994, the San Jose Creek WRP was connected to the E. Thornton Ibbetson Century and Esteban Torres Rio Hondo Water Recycling projects which supply the water recycling needs of more than a dozen cities combined from the Central Basin water recycling distribution system.

The high quality San Jose Creek WRP final effluent meets the National Pollution Discharge Elimination System (NPDES) requirements for water quality. The following discussion includes readings of the sampled constituents in 2003.

*The Regional Water Quality Control Board (RWQCB) established a new limit for chloride levels through Resolution No. 97-02 in 2002. The Resolution requires monitoring data and assessment reports on chloride by Publicly Owned Treatment Waterworks on an annual basis. During 2003, chloride levels in the final effluent of San Jose Creek WRP were consistently below the limit (180 mg/l).*

*The daily maximum final effluent turbidity was 3.4 NTU, and the 24-hour composite final effluent turbidity was 1.0 NTU. All the water reused in 2003 was adequately chlorinated to comply with the coliform limit. Also, all water discharged to the San Gabriel River was properly disinfected and dechlorinated.*

### **Los Coyotes Water Recycling Plant**

The Los Coyotes WRP provides tertiary treatment for 37 MGD of wastewater. The WRP serves a population of approximately 370,000 people. Over 5 MGD of the purified water is reused at over 200 reuse sites. These include irrigation of schools, golf courses, parks, nurseries and greenbelts and industrial use at local companies for carpet dyeing and concrete mixing.

Regional recycled water projects such as the Century and Rio Hondo are the next step in the evolution of water reuse, as the Los Angeles area heads toward a planned basin-wide system linking numerous sanitary agencies and regional and local water purveyors in a highly flexible and reliable reclaimed water distribution system to complement and supplement the precious, limited drinking water supply.



Over 200 reuse sites have been receiving recycled water, which is used for irrigation of parks, golf courses, schools, nurseries, freeway and street medians and slopes and other greenbelt areas. In addition, various industries, such as the Tufftex Carpet Mill (right), will use recycled water for carpet and textile dyeing, metal finishing, concrete mixing and cooling tower supply.



LASCD operates ten laboratories including the San Jose Creek Water Quality Lab and Treatment Plant Laboratories. These laboratories have greatly increased the capability to control plant water quality, quality assurances, and offer laboratory services in order to monitor the quality of effluent before it reaches the recycled water users.

### 8.2.2 Treatment Process

The wastewater that is recycled at the Los Coyotes and the San Jose Creek plants undergoes tertiary treatment. Tertiary recycled water begins with secondary treated water that undergoes coagulation, flocculation, filtration and disinfection. Tertiary treated water can be used for a wide variety of industrial and irrigation purposes where high-quality, non-potable water is needed. Section 5, Water Quality, of this Plan explains in more detail the wastewater treatment facilities that provide Central Basin with recycled water.

Recycled water undergoes a rigorous, multi-stage treatment process to clarify it to high quality standards. The level of treatment necessary is approved by the California Department of Health Services (CDHS). CDHS requires recycled water to meet California Code of Regulations Title 22 standards (Title 22). Title 22 standards address specific treatment requirements for recycled water and lists approved uses. Approximately 2,000 tests are performed monthly to ensure water quality meets or exceed all State and Federal requirements.

Table 8-1 illustrates the past, current and projected amount of wastewater collected and treated as well as the amount of recycled water delivered by these two plants to the District’s distribution system.

**Data Pending**

**Table 8-1  
Wastewater Collected and Treated<sup>1</sup>  
(In Acre-Feet)**

	2000	2005	2010	2015	2020	2025	2030
Wastewater collected & treated <sup>2</sup>	135,996						
Recycled water Delivered	32,530						

[1] Data supplied by the Los Angeles County Sanitation District.



[2] From both the Los Coyotes WRP and the San Jose Creek WRP

The amount of wastewater collected and treated by these two reclamation plants are expected to remain consistent over the next 25 years, despite population increases. According to LACSD analysis, these increases are projected not to be significant enough to make it not economically feasible to expand these LACSD facilities to accommodate a minimal population increase.

### 8.3 Central Basin’s Recycled Water System

#### 8.3.1 Existing System

Central Basin’s recycling system is comprised of two separate projects: E. Thornton Ibbetson Century Recycled Water Project (Ibbetson Century Project) and the Esteban E. Torres Rio Hondo Recycled Water Project (Torres Project). Both projects deliver recycled water for landscape irrigation and industrial uses throughout the District’s service area.

The Ibbetson Century Project began delivering recycled water in 1992. The project currently delivers tertiary-treated recycled water from the LACSD’s Los Coyotes WRP, and serves the cities of Bellflower, Bell Gardens, Compton, Cudahy, Downey, Lakewood, Lynwood, Norwalk, Paramount, Santa Fe Springs, and South Gate.

In 1994, the recycled water system was extended into the northern portion of Central Basin’s service area. This extension is known as the Torres Project, which delivers tertiary-treated recycled water from LACSD’s San Jose Creek WRP and serves the cities of Bell, Bell Gardens, Commerce, Huntington Park, Montebello, Pico Rivera, Santa Fe Springs and Whittier.

In fiscal year 2004-2005, Central Basin’s recycled water system delivered approximately 3,150 AFY to over 200 sites. It is anticipated, over the next five years that Central Basin will triple its sales with new connections across the northern portion of the service area.

Every year Central Basin connects new customers to recycled water and further reduces demands on potable water.

#### 8.3.2 Recycled Water Use by Type

The type of sites that Central Basin currently serves, as shown in Table 8-2, varies from parks and landscape medians to textile industries and cooling towers.

**Table 8-2  
Types of Recycled Water Customers**

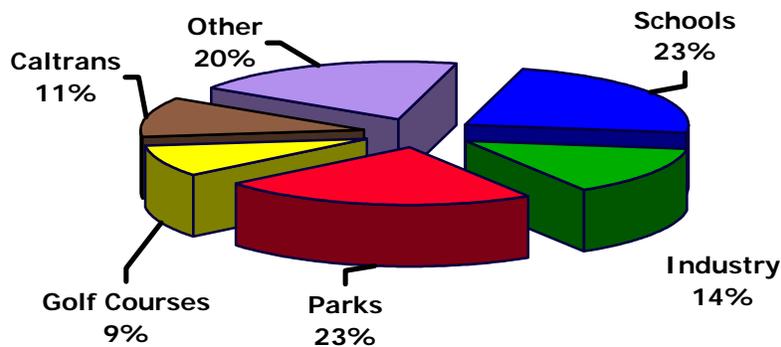
- Landscape
- Golf Course
- Co-Generation (Cooling Tower)
- Cemetery
- Textile
- Median
- Nursery
- Park



- Concrete Mixing
- Cal-Trans (irrigation)
- School (irrigation)
- Others

As illustrated in Figure 8-1, the predominated use of recycled water deliveries is landscape irrigation, accounting for almost 66% of the total use. However, in the upcoming years Central Basin plans on increasing its deliveries to the industrial sector. Once the City of Vernon begins receiving recycled water via the Malburg Generating Station and subsequently when the Southeast Water Reliability Project begins operation, the percentage of industrial usage is projected to change significantly over the next ten to 15 years.

**Figure 8-1  
Central Basin Recycled Water Use  
By Type of Site FY 2004-05**

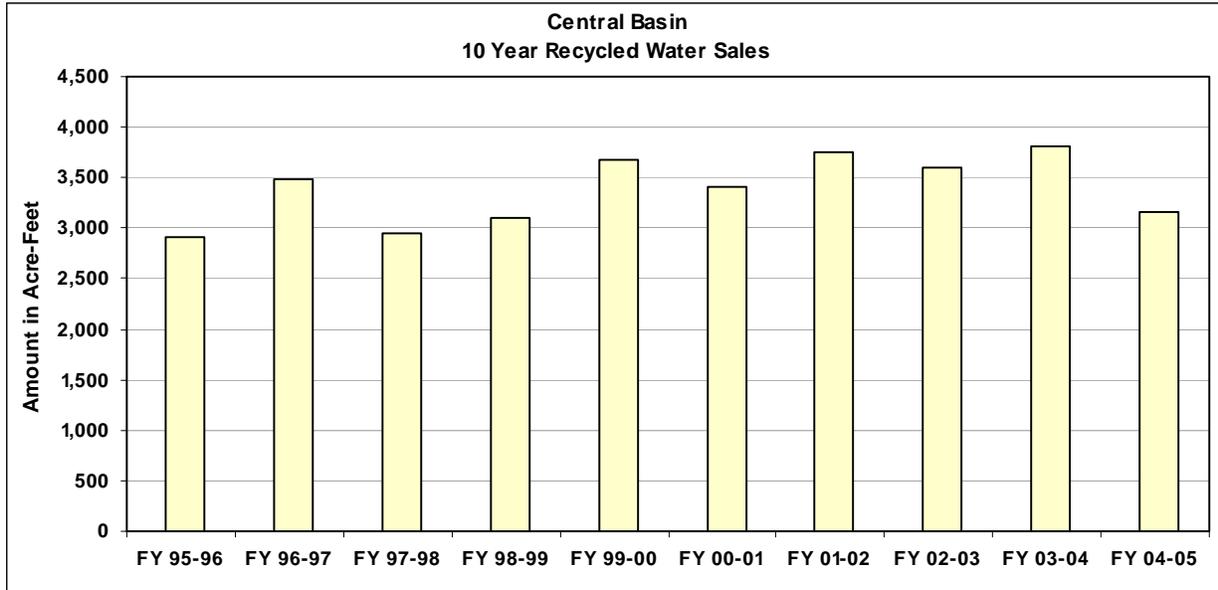


### 8.3.3 Historical and Current Sales

For the past 10 years, Central Basin has seen its recycled water sales increase gradually each year. With landscape irrigation constituting two-thirds of Central Basin's current recycled water use, there have been years where sales have varied primarily due to weather changes. As shown in Figure 8-2, there have been years, most notably fiscal years 2000-01 and 2004-05, where total recycled water sales have increased or decreased from projected levels because of rainfall.



**Figure 8-2  
Historical Recycled Water Sales  
FY 1996-2005**



Source: CBMWD Water use Database, 2005.

The amount of recycled water supplied by Central Basin over the last ten years has totaled over 33,800 AF, replacing enough potable water to supply the needs of approximately 67,700 families for over a year. Central Basin anticipates recycled water sales to increase in the future as more customers switch from potable water to recycled water due to the reliability of the supply and the economic incentives associated with converting from potable water to recycled water.

Table 8-3, displays a more detailed breakdown of historical sales by showing each retail customer agency’s annual purchases from Central Basin for fiscal years 1996 to 2005.

**Table 8-3  
Historical Customer Recycled Water Sales by Retail Customer Agency of CBMWD\*  
FY 1996 to 2005  
(In Acre-Feet)**

Central Basin	FY 95-96	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05	TOTAL
Bellflower-Somerset Mutual	114	125	95	117	133	131	159	118	125	108	1,225
City of Cudahy	-	-	3	9	9	9	8	7	5	6	56
City of Downey	532	612	517	636	710	642	733	664	686	617	6,349
City of Huntington Park	21	61	44	56	57	49	60	48	64	49	509
City of Lynwood	44	74	75	59	55	69	66	70	67	46	625



City of Norwalk	87	118	75	89	128	100	120	109	111	53	<b>990</b>
City of Paramount	354	376	364	382	485	429	453	431	443	360	<b>4,077</b>
City of Pico Rivera	-	-	-	-	-	-	-	35	39	28	<b>102</b>
City of Santa Fe Springs	864	1,018	919	817	835	858	893	815	774	630	<b>8,423</b>
City of South Gate	144	165	151	151	189	164	191	162	177	213	<b>1,707</b>
City of Whittier	94	114	82	102	136	78	77	82	98	66	<b>929</b>
Park Water Company	363	448	315	353	479	428	469	471	489	341	<b>4,156</b>
Peerless Water Company	17	32	25	20	26	21	22	17	20	16	<b>216</b>
San Gabriel Valley Water Co	44	94	56	68	81	72	77	65	76	48	<b>681</b>
Southern California Water Co	227	244	224	234	359	358	418	506	610	523	<b>3,703</b>
Upper San Gabriel Valley MWD	-	-	-	-	-	-	-	7	35	45	<b>87</b>
<b>Total</b>	<b>2,905</b>	<b>3,481</b>	<b>2,945</b>	<b>3,093</b>	<b>3,682</b>	<b>3,408</b>	<b>3,746</b>	<b>3,607</b>	<b>3,819</b>	<b>3,150</b>	<b>33,836</b>

Source: CBMWD Water use Database, 2005.

In Central Basin’s 2000 UWMP, the District projected deliveries of recycled water to reach 5,800 AF by 2005. As shown in Table 8-4 below, actual sales for 2005 fell below this target. Combined with a record rainfall year and delays in connecting large based customers, Central Basin lacked the number of connections to reach the projections set in 2000. Nevertheless, Central Basin anticipates increases in sales over the next five to ten years due to some large projects and partnering efforts among its customer agencies.

**Table 8-4  
Recycled Water Uses  
2000 Projections Compared with 2005 Actual  
AF/Fiscal Year**

Type of Use	2000 Projection for 2005	2005 Actual Use <sup>1</sup>
<b>Irrigation</b>	4,600	2,654
<b>Commercial</b>	0	0
<b>Industrial</b>	1,200	496
<b>Total</b>	<b>5,800</b>	<b>3,150</b>

Source: Central Basin Water Use Database, 2005.

[1] Based upon 2004-05 actual sales for Central Basin MWD

### 8.3.4 System Expansions and Projected Sales

In 2000, Central Basin conducted a Recycled Water Program Master Plan (Master Plan) to help the District identify all of the potential customers that could benefit from recycled



water. In addition, the Master Plan would provide the best system expansion routes to benefit the entire system, from which the following system expansion projects were devised:

### ***Southeast Water Reliability Project***

The planned Southeast Water Reliability Project (SWRP) represents the fulfillment of the current Central Basin program as originally envisioned. The proposed project would “loop” the overall system hydraulically by connecting the Rio Hondo and Century projects across the northern part of the service area (also known as the “Southeast” area because it roughly covers the southeast portion of Los Angeles County). Cities that will benefit directly from the SWRP include Pico Rivera, Montebello, East Los Angeles, Commerce, Maywood and Vernon.

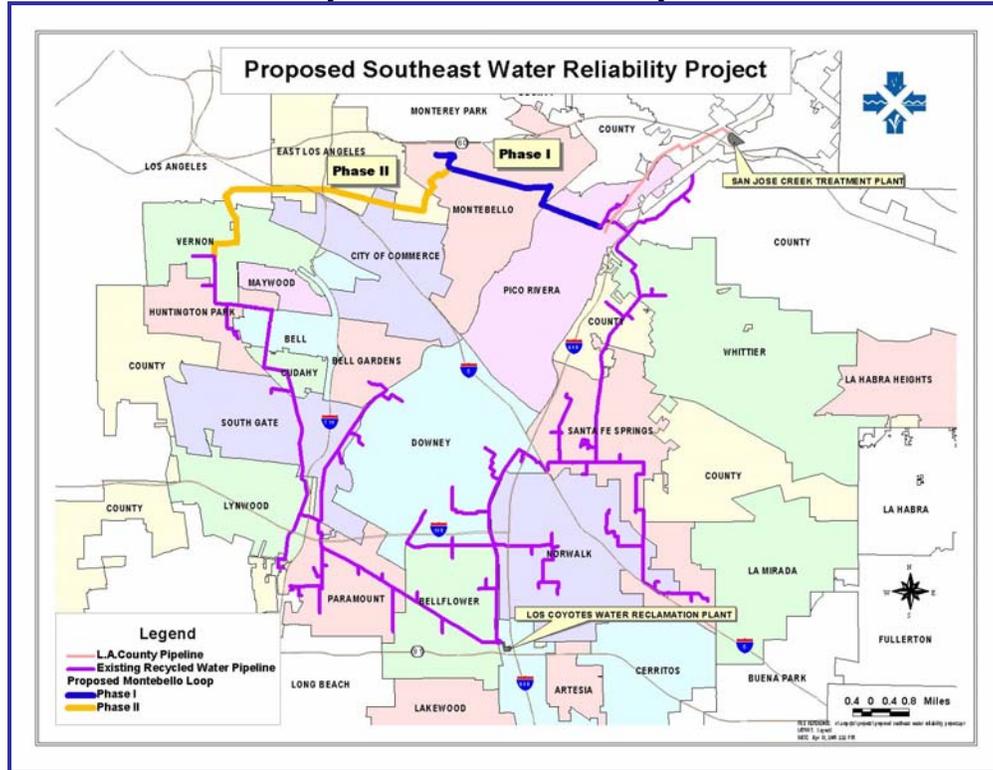
Because the 2000 Master Plan may not accurately reflect recent changes in the industrial base of the areas to be served by the SWRP project, a Master Plan update will be completed in 2006. The Master Plan update will allow Central Basin to refine the alignment of the SWRP project and forecast more accurately future recycled water sales.

Connecting Central Basin’s existing projects with the SWRP will increase flow and pressure in many areas of the distribution system that are not adequately served today, and it will provide recycled water to new customers in several cities. Figure 8-3 illustrates the connection of the SWRP to the existing system as it is currently envisioned.

Central Basin is aggressively pursuing State and Federal grant funding to reduce the cost of construction for the SWRP to be borne by Central Basin.



Figure 8-3  
Southeast Water Reliability Project, Phase I and II  
Recycled Water Distribution System



**Other Potential System Expansions**

The Cities of South Gate, Lynwood, and La Mirada have expressed interest in receiving recycled water, in some cases to augment existing demand. These potential new connections will be planned either concurrently or subsequent to the SWRP, since they are dependent on the hydraulic benefits of the larger project. Other capital projects planned for the next five years include improvements that will increase the efficiency and reliability of existing facilities, including the pipeline connection in the City of Norwalk.

**Projected Recycled Water Sales**

According to the Master Plan, the Central Basin’s recycled water system is projected to increase from its current sale of 3,150 AF to 15,500 AF by 2030.



**Table 8-5  
Projected Central Basin Recycled Water System Sales  
AF/Fiscal Year**

Type of Use	2010	2015	2020	2025	2030
Irrigation	7,000	7,750	8,500	9,250	10,000
Commercial	0	0	0	0	0
Industrial	3,500	4,000	4,500	5,000	5,500
<b>Total Projected Use of Recycled Water</b>	<b>10,500</b>	<b>11,750</b>	<b>13,000</b>	<b>14,250</b>	<b>15,500</b>

As Table 8-5 displays, the area of greatest potential growth in sales for the District is within landscape/irrigation. However, with system expansions planning to reach heavy industrial areas, i.e. the City of Vernon, the area of industrial recycled water usage does expect to increase.

The SWRP is anticipated to begin operation in 2009 and ultimately serve an additional 5,600 AFY of recycled water to various customers in the northern service area. However, depending upon the outcome of the updated Master Plan, the ultimate capacity of the SWRP may provide additional sales. Full project capacity will be phased in over roughly five years to account for the construction of the many lateral distribution lines required to serve individual users.

Based on the current 5,600 AFY estimate of SWRP deliveries, Central Basin’s total sales of recycled water is projected to reach approximately 10,500 AFY by FY 2010.

**8.3.5 Potential Recycled Water Use**

The potential of recycled water use will increase among cities, water agencies, and businesses/industries over the years. The increased cost of imported and groundwater will enhance the beneficial usages of recycled water.

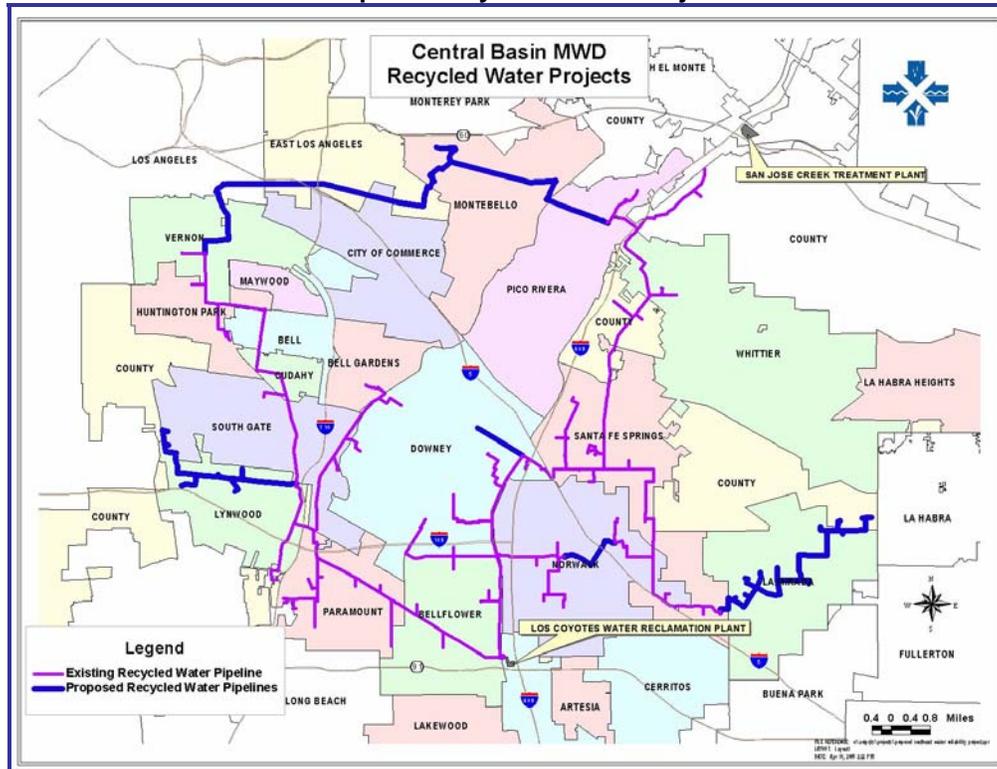
Central Basin will continue to pursue new cost-effective projects both within its service area, and in partnership with willing neighboring agencies. Efforts are currently focused on maximizing the potential of the original regional system, for which Central Basin receives an incentive payment from MWD for every acre-foot delivered up to 10,500 AFY through 2019. Although current projections discussed above show Central Basin exceeding that 10,500 AFY incentive limit, the agency is preparing for the long-term financial viability of the recycled water system.

Although there is a great potential to increase recycled water use in Central Basin, there are challenges and limitations in connecting customers. Among them are proximity to recycled water pipelines, capacity and pressure to serve, and retrofit cost-feasibility. These factors play a significant role in meeting the potential growth of recycled water. The ability to connect new customers dictates when and how much recycled water will be sold in the future.



In 2000, the Master Plan identified and prioritized areas within Central Basin’s service area where recycled water has the potential to expand. In this study, a database was established to locate and identify future customers. The approach considered pipeline routing, hydraulic analysis and economic interests to project the growth of recycled water in Central Basin’s service area. Figure 8-4 presents conceptual recycled water projects based on pipeline routing.

**Figure 8-4  
Conceptual Recycled Water Projects**



Although the Master Plan is in the process of being updated and could influence Central Basin’s near-term and long-term projections depending primarily on the potential changes to industrial water, the principle goal of maximizing the potential usage of recycled water throughout the service area will not change.

Partnerships with neighboring agencies have already resulted in projects that expand the Central Basin system and sales beyond the service area limits. Phase I and II of an agreement with Upper San Gabriel Valley Municipal Water District to serve Rose Hills will add approximately 1,500 AFY of sales beginning in 2006, and discussions have already begun to expand this partnership further.

Within Central Basin, discussions have begun with the City of Vernon for a new agreement to potentially delivery between 6,000 to 10,000 AFY of recycled water to a new planned power generation facility.



### 8.3.6 Encouraging Recycled Water Use

Central Basin's marketing efforts have been successful in changing the perception of recycled water from merely a conservation tool with minimal application to a business enhancement tool that lowers operating costs while increasing the reliability of the water supply. Central Basin markets recycled water as a resource that:

- Is less expensive than potable water;
- Is more reliable than imported water in a drought; and
- Is consistent with statewide goals for water supply and ecosystem improvement on both the SWP and Colorado River systems.

The target customer is expanding from traditional irrigation users such as golf courses and parks to unconventional commercial and industrial users. Through innovative marketing, recycled water is now being used by oil refineries and dye houses. In addition, Central Basin is investigating recycled water use in paper production, co-generating plants, and printing plants.

In addition to Central Basin wholesaling recycled water at a rate lower than potable water, Central Basin provides other financial incentives as well to encourage recycled water use. Some potential recycled water customers do not have the financial capability to pay for onsite plumbing retrofits necessary to accept recycled water. Therefore, Central Basin advances funds for retrofit expenses and are reimbursed through the water bills. The on-site plumbing retrofit costs are amortized over a period of time, up to ten years at Central Basin's cost of funds. Repayment is made using the differential between potable and recycled water rates so that the customer never pays more than the potable rate. Once the loan is repaid, the rate reverts to the current recycled rate.

#### Optimizing Recycling Water Use

Central Basin's plan for optimizing the use of recycled water will be carried out through two efforts, both of which will be updated during the 2005-06 fiscal year, the Recycled Water Master Plan and the Recycled Water Marketing Plan (Marketing Plan). The Master Plan is Central Basin's guiding document for identifying and prioritizing potential customers. The 2000 Master Plan is currently being updated to capture changes in the industrial and commercial base within the service area, particularly in the northern portion to be served by the Southeast Water Reliability Project.

The Marketing Plan is the companion effort to the Master Plan and will revisit the strategies and tools employed by Central Basin's staff and consultants in generating interest in recycled water with potential customers and the cities in which they do business. The thrust of the Marketing Plan will be to emphasize the benefit of recycled water as a "tool for profitability" for businesses and not just the right thing to do in terms of water conservation and the environment.



### Coordination Efforts

Table 8-6 illustrates the District’s coordinated effort among key stakeholders in the development of the 2000 Central Basin Water Recycling Master Plan. Central Basin plans on continuing the same coordinated effort in the updated Master Plan as well as include some participating agencies in the development process of the Marketing Plan.

**Table 8-6  
Recycled Water Master Plan Coordination**

Participating Agencies	Role in Plan Development
<b>1. Water Agencies (Purveyors)</b>	Customer Development, Facilities, Impacts, Rates
<b>2. Wastewater Agencies</b>	Recycled Water Supply, Water Quality, Reliability
<b>3. Groundwater Agencies</b>	Rates and Customer Involvement
<b>4. Planning Agencies</b>	Economic Analysis, Rates, Data Assessment, Customer Assessment, Rates, Community Impacts, Customer Involvement, Conceptual Pipeline Routes, Cost Estimates

- 1. Water Purveyor Agencies: See Table 8-3.
- 2. Wastewater Agencies: Los Angeles County Sanitation District
- 3. Groundwater Agencies: Water Replenished District of Southern California
- 4. Planning Agencies: Purveyors and Cities within Central Basin’s service area

### 8.3.7 Funding

Capital costs for projects planned for the future have been budgeted to average per fiscal year approximately \$5,600,000<sup>1</sup>. These costs will be covered by the sources identified here and other sources as they become available:

- **MWD Local Resources Program Incentive.** To qualify, proposed recycled water projects by member agencies must cost more than projected MWD treated non-interruptible water rates and reduce potable water needs. Since founding MWD with other municipal water utilities in 1928, Central Basin has remained affiliated as a member agency and is therefore considered for the rebates for up to \$250/AF offered under the program.
- **Grant Funding.** Central Basin continuously applies for Federal and State grant funding for recycled water projects as they become available. In 2005, Central Basin applied for a Water Recycling Construction grant for the Southeast Water Reliability Project, Phase I Water Recycling Construction Project through Proposition 50. Central Basin submitted an application to the SWRCB to fund 25% of the \$15.2

<sup>1</sup> Approximation is an average based on fiscal year capital project projections over a five year period (FY: 2005-2006 to 2009-2010).



million cost of the pipeline. An additional source of funding is through the U.S. Army Corp of Engineers Program, which affords qualified programs 75% project funding.

## **8.4 Recycled Water Projects within CBMWD Service Area**

### **8.4.1 City of Cerritos Recycled Water Program**

The City of Cerritos has its own recycled water system, which is not associated with Central Basin's recycled water program. It serves approximately 80 sites within the cities of Cerritos and Lakewood, which are located in Central Basin's service area. The City of Cerritos receives tertiary-treated recycled water from the LACSD's Los Coyotes WRP and serves a little over 2,400 AFY, of which 450 AFY is sold to the City of Lakewood.

### **8.4.2 City of Lakewood Recycled Water Program**

The City of Lakewood purchases 450 AFY of recycled water from the City of Cerritos to help offset an equal demand of potable water.

### **8.4.3 Water Replenishment District- Montebello Forebay Groundwater Recharge**

The Montebello Forebay Groundwater Recharge Project allows the spreading of treated recycled water to be melded with imported and storm water within the recharge grounds with LACSD and Los Angeles County Department of Public Works (LACDPW). WRD has an agreement to recharge the basin with recycled water. LACDPW owns and operates the recharge facilities, while WRD purchases the recycled water from the LACSD. Under the conditions of a regulation permit from the Los Angeles Regional Water Quality Control Board, approximately 50,000 AF of recycled water is the annual limit that can be recharged into the spreading grounds.

## **8.5 Total Recycled Water Use in Central Basin**

Within Central Basin's service area there are three key recycling water programs that help offset potable water usage and provide groundwater replenishment. Among the three are the Central Basin, Cerritos, and WRD recycled water programs. As illustrated in Table 8-7, together these programs delivered 52,400 AF of recycled water in 2005 and over the next 25 years they plan to increase deliveries by 10,500 AF.



**Table 8-7  
Projected Central Basin Recycled Water Use  
AF/Fiscal Year**

<b>AGENCY</b>	<b>2005<sup>1</sup></b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Central Basin MWD</b>						
Century/Rio Hondo Projects	3,150	10,500	11,750	13,000	14,250	15,500
<b>Total</b>	<b>3,150</b>	<b>10,500</b>	<b>11,750</b>	<b>13,000</b>	<b>14,250</b>	<b>15,500</b>
<b>Other Programs within Central Basin</b>						
City of Cerritos	1,714	1,950	1,950	1,950	1,950	1,950
City of Lakewood <sup>2</sup>	352	450	450	450	450	450
WRD (Replenishment)	50,000	50,000	50,000	50,000	50,000	50,000
<b>Total</b>	<b>52,067</b>	<b>52,400</b>	<b>52,400</b>	<b>52,400</b>	<b>52,400</b>	<b>52,400</b>
<b>Central Basin's Service Area Total</b>	<b>55,217</b>	<b>62,900</b>	<b>64,150</b>	<b>65,400</b>	<b>66,650</b>	<b>67,900</b>

[1] The 2005 demands are based on the 2004-05 year, which is also considered one of the "wettest" years on record.

[2] The city of Lakewood receive its recycled water from the Cerritos recycled water system.