Inland Empire Utilities Agency

Operating and Capital Program Budget

FY 2010/11

TEN YEAR CAPITAL IMPROVEMENT PLAN





Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

VOLUME 2 ♦ JUNE 2010

INLAND EMPIRE UTILITIES AGENCY

OPERATING AND CAPITAL PROGRAM BUDGET FISCAL YEAR 2010/11, VOLUME II

TEN-YEAR CAPITAL IMPROVEMENT PLAN

Inland Empire Utilities Agency

6075 Kimball Avenue

Chino, California 91708

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1.0 INTRODUCTION

1.1 Background 15
1.2 IEUA's Mission 15
1.3 IEUA Regional Facilities 17
1.3.1 Regional Water Recycling Plants 17
1.3.2 Regional Interceptor System 18
1.4 Program Master Planning & Integrated Water Resources Management 20
1.5 Wastewater Facilities Master Plan 21
1.6 IEUA Recycled Water Feasibility Study 23
1.7 Recycled Water Business Plan 24
1.8 Chino Basin Organics Management Strategy Business Plan 24
1.9 Chino Basin Watermaster's Optimum Basin Management Plan (OBMP) 25
1.10 MWD Integrated Resources Plan 27
1.11 MWD Dry Year Yield Program 27
1.12 MWD Water Supply Allocation Plan 27
1.13 IEUA Drought Plan 28
1.14 Recharge Master Plan 29
1.15 IEUA Adopted Seven-Point Emergency Energy Action Plan 29
1.16 Salinity Management Action Plan – Regionalization of NRW System 30
1.17 IEUA 2010 Urban Water Management Plan 31
1.18 Regional Board Maximum Benefit Basin Plan Amendment 31
1.19 SAWPA Integrated Watershed Program 32
1.20 SAWPA Planning Work Groups 33
1.21 Environmental Documentation 34
1.22 California Water Plan 35
1.23 Bay-Delta Conservation Plan 35

2.0 WASTEWATER FLOW PROJECTIONS

2.1 Wastewater Flow Trends 36
2.2 Flow Factors 39
2.3 Anticipated Service Area Growth 39
2.4 Ten-Year Wastewater Flow Forecast 40
2.5 Capacity Utilization Forecast 42
2.6 Fifty-Year Flow Projection 44

3.0 REGIONAL WASTEWATER SYSTEM

3.1 Regional Program Overview..... 45
3.2 Organic Management Projects..... 48
3.2.1 Northern Service Area (RP-1, RP-4)..... 49
3.2.2 Southern Service Area (RP-2, RP-5, CCWRF).....50

4.0 ENERGY MANAGEMENT

4.1 Background..... 52
4.2 IEUA Energy Management Strategy 53
4.2.1 Increasing the Renewable Energy Portfolio.....53
4.2.2 Energy Procurement.....54
4.2.3 Energy Curtailment.....54

5.0 RECYCLED WATER AND RECHARGE PROGRAMS

5.1 Recycled Water Program Background 56
5.2 Recharge Program Background..... 58
5.3 Recycled Water Use for Recharge 62

5.4 Recycle Water Business Plan Update 63
5.5 Red Team 64
5.6 Regional Recycled Water Priorities 65
5.7 Local Recycled Water Facilities 65
5.8 Regional Recycled Water Program Summary 67
5.9 Funding 67
5.10 Funding Status 68
5.11 Permitting 68
5.12 Customer Development 70
5.13 Current Ten-Year Capital Improvement Plan 70
5.13.1 Recycled Water Projects 70
5.13.2 Recharge Water Projects 72

6.0 NON-RECLAIMABLE WASTEWATER SYSTEM

6.1 Background 73
6.2 NRWS and Salinity Management Action Plan 75
6.3 Economic Benefits of the NRW and Salinity Management Action Plan 79
6.4 Current Ten-Year Plan 79

7.0 COSTS AND FINANCING

7.1 Introduction 81
7.2 Agency Capital Funding Sources 82
7.2.1 Connection Fees 82
7.2.2 Capital Improvement Fees 85

7.2.3 Property Taxes 85

7.2.4 Grant Revenues 87

7.2.5 Federal and State Stimulus Funding..... 87

7.3 Financing Strategy 88

7.4 AB-1600 Nexus Test 90

7.5 Conclusions 92

EMERGING PLANNING ISSUES

8.1 Introduction 93

8.2 Major Water Efficiency & Water Resources Initiatives 93

8.3 Air Quality Issues & Carbon Reduction Program 95

8.4 Climate Change 96

TABLES

ES-1 TYCIP Capital Program Allocation 10

ES-2 Regional Wastewater System Capital Projects 11

ES-3 Recycled Water Program & Recharge Program Capital Projects .. 13

2-1 Ten-Year Growth Forecast by Contracting Agency 40

2-2 Regional System Flow & Capacity Utilization Summary (MGD) 43

3-1 Regional Wastewater Capital Projects 47

3-2 RP-1/RP-4 Service Area-Major Capital Projects 49

3-3 RP-2/RP-5 Service Area-Major Capital Projects 51

5-1	Chino Basin Potential Source Water Recharge Capacities	61
5-2	Annual Goals for Recycled Water Connected Demand & Sales	64
5-3	Recycled Water (WC) Capital Program-Major Projects	71
5-4	Recharge Water Capital Improvement Plan-Major Projects	72
6-1	Tons of Salt Removed	75
6-2	Costs Avoided by the NRW Action Plan	79
6-3	NRW System Capital Improvement Program – Major Projects	80
7-1	Agency's Projected New Connections	83
7-2	Economic Stimulus Funded Projects	88
7-3	Borrowing Requirements	89
7-4	Projected Status of Reimbursement Payment Receipts	91

FIGURES

ES-1	IEUA Coordinated Regional Planning Process	2
ES-2	IEUA Energy Portfolio	5
ES-3	Regional Plant Service Area Wastewater Flows	6
ES-4	Recent Water Use and Wastewater Flow Trends	7
ES-5	Current Regional System Wastewater Flows	8
1-1	Contracting Agencies	16
1-2	Regional Plant Service Area Boundaries	18
1-3	Existing Regional Trunk Wastewater System & Tributary Areas	20
1-4	2002 Fac. Master Plan – Cons. of Relevant IEUA Planning Docs	22

1-5	IEUA Coordinated Regional Planning Process	23
2-1	Current Wastewater Flows	37
2-2	Regional Plant Wastewater Flow History	38
2-3	Recent Water Use and Wastewater Flow Trends	39
2-4	10 Year Flow Forecast (200gpd/EDU)	41
2-5	10 Year Flow Forecast (250gpd/EDU)	42
2-6	Regional System 50-Year Projection	44
4-1	2009 GAP Analysis Results	53
4-2	Facility SCE Tariffs & Annual Imported Usage	54
5-1	Storage & Recovery in Chino Basin	58
5-2	Chino Basin Recharge Site Locations	60
5-3	Imported, Storm, and Recycled Water Recharge Schedule	63
5-4	IEUA Regional Recycled Water Capital Project Priorities	66
6-1	Salt Export from Chino Basin	74
6-2	Relative Costs of Salt Removal from Chino Basin	76
7-1	Funding Sources	82
7-2	Connection Forecasts	84
7-3	Historical Property Assessments & Revenues	85
7-4	Capital Costs vs. Net System Revenues	89
7-5	Wastewater Collection, Treatment, and Disposal Program Cumulative Revenues and Expenditures	92

EXHIBITS

IA	Total Plant Flows – Baseline Raw Sewage Flows	100
IB	Total Plant Flows – Adjusted Sewage Flows, Low Scenario	101
II	RP-4 Flow Forecast	102
III	RP-1 Flow Forecast	103
IV	CCWRF Flow Forecast	104
V	RP-5 Flow Forecast	105

APPENDICES

A	Incremental EDU Growth Data	106
B	Proposed Capital Projects Summary	118

Executive Summary I E U A	TYCIP

TEN-YEAR CAPITAL IMPROVEMENT PLAN

INTRODUCTION

Each year, the IEUA Board of Directors adopts a Ten-Year Capital Improvement Plan (TYCIP) based on the comments and recommendations of the Regional Technical and Policy Committees. Pursuant to the terms of the Regional Sewerage Service Contract, the TYCIP includes wastewater flow forecasts, a description of the capital improvement projects planned to meet those forecasts, a summary of the costs associated with the program, and a description of the financing plan to implement the program.

This year's TYCIP reflects the current slow housing growth in the region and the flat-lined wastewater flow rate trend. The highlights include:

- The capital program and budget are a continuation of the FY 2007/08 and FY 2008/09 program, which deferred over $200 million of capital projects due to the economic recession and the need for cost containment.
- No substantive new projects are proposed compared to last year's budget and TYCIP.
- No connection fee rate increase is proposed for fiscal year (FY) 2010/11 .
- Property tax revenues (which are used primarily to fund debt service) are anticipated to drop slightly in FY 2009/10 and FY 2010/11, due to the high number of foreclosures in the area.
- Aggregate capital expenses are expected to be $232 million.
- Adequate funding sources are projected to fund the capital program, including a combination of State Revolving Fund loans, unexpended bond proceeds, system revenues (primarily user charges, connection fees, and property taxes not needed for debt service), and grants.

Some changes have been made in the format of this year's TYCIP compared to last year's, including:

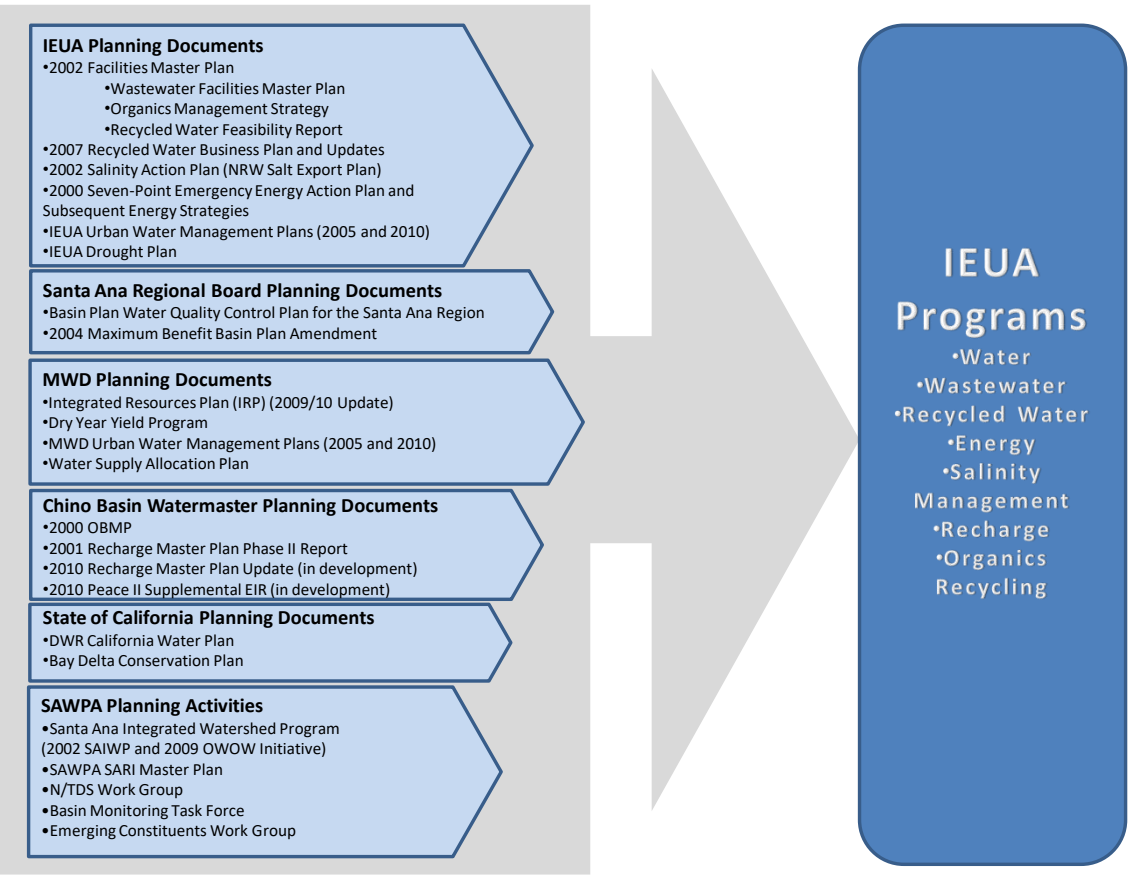
- The description of the recharge program capital improvement program has been merged into the recycled water program chapter, reflecting the Agency's current budget structure, in which all of IEUA's operating and capital program expenses for the recharge program are recorded in and reimbursed by the recycled water fund. Only the portion of recycled water program costs paid by Chino Basin Watermaster is recorded in the recharge water fund.
- A new chapter has been added on IEUA's renewable energy program which reflects the Agency's commitment to developing sustainable energy sources and also the major impact of new legislation controlling greenhouse gas emissions on Agency operations.

INTEGRATED CAPITAL PROGRAM PLANNING

The TYCIP is developed each year to be consistent with the Agency's annual operating budget and long-range plan of finance. The TYCIP is also consistent with the long-term programs described in the 2002 Program Environmental Impact Report (PEIR), which encompassed the Wastewater Facilities Master Plan (Board-adopted in August 2002), Recycled Water Feasibility Study (2002), and Organics Management Business Strategy (2002). The Agency has on a regular basis updated its CEQA documents when additional detailed project designs are completed. The PEIR addresses these documents and the related planning activities in an integrated fashion that deals with water supply, basin management, salinity management and environmental enhancement issues.

Since 2002, there have been dramatic changes in the region's energy, water supply, and economic conditions. Thus, IEUA's original planning documents and implementation plans have been expanded and updated to address the changed local water supply and energy conditions and provide cost-containment benefits. In addition, IEUA's resource planning efforts are coordinated with other local, regional and state planning activities that may have a significant impact on the Agency's operations and capital programs, as illustrated below.

Figure ES-1: IEUA Coordinated Regional Planning Process



This TYCIP reflects the integration of the Agency's planning activities into the Chino Basin Watermaster (CBWM) overall water supply management strategy, commonly called the Optimum Basin Management Program (OBMP). The Agency is also continuing to work closely with the Santa Ana Watershed Project Authority (SAWPA), the Metropolitan Water District of Southern California (MWD) and the Santa Ana Regional Water Quality Control Board to enhance and expand existing programs that improve local water supply availability and water quality, such as storm water capture and management, groundwater basin management, conservation, public education, water efficient landscaping, low impact development and water efficiency rebates.

ECONOMIC CONDITIONS

According to the well-known California economist, Dr. John Husing of Economics & Politics, Inc., an economic recovery is not expected until 2012 or 2013 on a national level, and even later for California, particularly for southern California. In light of the bleak economic conditions, the Agency shifted the focus of its capital program from expansion to the repair and replacement of existing facilities. Beginning in FY 2007/08 and continuing through FY 2008/09, the Agency and the Board deferred over $200 million of non-critical capital projects originally included in the FY 2007/08 – FY 2016/17 TYCIP. Most of these projects were slated to begin between FY 2007 and FY 2010. The deferred capital projects were primarily expansion and improvement projects for the wastewater system that were based on the assumption that the area's population would continue to grow through 2025. One exception is the Recycled Water Business Plan, which was adopted by the Board in December 2007 for the expansion of the Agency's Recycled Water Distribution system. The Recycled Water Business Plan was driven by a reduction in the available potable water supply and contained an aggressive program to increase the use of recycled water within the Agency's service area to meet growing demands.

WATER SUPPLY CONDITIONS

Most of the IEUA service area's water supply is either well water pumped from local groundwater basins or imported water purchased from Metropolitan Water District of Southern California (MWD). Additional sources include recycled water, surface water diversions, desalters, or other groundwater basins. The availability of water from MWD is critical to the region to replenish local supplies. Calendar year 2007 introduced a number of water supply challenges for MWD and its customers. Critically dry conditions affected all of MWD's main supply sources. In addition, a ruling in a federal court in August 2007 provided protective measures for the Delta Smelt in the Sacramento-San Joaquin River Delta which brought uncertainty about future pumping operations from the State Water Project. This uncertainty, along with the impacts of dry conditions, raised the possibility that MWD would not have access to the supplies necessary to meet total firm demands and would have to allocate shortages in supplies to its member agencies.

In preparing for this possibility, MWD worked jointly with its member agencies to develop a Water Supply Allocation Plan (WSAP). On April 14, 2009, the MWD Board voted to implement the WSAP, effective July 1, 2009. This decision came at a time when California was facing its third consecutive year of drought, the State Water Project 2009 Table A allocation was only 20%, and Governor Schwarzenegger had proclaimed a statewide water shortage emergency (February 26, 2009).

The WSAP includes the specific formulas for calculating member agency supply allocations and the key implementation elements needed for administering an allocation should a shortage be declared. Ultimately, the WSAP will be the foundation for the urban water shortage contingency analysis required under Water Code Section 10632 and will be incorporated into MWD's Regional Urban Water Management Plan.

Working together in response to MWD's WSAP, IEUA, its member agencies, Chino Basin Watermaster and the Chino Basin Water Conservation District prepared the IEUA Drought Plan. The purpose of the IEUA Drought Plan is to implement the MWD WSAP according to these goals:

- Ensure equity and fairness throughout IEUA's service area.
- Avoid any payment of MWD WSAP or Dry Year Yield (DYY) penalties to MWD.
- Recognize IEUA/MWD investments in local supplies to "drought proof" the IEUA service area.
- Encourage additional local investments to further drought proof the economy.
    - Enhanced Conservation
    - Recycled Water – Connect parks, schools and other landscapes
    - Interconnections to promote flexibility (Azusa Pipeline)
    - Increase Chino Desalter deliveries to the maximum
    - Groundwater Recharge (recycled water and capture of storm water when available)
- Coordinate IEUA service area communication strategy.

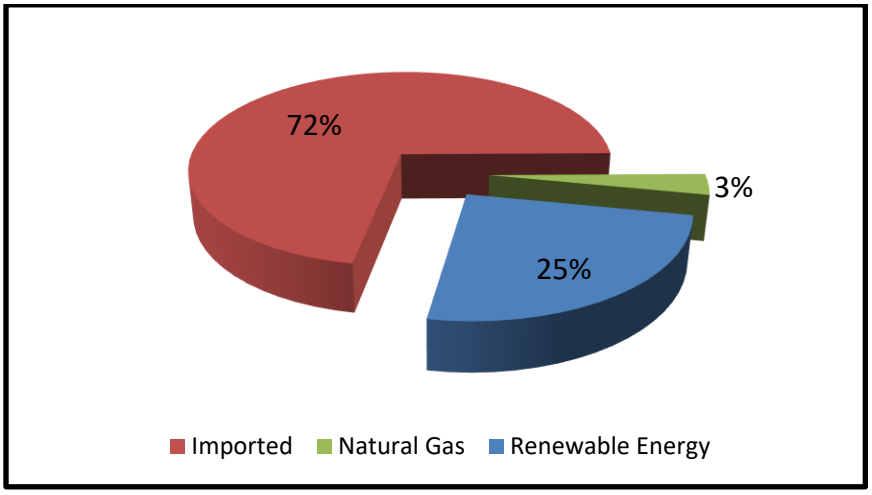
Due to continued water shortage conditions, IEUA is expecting a second consecutive year with reduced imported water supplies from MWD's WSAP, which will require IEUA to implement its Drought Plan and member agencies to rely heavily on local water supplies. Overall, IEUA's service area is well-prepared for an extended period of water shortages, as the result of earlier investments in recycled water, the Chino Basin Desalter, groundwater and water use efficiency programs.

ENERGY PICTURE

Due to the volatility of the energy market and heightened concern about greenhouse gas emissions, global climate change, and State-imposed requirements for reducing carbon emissions, the Agency has been taking proactive measures to increase its portfolio of clean, renewable energy and reduce energy demand. The main goals of IEUA's energy efficiency program include increasing renewable energy production, employing effective strategies for the procurement of electricity, and the curtailment of energy usage.

The current Agency-wide energy usage is approximately 67,000,000 kWh per year. Of this amount, approximately 16,000,000 kWh is generated onsite through internal combustion engines and solar energy, while the remaining 51,000,000 kWh is imported through Southern California Edison (SCE). IEUA's current energy portfolio is illustrated in the figure below.

Figure ES-2: IEUA Energy Portfolio



IEUA completed a 3.5 megawatt, multi-facility Solar Power Project in December of 2008 which accounts for about 9% of the Agency's total energy needs from a renewable, non-polluting energy source. The Agency also self-generates almost 16% of its power needs from internal combustion engines, using a combination of approximately 5% natural gas and 95% biogas. This gives IEUA a total of 25% of its current energy needs from renewable energy resources. Due to the success of the Solar Power Project, which was implemented through a Power Purchase Agreement (PPA) with SunPower Corporation Inc., IEUA is planning further expansion of its solar capacity, as well as looking into the possibility of implementing fuel cell and wind power projects throughout the service area. Implementation of these new projects will increase the Agency's renewable energy portfolio and propel the Agency closer to its self sufficiency goal of going "gridless" by the year 2020 by producing all its electricity needs through self-generation and net-metering.

The Agency could be significantly affected by recent rules and legislation governing air emissions. California Assembly Bill (AB) 32 requires implementation of programs starting in 2012 to achieve a 20% reduction in greenhouse gas emissions by the year 2020. In addition, the South Coast Air Quality Management District (SCAQMD) Rule 1110.2, which became effective starting in 2008, limits natural gas usage by internal combustion engines to 10% of the total fuel consumed. This has reduced the Agency's ability to produce its own electricity with renewable energy sources. Another challenge will be the uncertainties of Senate Bill 695. This legislation may limit the Agency's ability in the coming years to procure Direct Access, a service that allows customers to purchase electricity from an energy service provider (ESP) instead of from a regulated electric utility.

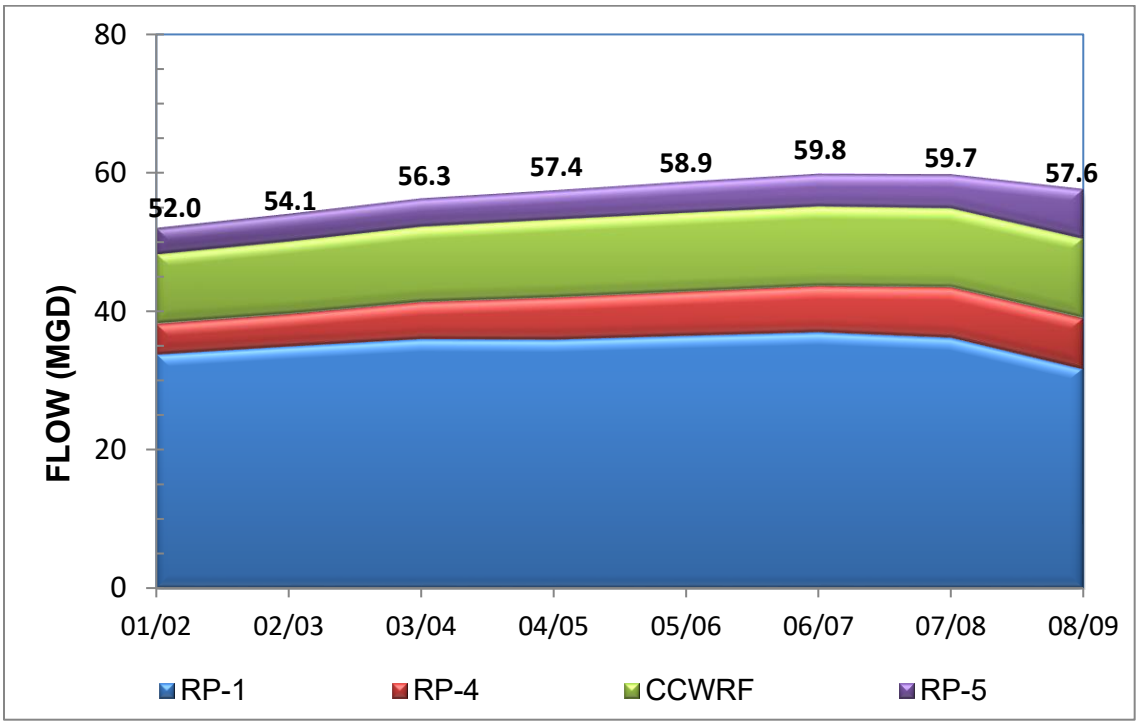
The Agency is projecting a significant increase in recycled water production during FY 2010/2011 due to the rapid growth in recycled water customers and increase in the recycled water demand of current customers in IEUA's service area. This will increase the energy demand at the recycled water pump stations. To meet the increased recycled water demand and other future energy requirements, as well as respond to the challenges imposed by AB 32, SCAQMD Rule 1110.2, the Agency is developing an Energy Management Strategy that maximizes the Agency-wide renewable energy portfolio. In summary, the Energy Management Strategy includes:

- Increasing the production and use of digester gas;
- Increasing self-generation capacity;
- Pursuing new renewable energy projects;
- Utilizing effective energy procurement strategies; and
- Using sub-metering as a tool to allow visibility in energy curtailment at each of its facilities.

TEN-YEAR FLOW FORECASTS AND CAPACITY UTILIZATION

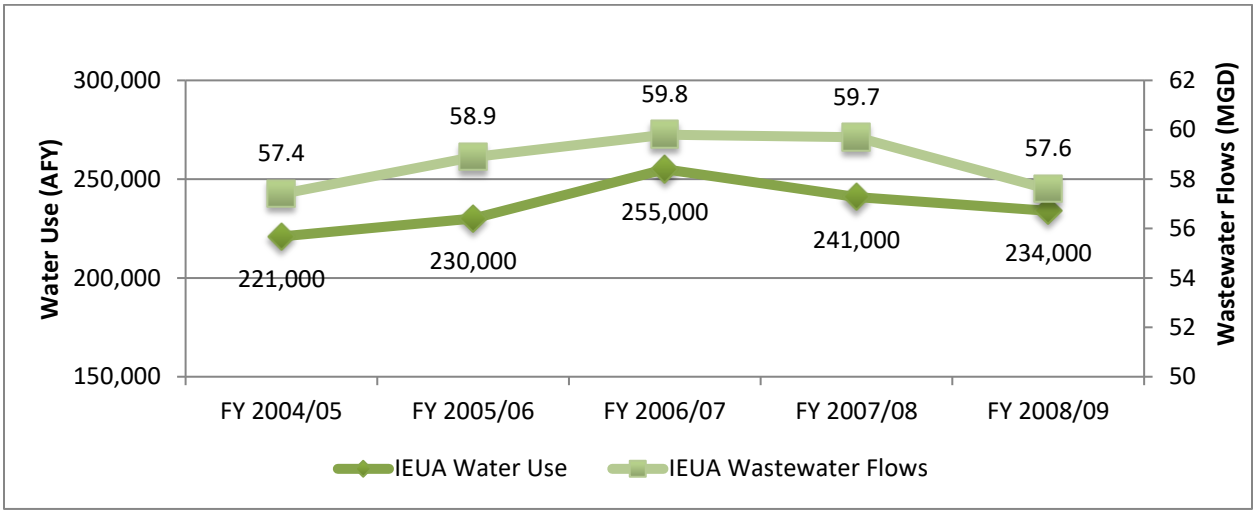
IEUA's historical wastewater flow trend is shown below. This figure depicts the raw sewage generated in the service area for each of IEUA's regional water recycling plants (RP's) as well as the total for RP-1, RP-4, RP-5 and Carbon Canyon Water Reclamation Facility (CCWRF).

Figure ES-3: Regional Plant Service Area Wastewater Flows



Since the beginning of the current drought in FY 2006/07, both water consumption and wastewater generation in IEUA's service area have been trending downward. IEUA's member agencies' overall water use decreased approximately 22,000 acre-feet over the past two years. This coincides with the beginning of the three-year drought and can be largely attributed to IEUA and its member agencies' public education, water use efficiency programs, ordinance enforcement and the economic downturn.

Figure ES-4: Recent Water Use and Wastewater Flow Trends

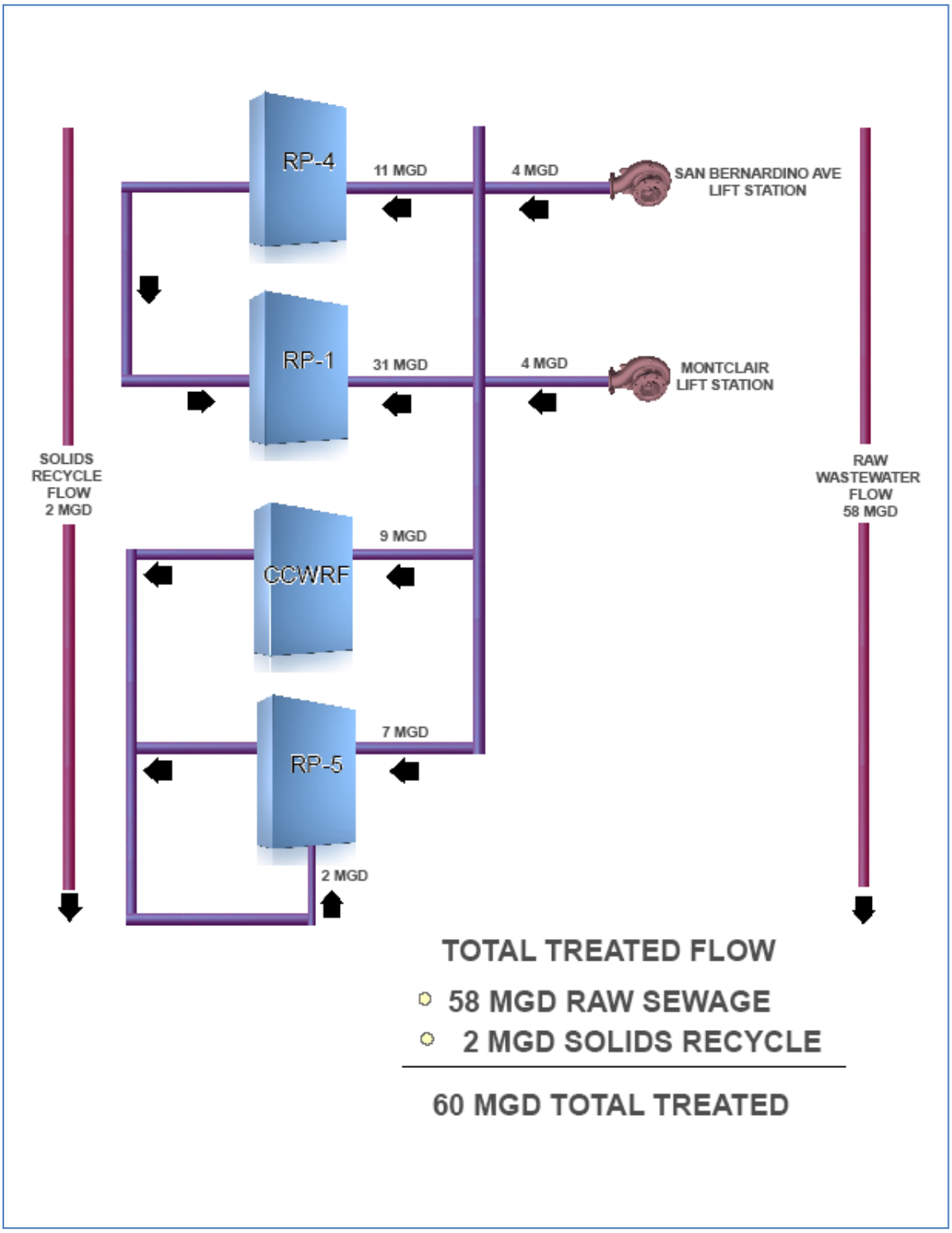


In FY 2008/09, with the recorded increase of 1,314 EDUs in the IEUA service area, IEUA would have expected to see an increase of about 360,000 gallons per day in total raw sewage influent flow into the regional sewerage system. Instead, the average daily flow rates of raw sewage into the Regional Water Recycling Plants showed no measurable increase. IEUA expects this trend of static or declining wastewater generation rates to continue over the next few years.

The figure below shows the current wastewater flows in the Regional System, using recent flow monitoring data. A significant difference in the flow distribution compared to last year is that the San Bernardino Lift Station came on line in June 2009 and diverted approximately 4 MGD of raw sewage from RP-1 to RP-4. The additional recycled water produced at RP-4 will be used to supply the recycled water users in the expanding northeast recycled water network.

Exhibits I through V at the back of this report show the ten-year flow projections for each individual facility and the Agency as a whole in graphical form. These projections are based on IEUA's revised estimate of EDU growth that reflects the current conditions and assumptions that were the basis of the Agency's long-range budget.

Figure ES-5: Current Regional System Wastewater Flows



Based on the current budgetary estimates of EDU growth, at the end of ten years, IEUA's total system flow is forecasted to be 63 MGD (including the solids recycle stream from RP-2), and the overall treatment plant capacity utilization is expected to be 74%. Agency-wide capacity utilization will be balanced and optimized between facilities to achieve the lowest operational cost while satisfying recycled water demands and water quality requirements using the regional wastewater system's flow re-routing capabilities.

It is important to note that, even though wastewater flows are decreasing, the concentrations of organic matter and suspended solid materials in the wastewater are increasing roughly proportionately. More solids are removed from the wastewater during treatment, requiring more solids handling capacity. IEUA will be able to handle additional solids generated from the RP-1 and RP-4 facilities, in the northern service area, due to the construction of the RP-1 Dewatering Facility Expansion Project (began in November 2009 and scheduled for completion in January 2012). The current TYCIP does not include any solids handling facility expansions in the southern service area (served by RP-5, CCWRF, and RP-2), but there could potentially be a need for expansion in the future beyond ten years.

TEN-YEAR CAPACITY IMPROVEMENT PLANS

Throughout most of the past ten years, the Agency has been in a phase of rapid construction and expansion, with two major wastewater facility expansion projects that provided a net treatment capacity increase of 17 MGD. The flow forecast for the next ten years indicates much slower growth and, as a result, the TYCIP includes no wastewater treatment plant expansions in the next ten years. In particular, through routing more flow to RP-4 and RP-1, there will be enough capacity in the Regional System to last through the next ten years without a major expansion at RP-5. However, to assure sufficient solids handling capacity, the Agency is replacing the old belt presses at RP-1 with more cost-efficient centrifuges.

The current TYCIP emphasis is on repair and replacement of existing equipment and structures, providing system redundancy where needed to guarantee performance and compliance, expansion of the recycled water system, and achieving energy sustainability. The financing plan maximizes the use of available state and federal funding programs, including the American Recovery and Reinvestment Act (ARRA), commonly known as the federal Stimulus Plan, which has allowed the recycled water system expansion to continue on pace and has allowed the development of the new operations laboratory project to continue.

OVERVIEW OF CAPITAL PROGRAMS

The Agency's budget and capital program are divided into several different program areas:

- Regional Program (RC and RO Funds)
- Recycled Water Program (WC Fund)
- Recharge Water Program (RW Fund)
- Non-reclaimable Waste System Program (NC Fund)
- Administrative Services (GG Fund)

These capital funds account for all of the costs and revenues associated with acquisition or construction of facilities and improvements.

As shown in Table ES-1, the Agency's total capital program is estimated to be $232 million for FY 2010/11 through FY 2019/20. The Regional Wastewater and Recycled Water Programs consist of the greatest capital investment within the Agency and comprise 84% of total Agency capital costs through FY 2020. For each program area, the complete list of projects with schedules and budgetary costs is included in the Agency's adopted Budget (Volume 1).

TABLE ES-1
TYCIP CAPITAL PROGRAM ALLOCATION

Capital Program	Amount ($Millions)	Percentage
Wastewater and Organics Mgt	$ 91	39 %
Recycled Water and Recharge Water	105	45 %
Non-Reclaimable (NRW)	30	13 %
Administrative Services	6.0	3 %
Total Program	**$232**	**100%**

WASTEWATER AND ORGANICS MANAGMENT

The Agency's Regional Wastewater Program is estimated to require capital funding of $91 million through FY 2019/2020, or 39% of the total projected capital expenditures. This figure includes $66 million for capital upgrade and expansion projects and $25 million for asset management (capital replacement) projects. Some of the major Regional Wastewater program projects are shown in Table ES-2 below.

Regional Plant No. 5 (RP-5) is IEUA's newest regional wastewater treatment and water recycling facility. Completed in March 2003, RP-5 is permitted to treat 16.3 MGD. Current capital projects for this facility involve the evaluation of the current capacity of the liquid phase and, additionally, the improvement of the performance of the solids phase. The plan to expand RP-5 from its existing 16.3 MGD capacity to 28 MGD was deferred for construction beyond the ten-year period based on current economic conditions and the significant slowdown in future development, expected to result in minor growth in the Agency's service area.

TABLE ES-2
REGIONAL WASTEWATER SYSTEM CAPITAL PROJECTS

Major Capital Projects	$ Millions
RP-1 Dewatering Facility Expansion Project	$19.0
All Facilities Plant Equipment Replacement	$13.0
Capital upgrades RP-1, RP-2,CCWRF,RP-4, RP-5	$28.0
RP-1 Asset Replacement	$ 8.6
Miscellaneous RC Construction Projects	$ 7.5
IERCA 50% Capital Contribution	$ 2.5

In January 2009, IEUA completed an expansion of Regional Plant No. 4 (RP-4) from 7 to 14 MGD. The next capacity expansion of RP-4, from 14 to 21 MGD, is not considered to be needed within the next ten years, based on the current flow forecasts. Other major projects in construction at the RP-4 site relate to the expansion of the Recycled Water Program to meet the goals for distributing more recycled water as outlined the adopted Recycled Water Business Plan.

There are no current or future plans to expand the flow capacity of Regional Plant No. 1 (RP-1), the oldest and largest plant in the Agency's system. Capital projects planned for this facility relate to system and equipment modifications and upgrades based on the Agency's Asset Management Plan. The largest project is the RP-1 Dewatering Facility Expansion Project, which has received approval under the federal Stimulus Plan for a 0.46% interest rate loan with a 20-year repayment period. The budget is $19 million and is slated for completion in FY 2011/12. These improvements will help the Agency meet its long-term goals of cost containment and efficient operation through use of new technologies and "state of the practice" equipment.

Replacement of aging facilities and major capital maintenance will demand an increasing share of the Agency's attention and resources. As a result, the Agency anticipates spending approximately 40% of its capital outlay on rehabilitation and replacement. With projected expenses of $25 million over the next 10 years, the asset management replacement program is planned to address older facilities (i.e., RP-1). Estimates of those costs are derived from consultant condition assessments, staff operation assessment and historical life of service. It assumes also that all new infrastructures will require capital maintenance after the first five years of operational use.

The Chino Basin Organics Management Business Plan (adopted in August 2002) provides the framework to manage the organics in the Chino Basin, including biosolids, dairy animal manure, and composting of local community green waste material. As a major milestone for implementation of the Business Plan, construction of the Inland Empire Regional Composting Facility (IERCF) was completed in 2007. Because of the IERCF, the Agency has a self-sufficient and environmentally

beneficial method to handle the over 200 wet tons of biosolids produced every day at its four water recycling facilities.

RECYCLED WATER CAPITAL PROGRAM

In response to potential reduction in imported water supplies, the Recycled Water Business Plan was adopted by the Agency Board of Directors in December 2007. The intention of the Business Plan is to accelerate the expansion of the recycled water distribution system in the most cost effective and rapid manner possible, to increase the amount of recycled water available within the Agency's service area and reduce the demand on potable water supplies. The recycled water system consists of pipelines, reservoirs, and pump stations that provide recycled water throughout the majority of the IEUA service area. Also included are construction projects for laterals to connect to the Agency's distribution system.

The Recycled Water Business Plan focuses on projects that have been grouped into priorities and categorized into four project areas: Northeast Area, Northwest Area, Central Area and Southern Area. These were prioritized based on the amount of recycled water that each area could serve and the proximity of each to one of the existing recycled water plants. The ultimate goal of the Recycled Water Business Plan is to provide 20% of the Agency's water requirement by 2025 by extending the use of recycled water in place of more costly imported water for industrial, irrigation, landscaping, and replenishment of groundwater basins.

Recycled water projects will average approximately $30 million per year for the current and next two fiscal years, FY 2011 through FY 2012, and will total approximately $105 million for the term of the TYCIP, FY 2011 through FY 2020. The major capital projects are listed in the table below. The basic financing assumption is that the Recycled Water Business Plan will be funded through federal and state grants and low-interest State Revolving Fund loans issued by the State Water Resources Control Board (SWRCB). The availability of this funding source is a critical assumption. If state and federal funding is delayed, then the Business Plan capital projects will be deferred.

In March 2009, the SWRCB approved Loan Package #4 in the amount of $20 million for Phases IV and V in the Northeast Facilities section, along with a grant award of $4.2 million. This was the first loan issued by the SWRCB under the Clean Water Act with federal Stimulus Program funding and eligible for 0% interest payable in 20 years. In addition to the SRF loans and grants, $14 million in United States Bureau of Reclamation (USBR) Title XVI grant proceeds will be received by FY 2010/11 against the total grant award of $20 million. Of the USBR grants, $6 million is allocated for the Northeast Area projects, and $8 million is allocated for the Northwest Area projects.

TABLE ES-3
RECYCLED WATER PROGRAM AND RECHARGE PROGRAM CAPITAL PROJECTS

Major Capital Projects	$ Millions
1630 W. Pipeline Phase 3	$19.2
930 W. Reservoir and Pipeline	$20.3
Wineville Extension RW Pipeline	$15.0
1430 W. Reservoir and 1630 W. Pump Station	$ 8.3
1630 W. Reservoir and Pipeline	$ 9.1
Euclid RW Lateral	$ 5.7
1299 E. Reservoir	$ 4.9
1630 E. Pipeline Segment A	$ 4.9
Baseline Regional Pipeline	$ 4.2
1430 W. Pipeline	$ 3.0
Recharge Program Capital Projects	$ 0.3

RECHARGE WATER CAPITAL PROGRAM

The Recharge Basins are currently not expected to require significant capital requirements beyond the completion of refurbishment at selected basins. The current ten-year budget is approximately $328,000. Within this TYCIP, the Groundwater Recharge Basins are assumed to be sufficient to provide adequate storm water, recycled water and imported water recharge capacity for the foreseeable future. Some modifications for maintenance will be required. The determination of what is needed and when to implement any capital changes will be the subject of a future review and collaborative effort of the Agency and the CBWM. The financial impact of any significant capital requirements for the groundwater recharge basins will be addressed in revisions and updates to this TYCIP.

NON-RECLAIMABLE WASTEWATER CAPITAL PROGRAM

The long range capital improvement projects for the existing Non-Reclaimable Wastewater System (NRWS) are directed toward increasing the economic value and improving and retaining the integrity of the NRWS. IEUA anticipates spending a total of $30 million on repairs and replacement of the NRWS pipelines and pump station as part of the IEUA Asset Management Program during the next ten years. These capital projects will improve the reliability of the NRWS and allow the Agency to comply with the recently-adopted state requirements to implement a Sanitary Sewer Management Plan (SSMP).

ADMINISTRATIVE SERVICES PROGRAM

The capital purchases in the Administrative Services Program are primarily for furniture, vehicles, office equipment (defined by Agency policy as greater than $5,000), computers and software (greater than $1,000) and other administrative purchases commonly used for general Agency purposes. These capital expenses are supported by the Wastewater Program (90%), and the NRWS and Recycled Water Programs. The total ten-year capital project costs for this program are projected at $6 million, which includes system upgrades, computer equipment replacement, network infrastructure replacement, software purchases, and capital improvements to the Agency's headquarters.

CHAPTER 1 I E U A	TYCIP

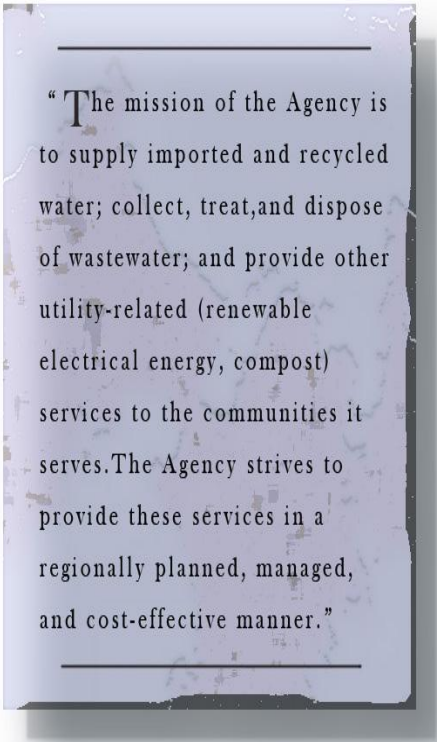
1.0 INTRODUCTION

1.1 Background

The Inland Empire Utilities Agency (IEUA) is a wholesale distributor of water and recycled water and provides regional wastewater treatment services for a 242-square-mile area of western San Bernardino County. IEUA provides industrial and municipal wastewater collection through regional wastewater interceptors and two non-reclaimable waste pipeline systems, and produces recycled water at four regional treatment plants. IEUA also produces energy from biogas and solar generation at its regional facilities and produces biosolids compost at its state-of-the-art composting facility. IEUA provides these utility services to seven Contracting Agencies:

1. City of Chino
2. City of Chino Hills
3. Cucamonga Valley Water District (CVWD)
4. City of Fontana
5. City of Montclair
6. City of Ontario
7. City of Upland

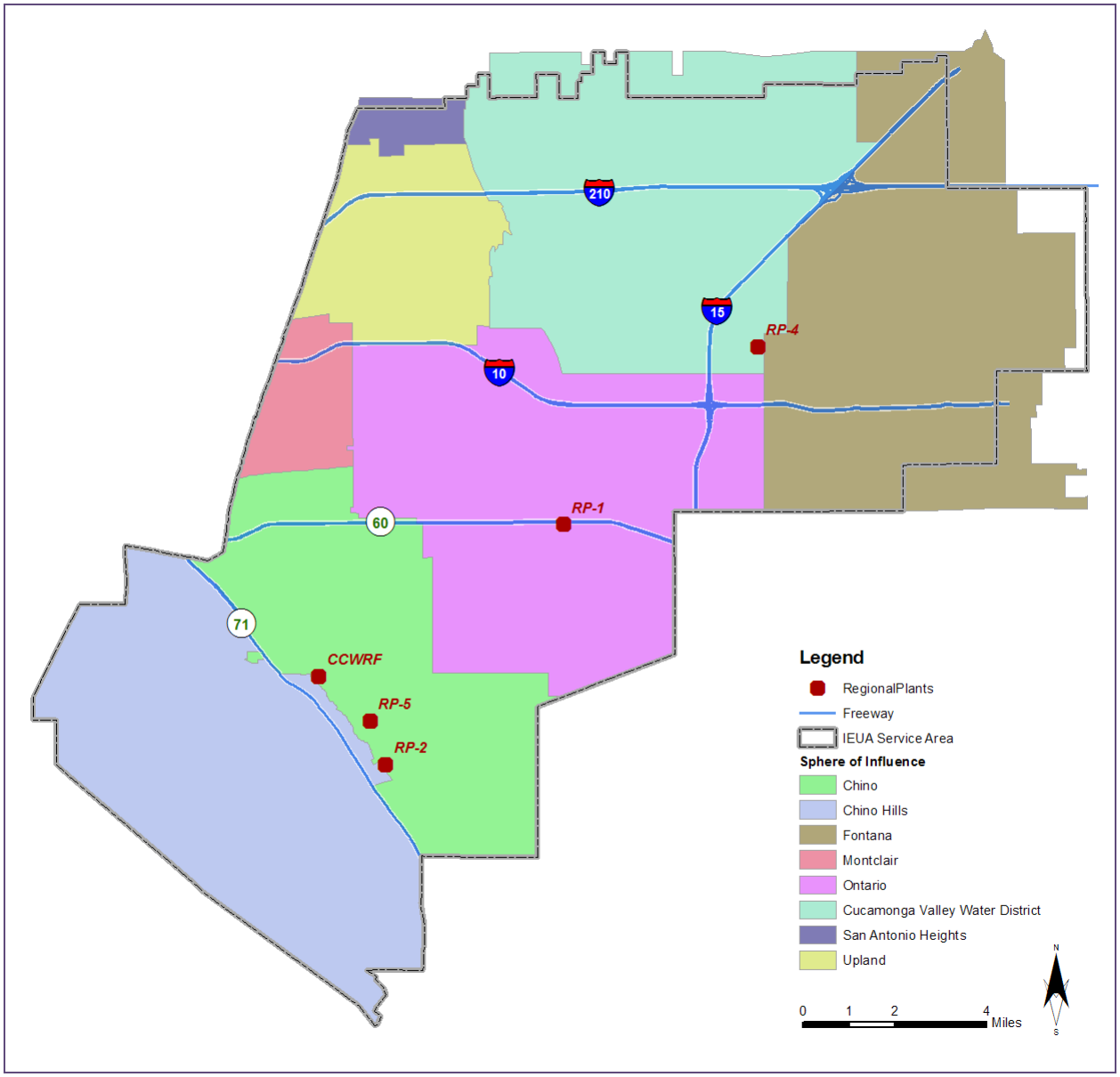
Figure 1-1 depicts the IEUA service area, each Contracting Agency's sphere of influence, and IEUA's regional water recycling facilities.



1.2 IEUA's Mission

IEUA, its Board and staff, strive to provide reliable, cost-effective water utility services which protect and enhance the environment while fostering economic development. The Agency is focused on providing three key products at its wastewater facilities: recycled water to drought-proof our service area; organic compost made from recycled materials; and electrical energy generated from renewable sources. The Agency provides these services in close coordination with its Contracting Agencies and strives to maintain a high level of public awareness. This Ten-Year Capital Improvement Plan, beyond being a requirement of the Regional Sewerage Service Contract between IEUA and our member agencies, is an additional means of communicating with the public concerning priorities for future projects and capital spending requirements needed to meet future demands in the service area.

Figure 1-1: Contracting Agencies



The residents of the Chino Basin area voted to form IEUA (originally incorporated as the Chino Basin Municipal Water District) in June 1950. The Agency is governed by a five-member Board of Directors (Board), elected to represent individual areas or Divisions. IEUA became a member of the Metropolitan Water District of Southern California (MWD) in 1950 and the Santa Ana Watershed Project Authority (SAWPA) in 1972. IEUA is a member of the MWD, SAWPA and CBWM Board of Directors.

IEUA closely coordinates its water resources management program in the Chino Groundwater Basin with the CBWM, the San Bernardino County Flood Control District, the Chino Basin Water Conservation District, and local water and wastewater retail agencies.

1.3 IEUA Regional Facilities

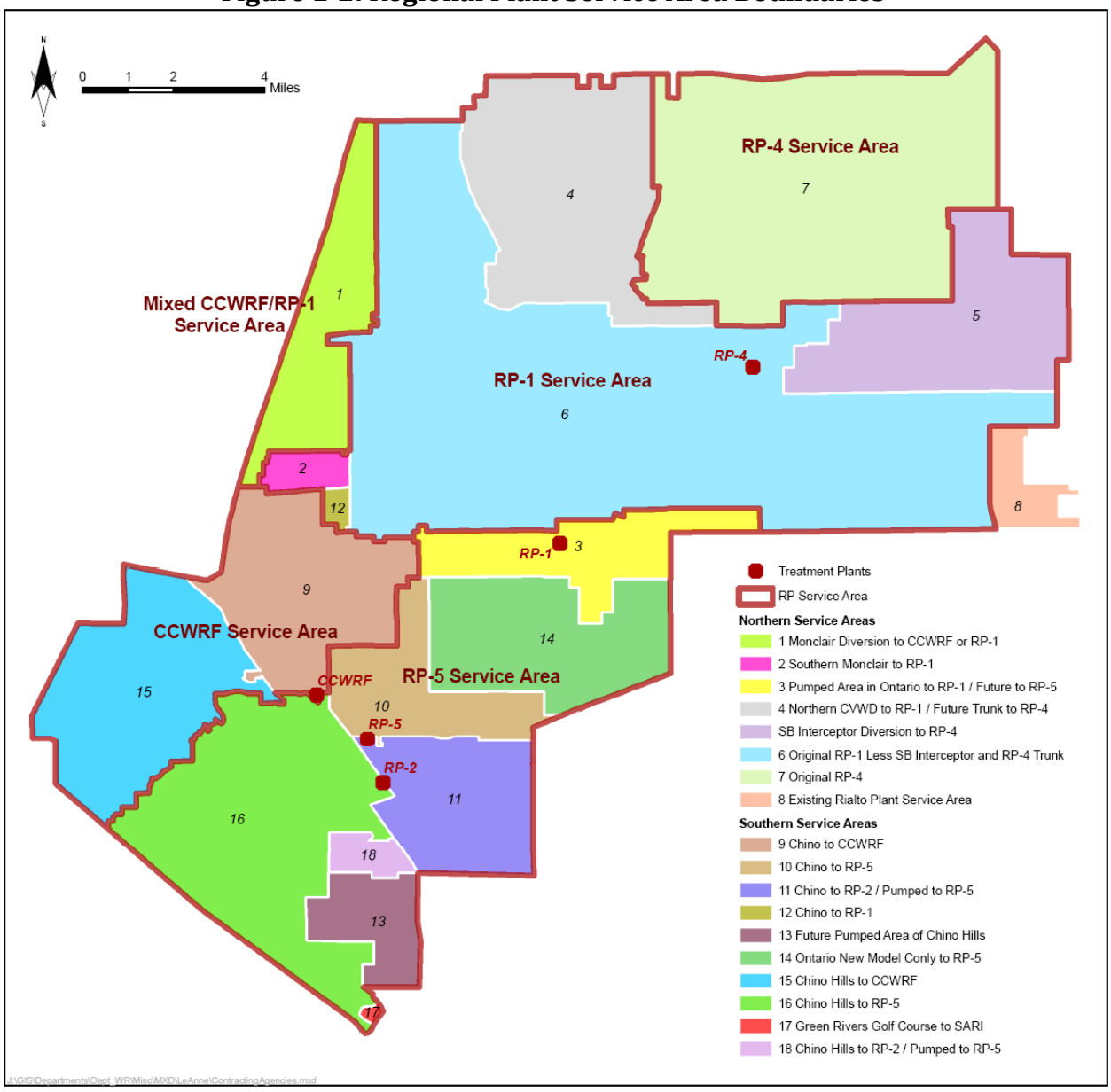
IEUA's Regional Wastewater System includes 90 miles of regional sewage interceptors. The sewage lateral pipelines are owned and maintained by the individual contracting agencies. All of the wastewater is treated at one of IEUA's water recycling plants, which provide advanced tertiary treatment that meets or exceeds all California Department of Public Health Services (Title 22 regulations) and California Regional Water Quality Control Board waste discharge permit requirements.

1.3.1 Regional Water Recycling Plants

Figure 1-2 illustrates the service area boundaries for IEUA's four water recycling plants. The four Regional facilities are: Regional Plant No. 1 (RP-1), Regional Plant No. 4 (RP-4), Regional Plant No. 5 (RP-5), and Carbon Canyon Wastewater Reclamation Facility (CCWRF). The biosolids produced at RP-4 and RP-1 are thickened, digested, and dewatered at solids handling facilities located at RP-1. Similarly, the CCWRF and RP-5 biosolids are treated at Regional Plant No. 2 (RP-2). The stabilized and dewatered solids are transported to the Inland Empire Regional Composting Facility for processing into soil amendment.

RP-5 began treating and discharging wastewater in March 2004. At that time, the RP-2 wastewater influent was diverted to RP-5 for treatment. Since portions of RP-2 are located in the 100-year flood plain, liquid wastewater processing at RP-2 was discontinued and the plant is being used only for processing solids from RP-5 and CCWRF. Biosolids processing at RP-2 will continue until the plant reaches the end of its useful life or until the RP-2 land can no longer be leased from the U.S. Army Corps of Engineers. Some land at RP-5 has been reserved for future solids processing facilities.

Figure 1-2: Regional Plant Service Area Boundaries



1.3.2 Regional Interceptor System

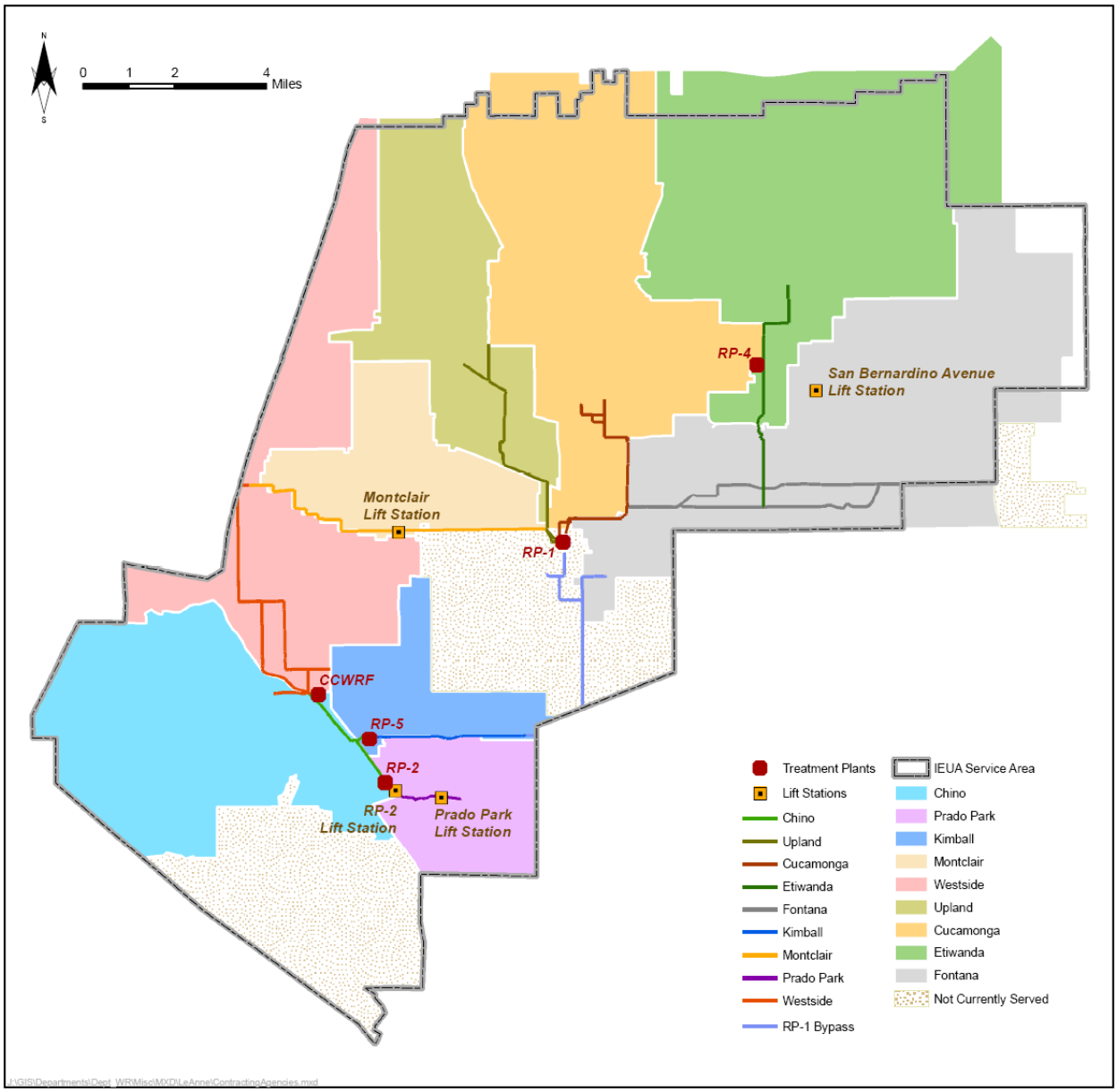
IEUA has a network of regional interceptor sewers that can be used to bypass flow from one treatment plant to another to balance and optimize the use of treatment capacity. Currently, the regional interceptors can bypass flow from RP-4 to RP-1 and from CCWRF to RP-5. In addition, primary effluent can be bypassed from the RP-1 equalization basins to RP-5. Figure 1-3 illustrates the existing regional trunk wastewater system and tributary areas. The main routes for bypassing/diverting flow are:

- Operators can bypass up to 6 million gallons per day (MGD) from RP-4 to RP-1 through the Etiwanda Interceptor.
- Operators can bypass flow from CCWRF to RP-5 through the Chino Interceptor-- typically 1 to 2 MGD.
- A portion of the flow from the Cities of Upland and Montclair (about 4 MGD) can be diverted either to CCWRF, through the Westside Interceptor, or to RP-1, via the Montclair Lift Station and Montclair Interceptor. Typically, most of the flow is routed to CCWRF to avoid pumping costs.
- Primary effluent and sludge can be diverted from the RP-1 equalization basins into the Eastside Interceptor and then it flows by gravity to RP-5. Up to 9 MGD could potentially be bypassed; however, operational experience has shown that 1 to 2 MGD is currently the optimum in terms of wastewater treatment plant performance.

As shown on Figure 1-3, IEUA has four wastewater lift stations:

- The Montclair Lift Station pumps wastewater from portions of Montclair, Upland, and Chino to RP-1.
- The Prado Park Lift Station pumps wastewater from the Prado Regional Park in the City of Chino to RP-5.
- The RP-2 Lift Station, which pumps flow from the southeastern portions of the cities of Chino and Chino Hills to RP-5.
- The San Bernardino Avenue Pump Station, which pumps a portion of the flow from the City of Fontana to RP-4.

Figure 1-3: Existing Regional Trunk Wastewater System & Tributary Areas



1.4 Program Master Planning and Integrated Water Resources Management

IEUA's Wastewater Facilities Master Plan (WFMP) was adopted in August 2002 with the approval of the Regional Technical and Policy Committees. The WFMP, together with the Recycled Water Feasibility Study (2002) and the Organics Management Strategy Business Plan (2002), formed a "Program Master Plan" and were the subject of a Programmatic Environmental Impact Report (PEIR) certified on June 28, 2002. This TYCIP is consistent with the IEUA's approved WFMP and PEIR.

The PEIR integrated all of the Agency's related planning activities into one comprehensive document in order to address the environmental concerns of the overall effects of the projects contemplated by the Agency. This comprehensive planning process is illustrated in Figure 1-4.

Since 2002, the need to integrate all of the Agency's master planning activities into Chino Basin's overall water supply management strategy has become even more apparent. In 2008 and 2009, there has been a profound shift in California Water Supply Planning in response to three consecutive years of drought and regulatory restrictions on pumping imported water from the Bay-Delta. In addition, rising energy costs, economic recession, climate change, greenhouse gas emission reduction legislation, and drought allocation plans have led to decreased imported water reliability and a call from the Governor to reduce per capita water demand by 20 to 30%. This has led to increased involvement of IEUA with the development of regional planning documents (CBWM, SAWPA, MWD, and Regional Board) and State of California Planning Documents (DWR, CalEPA, etc.)

Figure 1-5 illustrates some of the most significant IEUA, Regional, and State environmental planning documents that are having an impact on IEUA operations and capital programs. A brief description of IEUA's original, 2002 planning documents and the more recent outgrowths of these planning efforts is given below.

1.5 Wastewater Facilities Master Plan

Some of the objectives of the 2002 WFMP were to: (1) identify facilities that need to be replaced or expanded in the near- and long-term to meet projected growth and wastewater flow needs; (2) develop a cost-effective, phased implementation plan; (3) determine space and location needs for additional or expanded treatment facilities; (4) develop strategies for flow diversion between service areas to optimize existing treatment capacity utilization; and (5) maximize water recycling, energy efficiency, and organics recycling.

The WFMP included plans for expansion of wastewater facilities to meet the needs of growth within the service area through 2050. Specifically, it included improvements and expansion of wastewater facilities at RP-4; construction of a new 16.3-MGD permitted capacity wastewater facility at RP-5; conversion of RP-2 to a solids handling facility only (elimination of wastewater treatment at RP-4); and numerous upgrades and odor control facilities at RP-1 and Carbon Canyon RWRF. These plans have all been implemented. In addition, a new, state-of-the art composting facility was put into service near RP-4 that handles biosolids and green waste; a demonstration renewable energy facility was constructed at RP-5; a new, LEED-Platinum administration building and wetlands educational park were constructed near RP-5; the recycled water system was expanded to include additional recycled water pump stations, pipelines, and reservoirs in the northeast and central areas; and organics management facilities were constructed for handling biosolids, manure, and food waste in the southern area.

Figure 1-4:

2002 Facilities Master Plan—Consolidation of Relevant IEUA Planning Documents

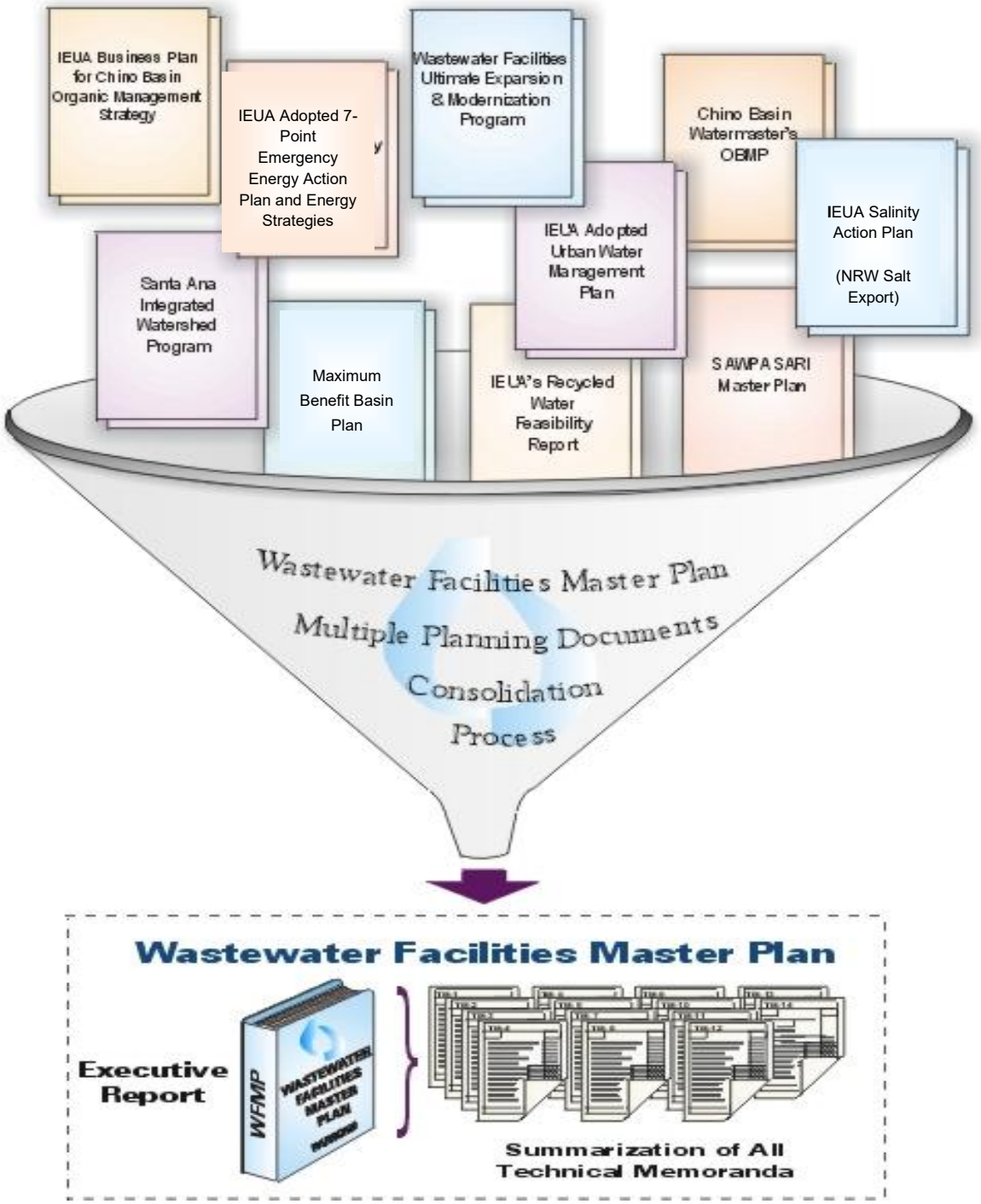
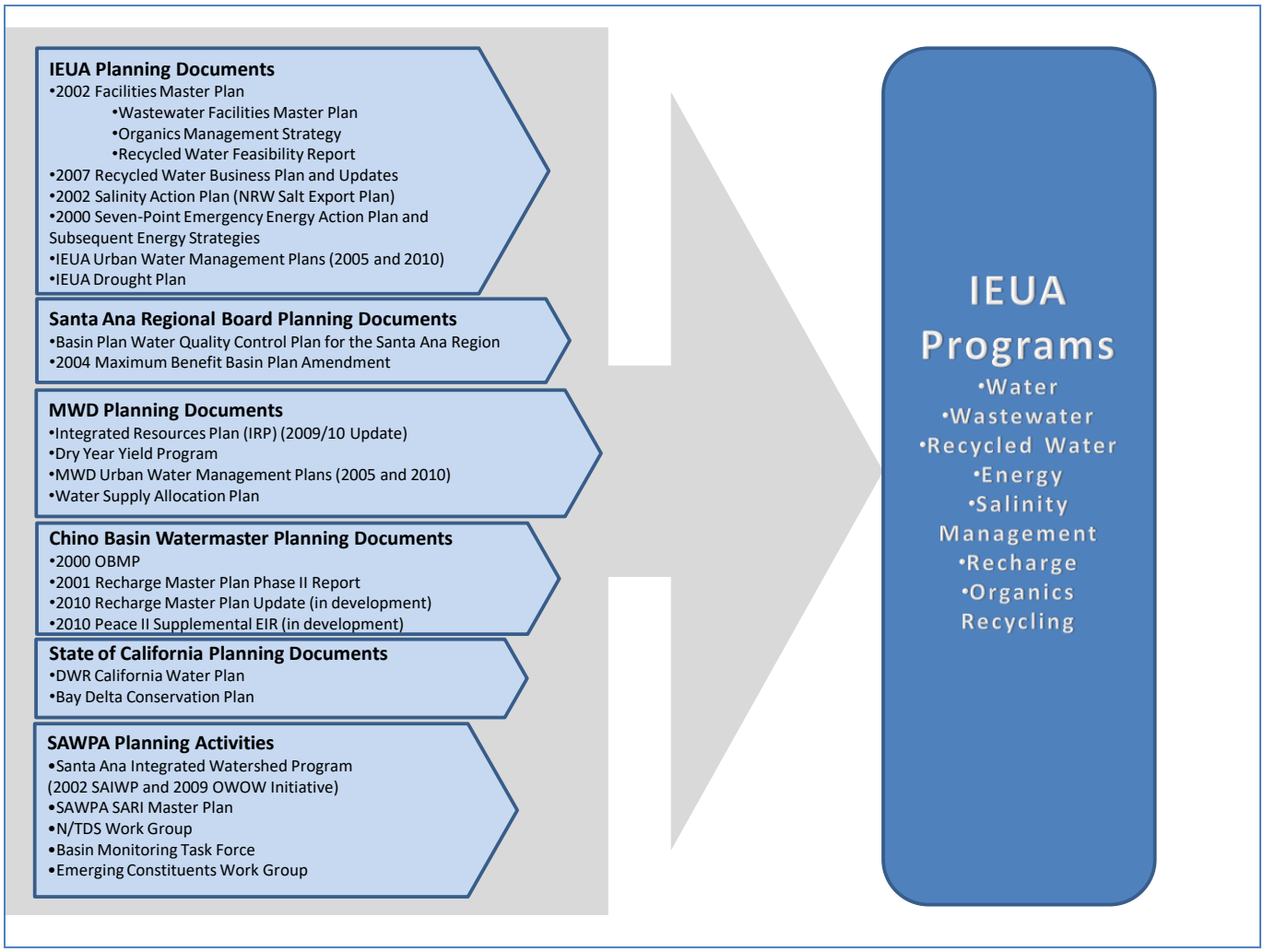


Figure 1-5:

IEUA Coordinated Regional Planning Process



1.6 IEUA Recycled Water Feasibility Study

IEUA prepared a Recycled Water Feasibility Study, adopted by the Board of Directors in August 2002, which delineated the Agency's recycled water program through the year 2020. In 2004, IEUA initiated development of the Regional Recycled Water Program Implementation Plan, which updated information from the 2002 study. In 2005, the IEUA Recycled Water Program Implementation Plan identified additional future recycled water demand, primarily in the developing areas of the cities of Chino and Ontario. IEUA recognizes that water recycling is a critical component of an effective water resources management strategy; over the years, recycled water will become a larger portion of the overall water resources supply mix for the Chino Basin. Water recycling will help "drought proof" the Basin, help achieve the objectives of the OBMP, and provide a lower cost water supply to all the residents within IEUA's service area.

The 2002 Feasibility Study recommended and the 2005 Recycled Water Program Implementation Plan confirmed that interconnection of all four of the IEUA's regional treatment plants in a looped distribution system would maximize beneficial use of recycled water, increase system reliability and flexibility, and provide other operational and cost reducing benefits. The looped system will also allow more customers to be served and provide the flexibility to release surplus recycled water to spreading basins throughout the Basin for recharge.

IEUA's adopted Recycled Water Feasibility Study (August 2002), indicated that by the year 2020 the projected use of recycled water would exceed 70,000 acre-feet per year (AFY), with over 1,700 customers projected to be connected to the regional recycled water distribution system. Subsequent implementation of the 2005 Recycled Water Program Implementation Plan and the 2005 IEUA Urban Water Management Plan showed that a total of over 93,000 AFY of recycled water could be delivered to over 1,900 potential customers. IEUA will recharge up to 33,000 AFY of recycled water (blended with storm water and imported water to meet the overproduction replenishment needs) into the Chino Groundwater Basin and facilitate direct deliveries of over 60,000 AFY of recycled water to local customers. IEUA's goal is to use as much recycled water for local beneficial uses as is economically practical and replenish the Chino Groundwater Basin. In June 2007, IEUA received a new permit for recycled water recharge adding several more basins that can be utilized for recharge with recycled water. These added basins will increase both the volume and distribution of recycled water availability in the Chino Basin.

1.7 Recycled Water Business Plan

In FY 2007/08, in response to potential water supply shortages and reductions in MWD imported water supplies, IEUA accelerated implementation of the recycled water program deliveries by committing to a Recycled Water Business Plan. The Recycled Water Business Plan (initially adopted in December 2007) is intended to be a "short-term" action-oriented document that will be updated annually to adjust the goals, timelines and projects that will expand the use of recycled water. The Recycled Water Business Plan, as updated in 2008, has a goal of increasing the total recycled water connected demand to 50,000 AFY by FY 2011/12. The program is to be funded by a combination of state and federal grants, State Revolving Fund Financing (SRF) and MWD rebates. In addition, the recycled water supply is not impacted by drought and will mitigate the impacts of regional or statewide water supply limitations.

1.8 Chino Basin Organics Management Strategy Business Plan

The Chino Basin Organics Management Business Plan developed a strategy to manage the organics in the Chino Basin, including biosolids, dairy animal manure, and composting of local community green waste material. The Business Plan was published in May 2001, along with a Project Report containing ten Technical Memoranda, which provided the background and basis for the recommendations in the Business Plan. The IEUA Board of Directors certified the Programmatic EIR for the Business Plan in June 2002 and adopted the Business Plan together with the Wastewater Facilities Master Plan and Recycled Water Feasibility Study in August 2002. The Business Plan presented specific short-term and long-term recommendations as well as outlining of

the steps and considerations that must be addressed in implementing projects consistent with the IEUA's goals and mission.

The Business Plan, as an integral tool for implementing the CBWM's Optimum Basin Management Plan (OBMP) includes two key initiatives. The first is a comprehensive renewable energy reliability program and the second initiative is a local organics recycling program. Implementation of those initiatives advances one of the paramount goals of the Business Plan: protection of the Chino Groundwater Basin from infiltration of salts and nitrogen compounds, in agricultural wastes. As a result, IEUA can avoid the need for costly removal of those contaminants from ground water.

As a major milestone for implementation of the Business Plan, construction of the Inland Empire Regional Composting Facility (IERCF) was completed in 2007. The IERCF provides the Agency with self-sufficiency as far as biosolids disposition, rather than being subject to the uncertainties of other options. Some options, such as land application of biosolids, are undependable because of changes in public attitudes and the need to haul longer and longer distances. Many options are increasingly expensive because of increasing contract costs, high energy costs, air pollution regulations, and lack of nearby facilities or markets.

The IERCF is designed to process over 200,000 tons per year of recycled wood wastes and biosolids producing over 250,000 cubic yards of high-quality compost each year. The facility began daily operations in April 2007 and ramped up to full capacity in late 2008 receiving over 500 tons per day of biosolids and recycled wood waste products. Compost, which is created and marketed as SoilPro Premium Compost, is sold as a soil conditioner which helps improve water retention resulting in better plant growth and water savings.

In order to receive recycled products year-round, a compost storage facility has been constructed to allow the facility to store compost during the winter season when compost demand is low.

1.9 Chino Basin Watermaster's Optimum Basin Management Plan (OBMP)

The OBMP for the Chino Basin was prepared by the Court-appointed Watermaster to address groundwater quality problems and identify groundwater management opportunities to be pursued for the benefit of the basin resources. The OBMP consisted of recommended studies, programs and facilities to further the objective of developing cost-effective, reliable, potable water supplies for the long-term while enhancing and protecting the yield and quality of the Basin groundwater aquifers and downstream uses. The OBMP provided a framework for developing a cooperative groundwater management program among agencies which use, manage or regulate water resources in the Basin. To facilitate implementation of the OBMP, an agreement (referred to as the "Peace Agreement") was signed by Watermaster, IEUA, Orange County Water District, and various other stakeholders on June 29, 2000. The OBMP Program EIR was certified on July 12, 2000, with IEUA acting as the lead agency.

The purpose of the OBMP was to develop a water quality and quantity based management plan for the Chino Groundwater Basin. The OBMP was intended to allow continued reliance on groundwater for beneficial uses within the basin - while minimizing demand for imported water -

and encourage the beneficial use of the large available storage space in the aquifer system. This Ten-Year Program is consistent with Watermaster's OBMP.

The OBMP addressed the need to develop additional water sources within the Chino Basin to meet future demands through water quality treatment, groundwater recharge, groundwater desalination, and water recycling programs. It has resulted in the design and construction of a looped pipeline recycled water system, along with storage reservoirs, and pump stations, that connects the IEUA recycled water production facilities with local recycled water customers as well as groundwater recharge basins. Construction and improvement of 18 groundwater recharge basins have also been completed, allowing for conservation of storm water, recycled water, and imported water in the underground Chino Basin. The OBMP Phase I Desalter program was also implemented which provided 12 MGD of new groundwater desalination capacity. In addition, the 100,000 acre-ft per year (AFY) MWD Dry Year Yield Program funded six new groundwater treatment facilities.

The OBMP Program EIR is now nine years old and determining consistency of specific projects with the PEIR in accordance with Section 15162 and 15163 of the State CEQA Guidelines has become more difficult to achieve. Thus, IEUA, the CBWM and stakeholders have made a decision to update the OBMP PEIR data base and to prepare a new environmental document. In addition, the original Peace Agreement has been updated to redefine the future programs and actions required to implement the OBMP, based on the past nine years of experience and accomplishments in implementing the OBMP. The "Peace II Agreement" was approved by the Court on December 21, 2007. IEUA is currently serving as the lead agency under CEQA for a focused Subsequent EIR for the OBMP update, called the "Peace II PEIR." It is expected to be completed by the end of FY 2009/10.

The Peace II Agreement provides, among other things, for "re-operation" and attainment of "hydraulic control" in the groundwater basin. Hydraulic control is defined as the reduction of groundwater discharge from the Chino North Management Zone to the Santa Ana River to *de minimis* quantities. Hydraulic control ensures that the water management activities in the Chino North Management Zone will not impair the beneficial uses of the Santa Ana River downstream of Prado Dam. Re-operation means the gradual increase in controlled overdraft of the Chino Groundwater Basin from 200,000 acre-ft to 600,000 acre-ft. Both of these objectives would be achieved through expansion of the desalter program such that the groundwater pumping for the desalters will reach 40,000 acre-ft/yr and that the pumping will occur in amounts and at locations that contribute to the achievement of hydraulic control and the strategic reduction in groundwater storage (re-operation).

Expansion of the desalter program would be accomplished with the installation and operation of a new well field to convey additional water to the desalters and a 10,000 acre-ft/yr expansion of Desalter II. The new product water developed at Desalter II would be conveyed to the Jurupa Community Services District ("JCSD"), the City of Ontario, and/or Western Municipal Water District ("WMWD") through existing and new pipelines. The facilities required to convey this water include pipelines, pump stations, and reservoirs. The precise locations of these facilities are unknown at this time.

1.10 MWD Integrated Resources Plan

The Integrated Resources Plan (IRP) is the long-term water resources strategy for MWD's six-county service area. The IRP is the blueprint that guides Metropolitan's efforts to increase water supplies and lower demands through 2035. MWD's first IRP was developed in 1996 and updated in 2004.

The 2009 IRP is being prepared as part of MWD's normal five-year planning cycle, but more importantly, it address' changing water supply conditions and the unprecedented series of challenges and uncertainties facing the Southern California region, such as Bay-Delta and Colorado River water supply restrictions, climate change, continued population growth, emerging water quality issues and rising energy costs. These challenges require new approaches that MWD, with the participation of Member Agencies and other stakeholders, is addressing in the 2009 IRP.

MWD Member Agencies are actively participating in the preparation of the 2009 IRP through Regional Workshops, a Technical Oversight Committee and six Technical Workgroups. The Technical Oversight Committee meets on a monthly basis to provide overall guidance and direction to the six Technical Workgroups. The workgroups are tasked with evaluating and providing recommendations with respect six resource areas: groundwater, recycled water, conservation, stormwater/urban runoff, graywater and seawater desalination.

1.11 MWD Dry Year Yield Program

In accordance with the goals of the OBMP, the 100,000 acre-ft per year (AFY) MWD Dry Year Yield (DYY) Program was approved in June 2003. MWD funded six new groundwater treatment facilities that allow optimal use of the Chino Basin groundwater resources.

In June 2007, MWD agreed to fund $1.5 million, for technical and environmental studies, to expand the DYY Program in the Chino Basin. It was used to characterize the DYY program objectives and Chino Basin capabilities, conduct conceptual designs for potential facilities development, prepare CEQA documentation, and produce a project development report (PDR). The DYY Program Expansion Project Development Report (PDR) was published in December 2008 and a Mitigated Negative Declaration for the DYY Expansion Project was adopted by the IEUA Board on December 17, 2008. The purpose of the PDR was to determine the facilities needed to store up to 174,000 AFY and to recover up to 40,000 AFY of stored groundwater for dry-year use, in-lieu of imported water from MWD.

1.12 MWD Water Supply Allocation Plan

Calendar Year 2007 introduced a number of water supply challenges for the Metropolitan Water District of Southern California (MWD) and its service area. Critically dry conditions affected all of MWD's main supply sources. In addition, a ruling in the Federal Courts in August 2007 provided protective measures for the Delta Smelt in the Sacrament-San Joaquin River Delta which brought uncertainty about future pumping operations from the State Water Project. This uncertainty, along with the impacts of dry conditions, raised the possibility that MWD would not have access to the

supplies necessary to meet total firm demands and would have to allocate shortages in supplies to the member agencies.

In preparing for this possibility, MWD worked jointly with its member agency to develop a Water Supply Allocation Plan (WSAP). The WSAP includes the specific formulas for calculating member agency supply allocations and the key implementation elements needed for administering an allocation should a shortage be declared. Ultimately, the WSAP will be the foundation for the urban water shortage contingency analysis required under Water Code Section 10632 and will be incorporated into MWD's Regional Urban Water Management Plan.

On April 14, 2009, the MWD Board implemented the WSAP, effective July 1, 2009. This decision came at a time when California was facing its third consecutive year of drought, the State Water Project 2009 Table A allocation was 20% and Governor Schwarzenegger had proclaimed a statewide water shortage emergency (February 26, 2009).

1.13 IEUA Drought Plan

Working together in response to MWD's WSAP, IEUA, its member agencies, Chino Basin Watermaster and the Chino Basin Water Conservation District, prepared the IEUA Drought Plan. The purpose of the IEUA Drought Plan is to implement the MWD WSAP according to these goals:

- Ensure equity and fairness throughout IEUA's service area.
- Avoid any payment of MWD WSAP or Dry Year Yield penalties to MWD.
- Recognize IEUA/MWD investments in local supplies to "drought proof" the IEUA service area.
- Encourage additional local investments to further drought proof the economy.
    - Enhanced Conservation
    - Recycled Water – Connect parks, schools and other landscapes
    - Interconnections to promote flexibility (Azusa Pipeline)
    - Increase Chino Desalter deliveries to the maximum
    - Groundwater Recharge (recycled water and capture of storm water when available)
- Coordinate IEUA service area communication strategy.
- Implement consistent with MWD WSAP and DYY contracts.

Due to continued water shortage conditions, IEUA can expect a second consecutive year with reduced imported water supplies from MWD's WSAP, which will require IEUA to implement its Drought Plan and member agencies to rely heavily on local water supplies. Specifically, they will maximize the use of recycled water; they will produce water (recover stored groundwater) pursuant to DYY Program; they will produce desalter water from the CDA; and recharge as much stormwater and recycled water as possible. Overall, IEUA's service area is well prepared for an extended period of water shortages, as the result of earlier investments in recycled water, the Chino Basin Desalter, groundwater and water use efficiency programs.

1.14 Recharge Master Plan

The Groundwater Recharge Program is a comprehensive plan to increase artificial groundwater recharge within the Chino Basin using stormwater, recycled water, and imported water. As a component of the CBWM's OBMP, the recharge program is described in the Recharge Master Plan, Phase II Report (August, 2001). In January of 2002, the IEUA Board of Directors approved the Recharge Master Plan Implementation Memorandum of Agreement, between CBWM, Chino Basin Water Conservation District, San Bernardino County Flood Control District (SBCFCD), and IEUA. Members of these four agencies formed a Groundwater Recharge Coordinating Committee to implement the initial $40-million program entitled the Chino Basin Facilities Improvement Project (CBFIP). The CBFIP is described further in Chapter 5 of this document.

Currently, the CBWM is updating the Groundwater Recharge Master Plan in response to changes in demand, recharge capacity, safe yield, and other factors. The Watermaster is required, consistent with the Peace II agreement and court deadline, to prepare an update of the Master Plan Update for the Chino Basin by July 2010. The proposed Groundwater Recharge Master Plan will include an assessment of safe yield changes and a revised safe yield projection as well as identify opportunities for enhanced storm water, recycled water and imported water recharge (including low impact development, new recharge projects and integrated storm water and supplement water facilities). The water supply plans for the agencies within the Chino Basin will be developed concurrent with IEUA's Regional Urban Water Supply Plan (which must also be completed in 2010) so that the data are consistent between the two regional plans.

1.15 IEUA Adopted Seven-Point Emergency Energy Action Plan

In response to the uncertainty in energy pricing and supply experienced in the winter of 2000, IEUA developed a Seven-Point Emergency Energy Action Plan. Some of the goals of this plan were to:

- Maximize the efficiency and self-sufficiency of existing office and plant operations
- Generate new local sources of energy and minimize external energy/fuel costs
- Maximize operational flexibility of plants to "roll off" the electric grid and natural gas sources, particularly during peak usage periods
- Promote regional energy and water conservation programs

Through this plan, IEUA has made major strides in building self-sufficiency and local control over long-term energy supplies and assisting the region and California in meeting their energy needs.

IEUA's Energy Management Strategy is evolving in response to both the volatility of the energy market and the new legislation (AB 32) governing greenhouse gas emissions. IEUA completed a Solar Power Project this in 2008 which will account for up to about 9% of its energy needs from renewable, non-polluting energy sources. IEUA's goal is to maximize the amount of power that is self-generated from renewable sources, which will help the Agency in its goal of going "gridless" by the year 2020 and produce all electricity "in-house." To accomplish these goals, IEUA has developed an Energy Management Strategy (presented to Board 11/12/08). The Energy Management Strategy includes optimizing energy consumption at Agency facilities; increasing the production and use of digester gas; increasing self-generation capacity utilization; pursuing new technologies;

and utilizing effective energy procurement strategies. The energy action plan will also deal with South Coast Air Quality Management District rule 1110.2, which limits natural gas usage to 10% of total gas usage and threatens to reduce the Agency's ability to produce its own electricity.

1.16 Salinity Management Action Plan—Regionalization of NRW System to Maximize Salt Export

The IEUA and its contracting agencies are implementing a regional recycled water distribution system to serve recycled water for non-potable reuse and groundwater recharge. Salinity is a critical element of recycled water quality for recharge and many other uses. Reduced salinity will enhance the marketability of recycled water and help IEUA meet the goals of the OBMP and the Maximum Benefit Basin Plan objectives. Reduced wastewater salinity will also help IEUA to comply with effluent limitations for TDS in its wastewater discharge permits. IEUA developed a Salinity Management Action Plan in 2002. Some of the strategies that were identified included:

- Maximizing the use of the IEUA's non-reclaimable waste (NRW) system by connecting more industries
- Reducing the use of water softeners in the area to decrease saline flows into the regional water recycling plants
- Reducing the salt contributions from IEUA treatment plant operations by optimizing the use of chemicals at the facilities

This is also consistent with the Maximum Benefit Basin Plan, adopted in 2004 by the Santa Ana Regional Water Quality Control Board, which established new groundwater TDS and nitrogen water quality objectives. The Plan allows the use of recycled water for groundwater recharge while providing reasonable protection for the groundwater quality in the region. Key commitments in the plan included construction of Chino Desalters, recycled water quality management through industrial waste control, optimum use of the NRWS, reducing the use of water softeners to decrease saline flows into the regional water recycling plants, ion-exchange plants, and groundwater monitoring programs.

As an outgrowth of the Salinity Management Plan, IEUA also developed an NRW Action Plan with extensive coordination and discussion with IEUA's Regional Technical and Policy Committees, the CBWM, and the Regional Board. IEUA also expects to achieve substantial avoided costs and valuable benefits for the region as a result of implementation of the current NRW Action Plan.

The NRW Action Plan adheres to the IEUA Board's policy of phased implementation of budgets and rates in order to provide economic incentives for the export of brine wastes through the NRW system. The Agency's FY 2009/10 Budget and this Ten-Year CIP incorporate specific budget options that were developed in coordination with the IEUA's Regional Technical and Policy Committees. A detailed list and summary of progress on individual NRWS action plan elements is summarized in Chapter 6 of this report.

1.17 IEUA Urban Water Management Plan

In the summer of 2009, IEUA began the preparation of the 2010 Urban Water Management Plan (2010 UWMP) to plan for the region's water management needs and to comply with the California Urban Water Management Planning Act. The 2010 UWMP will update the current Urban Water Management Plan, adopted by the Board in December 2005. It will include the following sections:

- Introduction
- Population and Land Use
- Water Demand & and Supply
- Water Use Efficiency Program
- Wastewater Flows and Projections
- Recycled Water Program
- Regional Groundwater Management Programs
- Alternative Water Supplies
- Water Shortage Contingency Plan
- Water Quality Impacts on Reliability
- Water Service Reliability
- UWMP Adoption and Implementation

Important additions to IEUA's 2010 UWMP, compared to its 2005 UWMP, are Wastewater Flows and Projections, Climate Change, Storm Water Management and development of a Regional Water Efficiency Plan that meets the new 20% reduction in per capita water use by 2020 mandate and other conservation related requirements that have been adopted by the legislature since 2005.

Staff will also prepare the 2010 UWMP's for consideration and adoption by the Water Facilities Authority and the Chino Basin Desalter Authority, using the IEUA UWMP as a basis. This approach ensures continuity among the Urban Water Management Plans within our service area and provides an important cost-saving service to both of these agencies.

The 2010 UWMP will be prepared in coordination with the regional planning efforts of the Chino Basin's Optimum Basin Management Plan (OBMP), the Chino Basin Groundwater Recharge Master Plan Update, the Santa Ana Watershed Project Authority's One Water One Watershed (OWOW) Plan and the Metropolitan Water District of Southern California's Integrated Resources Plan (IRP).

The 2010 UWMP will be prepared in close coordination with the retail agencies within IEUA's service area as well as with the Metropolitan Water District of Southern California (MWD), Santa Ana Watershed Project Authority, Chino Basin Watermaster, Water Facilities Authority, the Chino Basin Desalter Authority and other cities and agencies within the watershed.

1.18 Regional Board Maximum Benefit Basin Plan Amendment

The Regional Water Quality Control Board, Santa Ana Region, (Regional Board) adopted amendments to the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) on January 22, 2004 incorporating a "maximum benefit" proposal recommended by IEUA and CBWM. The Maximum Benefit Basin Plan establishes new groundwater Total Dissolved Solids (TDS) and

Total Inorganic Nitrogen (TIN) water quality objectives and waste load allocations that allow the use of recycled water for groundwater recharge while providing reasonable protection of the groundwater quality in the region.

Reuse of recycled water for groundwater recharge is a critical component of the OBMP and water supply plans for the region. As part of the Maximum Benefit Basin Plan, IEUA and CBWM have committed to a specific set of projects and requirements in order to demonstrate that the water quality of the groundwater basin is protected and that the plan provides the maximum benefit to the users of the groundwater basin. These commitments include:

- Surface water and groundwater monitoring programs
- Chino Desalters (consistent with OBMP requirements of 40 MGD by 2020)
- Recharge facilities/conjunctive use program
- Recycled water quality management (through industrial waste source control and optimum utilization of the IEUA's non-reclaimable waste (NRW) system), and
- Hydraulic control to protect the Santa Ana River quality (consistent with the Orange County Water District and IEUA Memorandum of Understanding)

If IEUA and CBWM achieve timely and appropriate implementation of these commitments, then the Basin Plan's "maximum benefit" water quality objectives will be applied instead of more restrictive historical "anti-degradation" objectives. This will result in significant savings to the Agency for outside water imports and wastewater treatment costs.

1.19 SAWPA Integrated Watershed Program

Since its formation in 1967, Santa Ana Watershed Project Authority (SAWPA) has been a water resource planning agency for the Santa Ana River Watershed region. In 2002, SAWPA acted as a coordinator for the stakeholders of the region to produce the Santa Ana Integrated Watershed Program (SAIWP). It consisted of seven major elements:

- Water storage to drought-proof the watershed by storing up to 1.3 million acre-ft (MAF) of new water underground throughout the Santa Ana River Basin
- Water quality improvement to mitigate negative impacts from past agricultural, industrial and residential point and non-point source pollutants
- Implementation of water recycling as a means of reducing the area's overall need for imported water
- Development of flood protection along the main stem of the Santa Ana River
- Enhancement of wetlands environment and habitat to restore the Pacific Flyway
- Recreation and conservation to bring additional recreational opportunities and increase public awareness of the Santa Ana River's environmental needs and purposes
- Use of the Santa Ana Regional Interceptor (SARI) brine disposal pipeline to carry saline wastes to the ocean in order to protect the long-term beneficial uses of the groundwater basins

SAWPA has pursued those elements simultaneously based on the availability of state grant funding and the aggregated needs of SAWPA member agencies, including the IEUA, water districts, cities, counties, and several environmental groups. The success of this planning effort provided $235 million of Proposition 13 grand funding for the watershed. In 2005, SAWPA updated the SAIWP to include the urban water management plans of the member agencies and provide an updated summary of the many planning processes underway and priority projects of the stakeholders of the watershed. As a result of this effort, SAWPA received a $25 million integrated planning grant (Proposition 50) from the Department of Water Resources and provided a $4.9 million to grant to IEUA for recycled water projects during FY 2008/09.

In early 2009, SAWPA completed a new integrated water management plan for the region known as "One Water One Watershed," or OWOW. Part of the impetus for starting the OWOW planning process was the passage of Proposition 84 by the California voters in 2006. Proposition 84 allocated $1 billion to regions with qualifying integrated watershed plans. The OWOW plan provides the basis for seeking Proposition 84 grant funds from DWR and will help to address the significant water supply crisis which has arisen throughout the state. The goal of OWOW is a sustainable watershed that is drought-proofed, salt-balanced, and supports economic and environmental vitality.

1.20 SAWPA Planning Work Groups

SAWPA is a joint powers agency which conducts water-related investigations and planning studies, and builds physical facilities where needed for water supply, wastewater treatment or water quality remediation. Since the early 1970's, SAWPA has played a key role in the development and update of the Basin Plan for the Santa Ana Region. Several task forces have been formed to address complex technical and regulatory issues and resolve inter-Agency conflicts. These task forces generally include staff of the Regional Water Quality Control Board-Santa Ana Region as active members or advisors, and may see buy-in from other state and federal regulatory bodies.

The Maximum Benefit Basin Plan Amendment described above was an outgrowth of SAWPA's Nitrogen/Total Dissolved Solids (N/TDS) Task Force. The task force, which met between 1996 and 2003, included the IEUA and 21 other water supply and wastewater agencies from the region as well as the Regional Board. Coordinated by SAWPA, the task force completed multimillion dollar studies to review groundwater TDS and nitrogen objectives, groundwater sub-basin boundaries, the TIN and TDS waste load allocations and other components of the Regional Board's nitrogen and TDS management plans. The purpose of this study was to develop more scientifically defensible water quality objectives and avoid any unnecessary constraints on water recycling opportunities. The original scope of work of the N/TDS Task Force included conducting a nitrogen loss coefficient monitoring program for Santa Ana River, Reach 3, which was completed in 2005.

IEUA is currently participating in SAWPA's Basin Monitoring Program Task Force (BMPTF). This task force was an outgrowth of the N/TDS Task Force study and the 2004 Basin Plan amendments. The group is tasked with executing some of the monitoring and reporting commitments of the Maximum Benefit Basin Plan Amendment, such as a triennial compilation of ambient groundwater quality data and an annual report of Santa Ana River water quality.

The BMPTF also funds updates to the Santa Ana River Wasteload Allocation model that was developed by Wildermuth Environmental, Inc., and uses the models to evaluate different discharge scenarios and the impacts on Orange County groundwater. In late 2009, the Basin Monitoring Task Force proposed an amendment to the task force's founding agreement. The amendment to the agreement includes the new task of conducting Santa Ana River wasteload allocations and other related studies to be used for new Basin Plan Amendments. Recent activities include wasteload allocation modeling for the Chino South groundwater sub-basin to update the N/TDS Management Plans; and drafting the Declaration of Conformance with the Recycled Water Policy.

Another SAWPA work group in which IEUA is an active participant is the Emerging Contaminants (EC) Work Group. The EC Workgroup was formed in 2007 to develop a characterization program for emerging constituents. The workgroup is comprised of imported water agencies and publicly-owned treatment works. The EC Work Group study effort was separated in two phases:

- Phase 1 covered current water quality monitoring programs, regulatory issues, stakeholder concerns, analytical methods, and the state-of-the-science with respect to potential public health & environmental impacts. This phase culminated in a written report submitted to the Regional Board in December 2008 characterizing the workgroup's preliminary findings.

- Phase 2 defines the Emerging Constituents Investigative Plan based on ongoing characterization studies and other related evaluations. The work plan was approved by the RWQCB during the December 2009 Regional Board meeting as Resolution No. R8-2009-0071.

In accordance with the adopted work plan, each participating wastewater agency will sample and pay for their own analyses. The work plan includes a list eleven emerging constituents identified during the characterization phase of the study and will be summarized in a final report.

1.21 Environmental Documentation

To comply with the California Environmental Quality Act (CEQA), IEUA certified a Programmatic Environmental Impact Report (PEIR) on June 28, 2002. It included IEUA's Wastewater Facilities Master Plan, Organics Management Business Plan and the Regional Recycled Water Program. IEUA also served as the lead Agency under CEQA for preparation of the Program EIR for the CBWM's OBMP, certified on July 12, 2000.

Supplements to the Programmatic EIRs are prepared, when necessary, as specific project elements are better defined during each project design. For example, for the Inland Empire Regional Composting Facility, IEUA prepared a CEQA Initial Study and Finding of Consistency with the Facilities Master Plan PEIR. Similarly, for several of the recycled water projects, IEUA prepared Addenda to the Facilities Master Plan PEIR as well as NEPA documents to comply with federal funding requirements. The Agency is currently serving as the lead agency for coordination and preparation of a focused Subsequent EIR for the updated OBMP or "Peace II Agreement" and expects to have it completed by the end of FY 2009/10. Furthermore, in December 2008, the Agency certified a Mitigated Negative Declaration for the Dry Year Yield Expansion Project.

1.22 California Water Plan

In March 2009, California's Department of Water Resources published the latest update to the California Water Plan (Update 2009). The five-volume report is a comprehensive reference document on California water conditions, challenges and water resource management. It is a blueprint for sustainable water management in a condition of uncertainty and vulnerability due to climate change and changing ecosystem needs. Update 2009 came on the heels of a historic water legislation package passed by the California State Legislature and signed by the Governor in November 2009.

Updates of the 1957 California Water Plan are required by law every five years. These reports have evolved from statistical summaries of water supply and demand to expert analyses of complex issues of hydrology, water use, conservation, and emerging trends in water resource management, flood safety and climate change adaptation. The Plan also provided broadly supported strategic recommendations to guide future investments and inform resource management policy-making.

1.23 Bay-Delta Conservation Plan

The Bay-Delta Conservation Plan (BDCP) is being prepared through a collaboration of state, federal, and local water agencies, state and federal fish agencies, environmental organizations, and other interested parties. These organizations have formed the BDCP Steering Committee. The plan will identify a set of water flow and habitat restoration actions to contribute to the recovery of endangered and sensitive species and their habitats in California's Sacramento-San Joaquin Delta. The goal of the BDCP is to provide for both species/habitat protection and improved reliability of water supplies.

As the BDCP evaluates habitat, physical and operational alternatives necessary to restore the Delta ecosystem while providing water supply reliability, state and federal agencies are developing a joint Environmental Impact Report/Statement (EIR/EIS) under the Delta Habitat Conservation and Conveyance Program (DHCCP). The EIR/EIS will determine the potential environmental impacts of the proposed BDCP.

Lead agencies for the EIR/EIS are the California Department of Water Resources, the Bureau of Reclamation, the U.S. Fish and Wildlife Service, and NOAA's National Marine Fisheries Service, in cooperation with the California Department of Fish and Game, the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers.

The BDCP is being developed in compliance with the Federal Endangered Species Act (ESA) and the California Natural Communities Conservation Planning Act (NCCPA). When completed, the BDCP would provide the basis for the issuance of endangered species permits for the operation of the state and federal water projects. The plan would be implemented over the next 50 years.

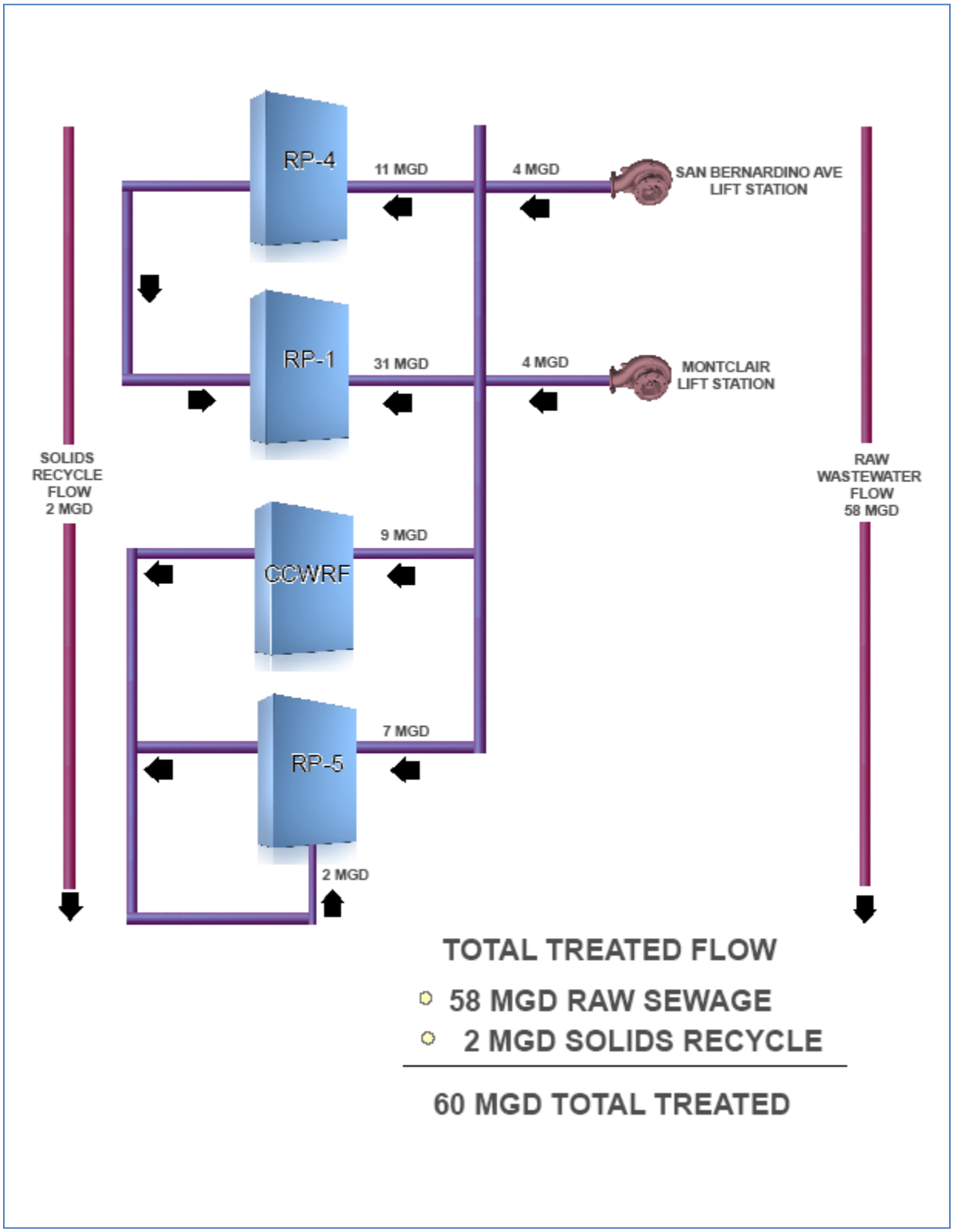
2.0 WASTEWATER FLOW PROJECTIONS

Exhibits I through V (at the end of this report) show total wastewater flow projections for the next ten years from IEUA's service area and individually for the RP-1, RP-4, CCWRF and RP-5 service areas. The flow projections are compared to current and future planned plant capacities. On these exhibits, the "baseline" flow is defined as raw sewage flow from the service area that is tributary to a treatment plant, without reflecting any of the current or planned diversions, bypasses, or recycle streams. In contrast, the "adjusted" flow does include bypasses, diversions and recycle streams and it is the actual flow that was received at a treatment plant. Exhibits I through V also point out any planned projects or major operational changes that will significantly affect capacity utilization.

2.1 Wastewater Flow Trends

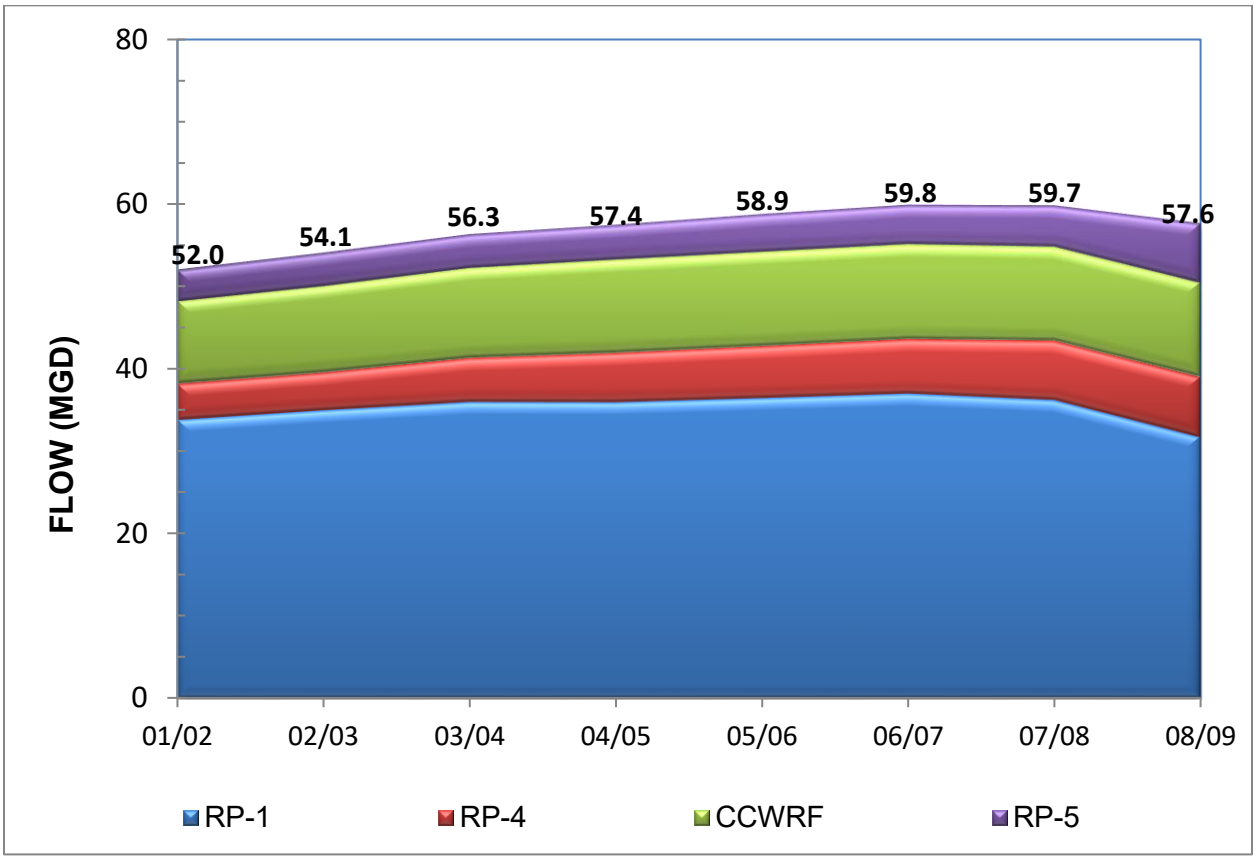
Figure 2-1 shows the current flows being treated at each of the Agency's regional water recycling facilities. In June 2009, the San Bernardino Avenue Lift Station came on line, which increased the amount of flow treated at RP-4 by approximately 4 MGD and correspondingly decreased the amount treated at the other three regional recycling facilities. The use of the lift station allows more flow to be supplied directly to recycled water users in the Northeast recycled water network.

Figure 2-1: Current Wastewater Flows



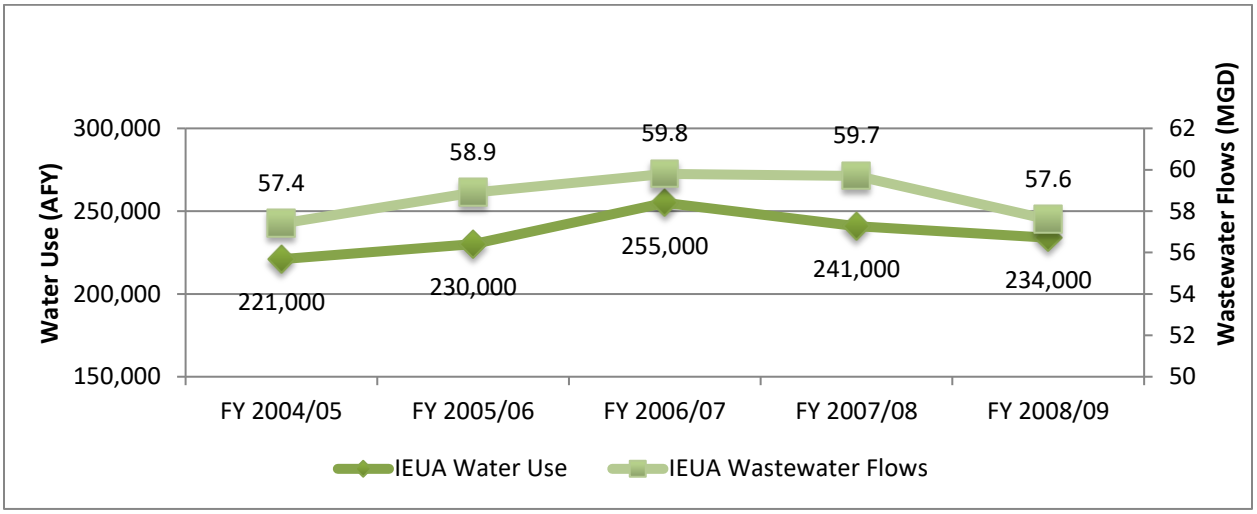
IEUA's historical wastewater flow trend is shown below in Figure 2-2. This figure depicts the raw sewage from each regional water recycling plant's tributary area and the total for all facilities combined.

Figure 2-2: Regional Plant Wastewater Flow History



Since the beginning of the current drought in FY 2006/07, both water consumption and wastewater generation in IEUA's service area have been trending downward (Figure 2-3). IEUA's member agencies' overall water use decreased approximately 22,000 acre-feet over the past two years. This coincides with the beginning of the three-year drought and can be largely attributed to IEUA and its member agencies' public education, water use efficiency programs, ordinance enforcement and the economic downturn.

Figure 2-3: Recent Water Use and Wastewater Flow Trends



In FY 2008/09, with the recorded increase of 1,314 EDUs in the IEUA service area, IEUA would have expected to see an increase of up to 360,000 gallons per day in total raw sewage influent flow into the regional sewerage system (estimated using a wastewater generation factor of 270 gpd/EDU). Instead, the average daily flow rates of raw sewage into the Regional Water Recycling Plants have decreased by approximately 1 MGD. Los Angeles County and Orange County sanitation agencies have also experienced a leveling off or declining of wastewater flows over the past few years. This trend may reflect the decrease in economic growth and the increase in area foreclosures to some extent. However, it is expected to continue for the next few years, even after the economy rebounds, as conservation continues.

2.2 Flow Factors

The backbone of the regional system has been designed using the raw sewage flow rate specified in the Regional Sewerage Service Contract—Exhibit J—which is 270 gallons per day per equivalent dwelling unit (gpd/EDU). IEUA still plans its regional sewer system around Exhibit J. However, the current average flow rate for new developments is estimated to be 200 gpd/EDU. Newly constructed and re-modeled homes are assumed to generate less wastewater on average due to the installation of water- efficient appliances. It is expected that the overall average Agency service area flow per EDU will continue to decline, given the rising price of water, decreases in water supply availability and greater need for water conservation.

2.3 Anticipated Service Area Growth

A survey of IEUA's Contracting Agencies is conducted in September of each year to determine the rate of projected growth for the next ten years, in terms of Equivalent Dwelling Units (EDUs). The results of the 2009 survey are included in Appendix A and summarized in Table 2-1.

TABLE 2-1
TEN-YEAR GROWTH FORECAST BY CONTRACTING AGENCY (SEPTEMBER 2009)

Fiscal Year	City of Chino	City of Chino Hills	CVWD	City of Fontana	City of Montclair	City of Ontario	City of Upland	Total
	(EDUs)	(EDUs)	(EDUs)	(EDUs)	(EDUs)	(EDUs)	(EDUs)	(EDUs)
09/10	92	31	308	500	158	318	52	1,459
10/11	42	412	461	650	290	318	197	2,370
11/12	56	797	464	715	255	1,428	422	4,137
12/13	54	780	468	760	123	1,508	581	4,274
13/14	63	530	471	815	48	1,673	695	4,295
14/15	61	243	476	1,000	48	1,754	402	3,984
15/16	54	143	479	1,365	48	1,754	494	4,337
16/17	54	93	483	1,217	48	1,992	280	4,167
17/18	54	78	487	1,325	48	1,992	355	4,339
18/19	54	41	490	1,195	48	1,992	105	3,925
Totals	**584**	**3,148**	**4,587**	**9,542**	**1,114**	**14,729**	**3,583**	**37,287**

Table 2-1 shows that 40% of the growth in the IEUA service area was projected to occur within the City of Ontario (primarily from the development of the New Model Colony). Building activity was projected to be approximately 75% residential and 25% commercial/industrial, by EDUs. In round numbers, the Contracting Agencies projected 4,000 EDU's per year on average over the next ten fiscal years (FY 2009/10 – FY 2018/19).

The growth forecast for IEUA's FY 2010/11 annual budget is more conservative, assuming slower growth and fewer new EDUs per year, consistent with the slowdown in the economy. The ten-year budget and capital spending plan assumes an average of 1,100 new EDUs in FY 2010/11, 1,200 new EDU's in FY 2011/12 and increasing by 200 EDUs per year for each of the following 8 years.

2.4 Ten-Year Wastewater Flow Forecast

For purposes of forecasting future wastewater flows and determining capacity needs, this Ten-Year Plan uses a revised estimate of EDU growth that reflects the current conditions and assumptions that were the basis of the Agency's long-range budget.

Exhibits I through V at the back of this report show the flow projections for each individual facility and the Agency as a whole in graphical form. These projections are based on the Agency's budgetary estimates of EDU growth. Figure 2-4 below shows a comparison of projected wastewater flows using the original Contracting Agency estimates and the revised budgetary estimates. Using the Contracting Agency estimates, the total wastewater flows would increase by 6-8 MGD over the 10 years. Using the adopted budget estimates, the total flows will increase by 3-4 MGD.

Figure 2-4: 10-Year Flow Forecast (200gpd/EDU)

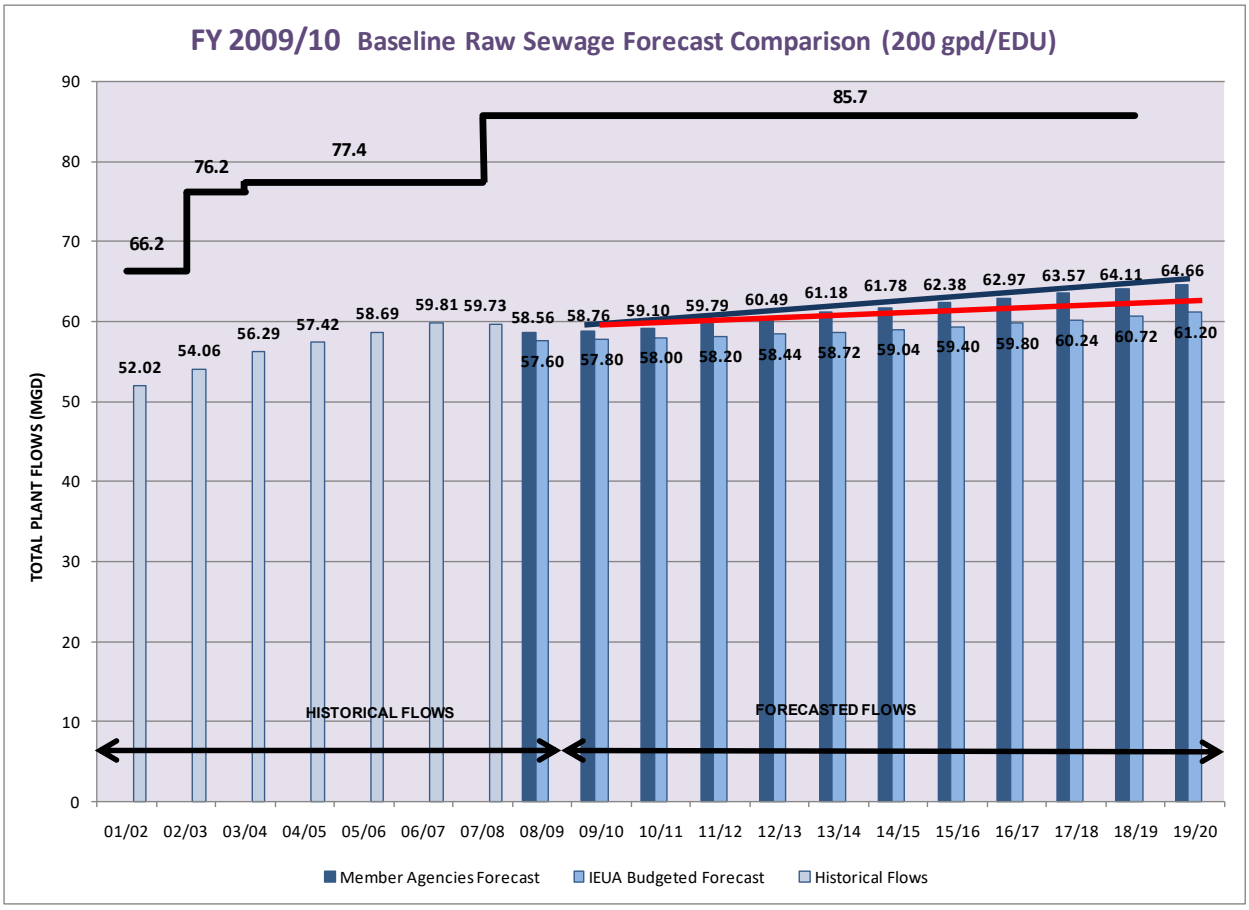
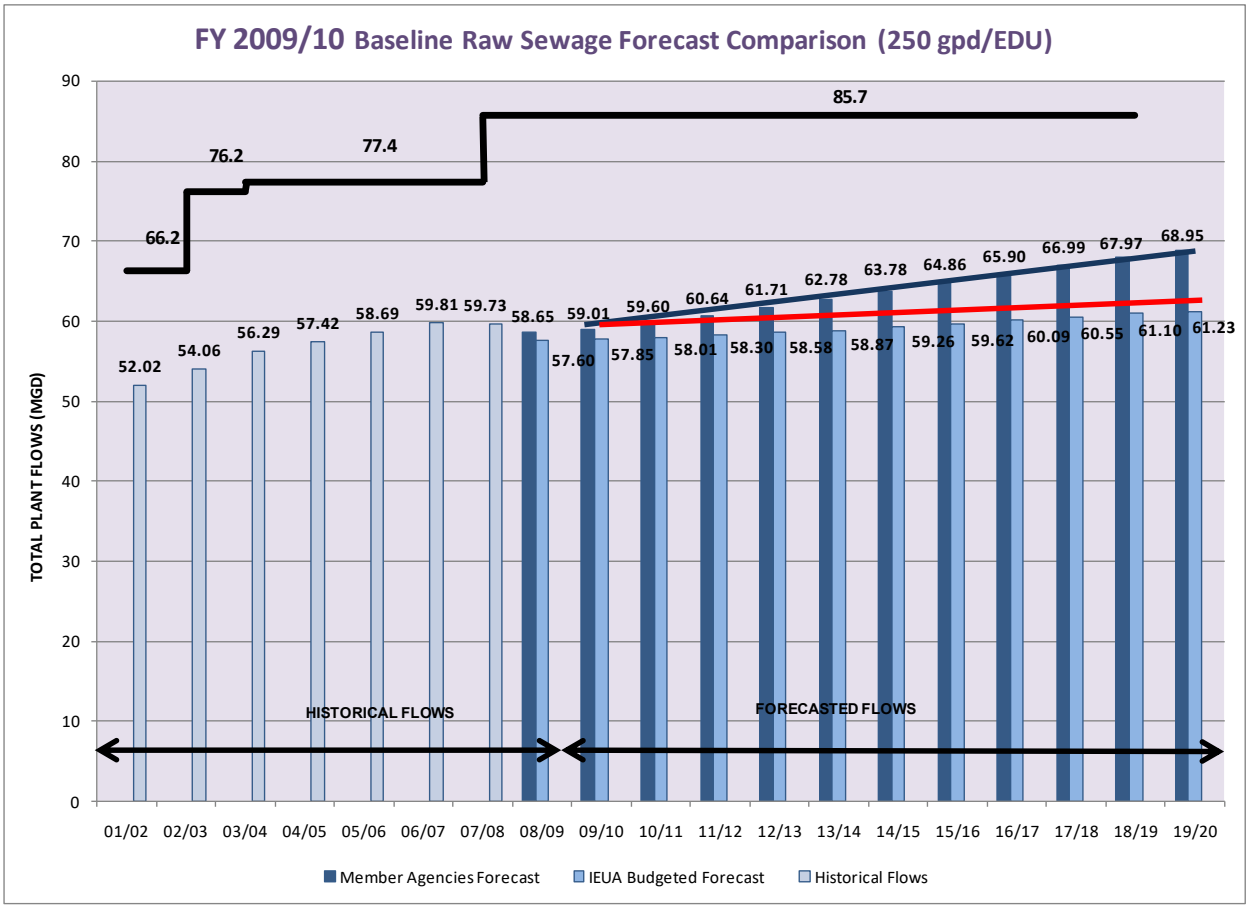


Figure 2-5 provides the same comparison using a flow factor of 250 gpd/EDU. The upper horizontal solid line is the combined capacity of the Agency's water recycling facilities. Regardless of which flow factor and which growth forecast is used, the treatment capacity is adequate for the projected flows.

Figure 2-5: 10-Year Flow Forecast (250 gpd/EDU)



2.5 Capacity Utilization Forecast

Table 2-2 presents the Ten-Year Capacity Demand Forecast by wastewater treatment plant. The current service areas of each Regional Plant were used to allocate projected sewage flows to each plant. For each service area, Table 2-2 compares the anticipated average regional plant influent flows now (FY 2009/10) and in FY 2019/20. It shows the baseline raw sewage flows from the service areas as well as the "adjusted" flows. The adjusted flows are the expected actual treated flows including bypasses, diversions, and the solids handling liquid recycle stream that is pumped from RP-2 to RP-5. Currently, the total baseline raw sewage flow is 57.8 MGD and the adjusted total influent flow is 60.0 MGD. The difference (2.2 MGD) is due to recycling solids-handling sidestreams between RP-2 and RP-5.

TABLE 2-2

REGIONAL SYSTEM FLOW AND CAPACITY UTILIZATION SUMMARY (MGD)

	FY2009/10 Projected				FY2019/2020 Forecast			
Water Recycling Facility	**Raw Service Area Flow**	**Plant Influent Flow**	**Plant Rated Capacity**	**Percent Capacity Utilization**	**Raw Service Area Flow**	**Plant Influent Flow**	**Plant Rated Capacity**	**Percent Capacity Utilization**
RP-1	31.8	31.3	44.0	71%	32.8	32.3	44.0	73%
RP-4	7.3	11.0	14.0	79%	8.2	11.8	14.0	84%
CCWRF	11.5	8.7	11.4	76%	11.7	9.0	11.4	79%
RP-5	7.2	9.0	16.3*	55%	8.5	10.3	16.3	63%
IEUA Total	57.8	60.0	85.7	70%	61.2	63.4	85.7	74%

*Note: RP-5's current discharge permit establishes the plant's rated capacity, including recycle flows, at 16.3 MGD.

Table 2-2 Assumptions Looking Forward:

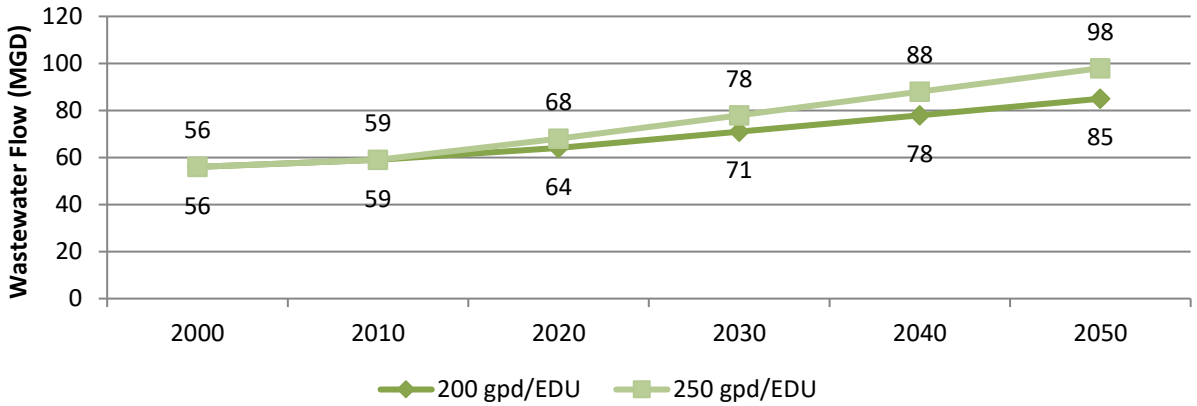
- Assumes 200 gpd/EDU and uses the Agency's budgetary estimate of projected EDU growth
- Former Ontario Lift Station flow (2.5 MGD) is considered part of RP-5 raw service area flow
- San Bernardino Lift Station routing 4 – 5 MGD (tributary to RP-1) to RP-4
- All flows going through the Montclair Interceptor are routed to RP-1
- 2.2 MGD of solids handling side-stream flow is recycled from RP-2 to be treated at RP-5

As shown in Table 2-2, the forecasted total system flow for FY 2019/20 is 63.4 MGD, including the recycle stream from RP-2 to RP-5. The overall treatment plant capacity utilization is expected to increase to 74% at the end of ten years. Agency-wide capacity utilization will be balanced and optimized between facilities to achieve the lowest operational cost while satisfying recycled water demands and water quality requirements. This will be accomplished using the bypass and diversion capabilities discussed in Chapter 1. As reflected in Table 2-2, it is likely that capacity utilization at RP-4 and CCWRF will be selectively higher than at the other water recycling facilities, with the operational goal being to supply recycled water to the users with the least amount of pumping energy.

2.6 Fifty-Year Flow Projection

As indicated in Figure 2-6 ("Regional System 50-Year Flow Projections"), wastewater flows have been projected to reach somewhere between a low of 85 MGD to a high of 98 MGD by the year 2050. These projections were developed considering current, historical and future growth information. The "low" scenario reflects a wastewater flow increase of about 0.7 MGD per year and the "high" scenario reflects 1.0 MGD per year. The current trend falls between the two curves.

Figure 2-6:
Regional System 50-Year Projection



3.0 REGIONAL PROGRAM CAPITAL IMPROVEMENT PLAN SUMMARY

3.1 Regional Program Overview

IEUA's Regional Program encompasses the activities associated with construction and replacement of the Agency's wastewater, energy cogeneration, and solids handling facilities. It includes the Regional Sewerage System consisting of the sewage collection trunk lines and pump stations, the wastewater treatment and disposal facilities, the recycled water production facilities, and also the facilities for generating energy from biogas as well as recycling or disposing of biosolids.

The capital improvements planned for the Regional Program are consistent with the recommendations in the Agency's Wastewater Facilities Master Plan (adopted in 2002). A basic requirement of the capital improvement program is to keep pace with the needs for wastewater treatment and solids handling capacity based on future growth projections provided by the Contracting Agencies. The adequacy of the capital improvement program is demonstrated by the projected flow and capacity comparisons for individual regional plants presented in Exhibits I through V at the end of this report. The forecasted flow curves are adjusted to take into account the Agency's ability to make planned diversions within the system to optimize the use of existing facilities.

IEUA's Regional Sewerage System has been in an expansion phase over the past 5 to 10 years which culminated with the construction of 7 MGD of new capacity at RP-4 and the completion of the Eastern Trunk Sewer connecting RP-1 and RP-5. These projects have helped to improve the availability and utilization of system capacity and to match recycled water supplies to demands. The completion of the San Bernardino Avenue Pump Station in FY 2008/09 helped to further optimize the use of existing system capacity and defer the need for treatment plant expansions.

In general, the focus of this year's Regional Program TYCIP is on projects to:

- Increase energy sustainability
- Improve the performance of existing facilities
- Provide optimization of existing facilities
- Upgrade essential items like the RP-1 Flare & Biofilter

Following is a list of projects identified for this fiscal year:

- Agency wide HVAC Improvements
  - Identify the 3 most critical areas that need HVAC upgrades for completion during this fiscal year. The remaining HVAC upgrades will be done in following years
- Agency wide server room fire suppression
  - Identify the most critical server rooms that need fire suppression for completion during this fiscal year. The remaining server rooms fire suppression will be done in following years
- New Main Laboratory
  - Complete design for the new main laboratory (construction will follow when funding becomes available)
- RP-1 Upgrade projects
  - Existing RP-1 flare (waste gas burner) has to be replaced to meet current and future digester gas production and air quality requirements
  - RP-1 biofilter has been rebuilt and requires media replacement
  - RP-1 Headworks gates were identified as needing replacement as part of the facility asset management plan
  - RP-1 lab boiler upgrade/replacement
  - Replacement of corroded light poles
  - RP-1 Digester gas condensate sump improvement
- CCWRF Upgrade projects
  - Tertiary filter media replacement
  - Aeration basin air ducting repair/replacement
- RP-4 Upgrade projects
  - RP-4 fencing repairs
- RP-5 Upgrade projects
  - Heating for sodium bisulfate injection lines

There are no major expansions of wastewater treatment facilities planned in the next ten years, due to the slowdown in housing growth and the reduction in the daily volume of wastewater requiring treatment. As described in Chapter 2, the reduction in wastewater flow rates has corresponded with the statewide drought and the water use efficiency programs that have been instituted in the service area.

This year's TYCIP will include the design phase of the New Main Laboratory for the Agency located at the headquarters. We will proceed with the construction phase of the project when funding becomes available.

It is important to note that, even though wastewater flows are decreasing, the concentrations of organic matter and suspended solid materials in the wastewater are increasing roughly proportionately. More solids are removed from the wastewater during treatment, requiring more solids handling capacity. IEUA will be able to handle additional solids generated from the RP-1 and RP-4 facilities, in the northern service area, due to the construction of the RP-1 Dewatering Facility Expansion Project (began in November 2009 and scheduled for completion in January 2012). The current TYCIP does not include any solids handling facility expansions in the southern service area (served by RP-5, CCWRF, and RP-2), but there could potentially be a need for expansion in the future beyond ten years.

This year's Regional Program Ten-Year Plan recommends $95.1 million in capital project expenditures, including $67.6 million for capital upgrade and expansion projects and $27.5 million for asset management (capital replacement) projects. The Regional Capital Fund budget includes the Agency's share (50%) of capital contributions for the Inland Empire Regional Composting Facility. The ten largest Regional Program projects are as listed in Table 3-1.

TABLE 3-1

REGIONAL WASTEWATER CAPITAL PROJECTS

Major Capital Projects	$ Millions
RP-1 Dewatering Facility Expansion Project	$19.0
Plant Equipment Improvements Project (All Facilities)	$13.0
Capital upgrades RP-1, RP-2,CCWRF,RP-4, RP-5	$ 28.0
RP-1 Asset Replacement	$8.6
Miscellaneous Wastewater Construction & Emergency Projects	$ 5.0
Major Facilities Repairs/Replacement Project	$2.5
RP-1 Facilities Improvements	$ 2.0
IERCA 50% Capital Contribution	$2.5
New Operations Laboratory	$1.0*
Regional Sewer Special Engineering Projects	$1.0

Several of the major capital projects in the TYCIP will be taking place at more than one Regional facility. For example, the Major Facilities Repairs/Replacement Project allocates $0.5 million per year for repair or replacement of critical equipment when an emergency need arises at any of the Regional wastewater facilities. It will address emergency needs that are not identifiable through the regular project development process, such as sudden equipment failure that threatens to result in regulatory noncompliance. Similarly, starting in FY 2010/11 and spread over 10 years, the Plant Equipment Improvements Project allocates $0.5 million to $2 million each fiscal year for multi-facility replacement projects as they arise. Additionally, the Miscellaneous Wastewater Construction and Emergency Projects are budgeted at $0.25 million per fiscal year for emergency engineering projects and $0.25 million per fiscal year for emergency construction.

3.2 Organics Management Projects

IEUA's long-range plans for treating and utilizing biosolids as well as addressing the problems of dealing with manure and wood waste generated within its service area were addressed in the Chino Basin Organics Management Business Plan, dated May 31, 2001 and related Organics Management Strategy Technical Memoranda. The Business Plan was developed to be consistent with IEUA's mission to protect public health, the groundwater basin, and the environment (e.g., reduces air pollution and improves water quality).

Included in the Business Plan was a local organics recycling program that includes the local communities as partners to divert organic solids from landfill disposal and to be consumers of recycled organic products generated from within the community. IEUA formed a Joint Powers Authority with the County Sanitation Districts of Los Angeles County (CSDLAC), called the Inland Empire Regional Composting Authority (IERCA), to implement the shared goal of development of a sustainable biosolids management project. In 2007, the two joint powers agencies completed the construction of a biosolids composting facility, called the Inland Empire Regional Composting Facility (IERCF). The IERCF is located in Rancho Cucamonga, adjacent to RP-4. This new composting facility replaced IEUA's Co-Composting Facility which was located in Chino and was closed in 2006.

The IERCF is designed to process and recycle over 200,000 tons per year of biosolids and wood waste from local communities, producing over 240,000 cubic yards of high-quality compost each year for local landscaping and horticultural uses. The facility is currently operating at its design capacity, receiving nearly 600 tons per day of biosolids and recycled waste products. The facility processes 150,000 tons of biosolids per year—half from IEUA and half from CSDLAC, representing all of the biosolids produced at the IEUA. The composted product, which is marketed as SoilPro Premium Compost, has been sold as a soil conditioner which helps improve water retention resulting in better plant growth and water savings. In order to receive recycled products year-round, a compost storage facility has been constructed to allow the facility to store compost during the winter season when compost demand is low.

The construction of the RP-1 Dewatering Facility expansion which will use centrifuges to dry solids to a higher percentage has the potential of freeing up 22 - 31 tons of capacity at IERCF per day.

On the energy side of IERCF operations, the IERCA entered into a Power Purchase Agreement with Sunpower, Incorporated for the installation of 1 megawatt of solar panels placed onto the roof of the IERCF. The project was completed in December 2008 and is currently providing about half of the facility's required electrical power during operating hours.

Other ongoing capital projects completed include a Backup Power Generation Facility (in construction), and emergency lighting. Future demands and operational issues will determine what the capital needs entail but currently no significant capital costs are budgeted. Any capital maintenance, enhancement, or replacement will be jointly analyzed and determined with the CSDLAC.

The Agency's share of capital contributions is being recorded as part of the Wastewater Regional Capital Program as opposed to a separate organics management fund. Annual capital contributions of $250,000 are budgeted in the current TYCIP for a total of $2.5 million over the ten-year period.

3.2.1 Northern Service Area (RP-1, RP-4)

The major RP-1 capital projects are summarized in Table 3-2 below:

TABLE 3-2

RP-1/RP-4 SERVICE AREA —MAJOR CAPITAL PROJECTS

Project	Scheduled Completion	Ten-Year Cost ($ Millions)
RP-1 Dewatering Facility Expansion	FY 2008/09—FY 2011/12	$19.0
RP-1 Asset Replacement	FY 2008/09—FY 2019/20	$ 8.6
RP-1 Aeration Basin Clean	FY 2010/11	$ 0.5
RP-1 Facilities Improvements	FY 2009/10 – FY 2010/11	$ 2.0

In general, the RP-1 projects in the TYCIP involve energy efficiency and modernization of facilities. The RP-1 projects which involve major expenditures in the next two fiscal years fall under the Asset Management Program. They include: Dewatering Facility Expansion; RP-1 Asset Replacement; and miscellaneous capital upgrades. These projects all focus on modernizing facilities at RP-1 to ensure that performance standards and regulatory requirements are met. The Dewatering Facilities Expansion Project will expand and upgrade the dewatering facility to meet the facility's current and future capacity needs for more than the next 20 years. The current dewatering equipment and the filter belt presses are at the end of their useful life. The expansion of the facility will also increase

the capacity of the dewatered cake storage system. This will allow for more operational flexibility when managing the hauling trucks. The single solids conveyance system will also be replaced and designed to accommodate a multiple conveyance system, which will eliminate future single point failure with conveyors.

The RP-1 Asset Replacement Project will also have a major impact on the aging infrastructure within the RP-1 facility. The project was initiated in July 2006 to implement several of the recommendations of the RP-1 Condition Assessment Study conducted by Metcalf and Eddy in 2005. The study evaluated all of the major equipment and provided a prioritized list of improvements that needs to be completed for the facility over a ten-year time period. Improvements included repairs, rehabilitation or studies to assess the condition of the equipment and devise a proper response as needed. The project was divided between three phases to address the items by priority level. The recommendations will be implemented over six years, starting in FY 2009/10, with most of the construction occurring in FY 2010/11 and beyond.

The Agency is currently evaluating Fuel Cells to generate power at RP-1 in lieu of using internal combustion engines. Fuel cell technology has improved over the past few years and with government subsidies is becoming more cost effective.

In addition, the Agency is currently evaluating wind turbines as an alternative energy source at the RP-4 facility. Wind power is a green energy source that is becoming more viable. The Agency desires the wind turbines and fuel cells to be provided through power purchase agreements similar to the solar power project.

3.2.2 Southern Service Area (RP-2, RP-5, CCWRF)

The Agency has gone through the process of putting together an expert panel to update the needs assessment and feasibility study done for the New Main Laboratory that was prepared by The Austin Company in 2006. The goal of this expert panel was to update the report so it will be ready for detailed design.

The Agency is in the process of doing a full condition assessment of the CCWRF. This is one part of the overall Asset Management Process that will be integrated into SAP.

Eventually, when the solids handling capacity at RP-2 is exceeded or the RP-2 facilities reach the end of their useful life, the Agency intends to use the RP-5 SHF for biosolids.

TABLE 3-3 RP-2/RP-5 SERVICE AREA —MAJOR CAPITAL PROJECTS		
Project	**Scheduled Completion**	**Ten-Year Cost ($ Millions)**
RP-5 Facility Upgrades	FY 2010/11	$ 0.3
RP-2 Digester Cleaning	FY 2010/11	$ 0.3
CCWRF Primary Efficient Pump Assembly	FY 2010/11	$ 0.1
TOTAL		$ 0.7

Future projects like the Whispering Lake Lift Station which will alleviate 2 MGD of flow from RP-5 will be implemented as RP-5 reaches its rated capacity. Additionally once the CCWRF Tertiary Filter hydraulic testing is completed the CCWRF will be re-rated to a higher capacity, which will also alleviate some flow from RP-5.

4.0 ENERGY MANAGEMENT

4.1 Background

The California Energy Commission reported that water-related energy demands account for 19% of the state's electricity usage, 32% of its natural gas usage, and 88 million gallons of diesel fuel consumption every year. It found that using energy to provide water and treat wastewater in Califorinia results in carbon dioxide emissions of 44 million tons per year to the atmosphere. Carbon dioxide is considered a "greenhouse gas" that is contributing to global climate change. AB 32 was adopted by the California State Legislature to reduce California's carbon footprint and increase the use of renewable energy resources. Another challenging stipulation is the SCAQMD Rule 1110.2. This rule limits natural gas usage in internal combustion engines and requires the Agency to install post-combustion controls, such as oxidation catalysts and Selective Catalytic Reduction (SCR) systems, on those engines by 2012 to reduce emissions. Implementation of this rule has led to a reduction of the Agency's ability to produce power internally for use at Agency facilities. This will require the Agency to explore additional options to increase its renewable energy portfolio. In 2009, the Agency performed a Gap Analysis to determine a strategy for implementing renewable energy projects to fulfill future energy needs. The results of this analysis showed the difference or "gap" between the annual Agency-wide energy usage and the current renewable energy production at all facilities. The table in Figure 4-1 shows this difference at each facility.

In order to bridge this gap, the Agency has embarked on a comprehensive Energy Management Strategy to increase biogas production as well as pursue other non-polluting energy programs, such as fuel cells and wind energy. The elements of IEUA's Energy Management Strategy will include: maximizing the Agency's renewable energy generation projects, effective procurement of electricity, implementing sub-metering as a component to provide visibility in energy use and help promote participation in Demand Response and other energy curtailment initiatives, and reducing the Agency's overall carbon footprint.

Figure 4-1: 2009 Gap Analysis Results

Plant	Annual Plant Consumption [KWH]	Engine Capacity [KW]	Annual Energy Production [KWH]	Annual Solar Energy Production [KWH]	Gap [KWH]
RP1	26,393,323	2,400	8,226,762	1,823,238	16,343,322
RP2	3,370,495	580	2,941,872	0	428,623
RP4	9,742,645	500	584,230	1,893,978	7,264,437
CCRWF	7,450,665	1,000	311,489	942,444	6,196,732
RP5	9,436,794	1,500	0	2,432,496	7,004,298
Total	56,393,922	5,980	12,064,353	7,092,156	37,237,412

4.2 IEUA Energy Management Strategy

The main elements of IEUA's Energy Management Strategy are:

- Increasing the Renewable Energy Portfolio
- Energy Procurement
- Energy Curtailment

All of these components are discussed in the following sections below.

4.2.1 Increasing the Renewable Energy Portfolio

One of the elements of IEUA's Energy Management Strategy includes increasing and diversifying its renewable energy portfolio by: 1) installing additional solar panels at more locations; 2) implementing wind power and fuel cells; and 3) increasing biogas production from food waste and waste fat/oil/grease (FOG). The Agency is currently evaluating a power purchase agreement (PPA) project to install a 1 megawatt wind turbine at the RP-4 facility and potentially up to 2.8 megawatts of fuel cells at the RP-1 facility, also through a PPA.

Another major component of the Energy Management Strategy for self-generation is increasing the utilization of biogas and natural gas. While the Agency has about 10 MW of self-generating capacity, it is currently using about 7 MW. This is due to the decommissioning of the peaker engines at RP-4 and CWWRF, along with the restraints created within SCAQMD Rule 1110.2, which decreases the amount of natural gas that can be utilized to run engine generators. However, participation in the fuel cell program would permit IEUA to utilize the onsite biogas production and would result in considerably less emissions and higher efficiency than most engines. This would also allow the Agency to avoid those limitations imposed by SCAQMD Rule 1110.2 and help reduce carbon emissions by operating the fuel cell on 100% biogas.

4.2.2 Energy Procurement

IEUA currently has a two-year agreement with an electricity service provider (ESP) for electricity procurement, which offers stability and reduces IEUA's exposure to volatility within the energy market. A portion of IEUA's electricity is purchased at a fixed price from the ESP. The excess electricity consumed is based on the average "day ahead" cost from an index within the Intercontinental Exchange (ICE). The Agency pays SCE for delivery costs. The Agency has taken advantage of considerable savings since entering into the current agreement in 2009. IEUA also purchases commodity natural gas directly from the wholesale market. The natural gas is delivered to the Agency through the local utility.

While there are many advantages that IEUA is able to pursue, there are also some unknown factors that are shaping electricity rates moving into the future. One of those factors is the stipulations surrounding Senate Bill (SB) 695, which should be in effect beginning in late 2010. While the measures in this bill require electrical corporations to target energy efficiency and solar programs, they also require the California Public Utilities Commission (CPUC) to allow non-residential customers, like IEUA, to be able to purchase electricity from an ESP at a maximum load. This service is also referred to as Direct Access. SB 695 will also limit the amount of electric load that an ESP may serve based on a three to five year phase-in schedule until the maximum is reached in that ESP's territory. A list of IEUA's facilities, along with the respective tariff at each facility, is listed in Figure 4-2. The details of SB 695 and its impact on the Agency are unknown at this time. The CPUC is scheduled to make a final decision by mid-2010.

Figure 4-2: Facility SCE Tariffs and Annual Imported Usage

Facility	SCE Tariff	Direct Access
RP-1	TOU-8-B-STANDBY	yes
RP-2 Liquids	GS-2	no
RP-2 Solids	TOU-8-B-STANDBY	yes
RP-4	TOU-8-B	yes
RP-5	TOU-8-B	no
CCWRF	TOU-8-B	yes

4.2.3 Energy Curtailment

One of IEUA's major energy management strategies going forward will be sub-metering. Sub-metering involves the use of digital or analog meters as a resource to help monitor kW, kWh, amperes, load factor, and many other units of energy consumption. Using a combination of sub-meters and load profiling data can help IEUA understand its operating patterns, increase operating

efficiency, assist in identifying malfunctioning equipment, and reduce peak loads which can lower demand charges. Knowing when to shut off certain equipment through the use of sub-metering can reduce maintenance costs and help prolong operating life of equipment. Energy costs can easily be reduced 2 to 3 percent by increasing employee awareness and accountability for energy usage.

IEUA has already implemented sub-metering at each of its recycled water pump stations. The ultimate goal is to implement sub-metering for all high-use equipment at IEUA facilities. The Agency will implement a sub-metering project at each motor control center during the next fiscal year. Sub-metering will give IEUA visibility in energy usage, which will allow the Agency to effectively and efficiently participate in certain Demand Response programs.

IEUA has been participating in Demand Response programs with SCE to help reduce electricity costs. By participating in the Time-of-Use Base Interruptible Program (TOU-BIP), the Agency is able to take advantage of a BIP Option Credit by reducing the total maximum demand by at least 15% when BIP events are called. This incentive has led to substantial savings in electricity costs over the first half of FY 2009/10. IEUA will explore the possibilities of participating in additional Demand Response programs after conducting an analysis of the information provided by on-going energy audits at each facility.

In addition to the above optimization strategies, a few other elements of the energy usage optimization strategy are:

- Participation in net metering and energy export, where applicable;
- Manage the operation of the recycled water system to reduce the energy required for pumping, especially during the peak energy cost time of day;
- Maximize water pumping efficiencies by decreasing pressure losses (head);
- Maximize oxygen transfer in aeration processes by increased membrane cleaning;
- Reduce compressed air pressure at RP-1;
- Shift discretionary loads (e.g., at RP-1);
- Utilize wastewater storage lagoons effectively;
- Continue to make changes in fleet operation to alternative fuels.

IEUA is dedicated to its goal of achieving energy self-sufficiency by incorporating these elements into its Renewable Energy Resource Program, plus various forms of future technologies. IEUA and its member agencies understand the importance of energy efficiency and their role in providing clean, safe renewable resources that would benefit the environment as well as relieve the stress on the energy grid.

5.0 RECYCLED WATER AND RECHARGE PROGRAMS

5.1 Recycled Water Program Background

The Recycled Water Program has been developed to be consistent with the recommendations of the IEUA Recycled Water System Feasibility Study completed in 2002, the 2005 Regional Recycled Water Program Implementation Plan and the 2007 Recycled Water Business Plan. Since the adoption of the Recycled Water Business Plan in 2007, updates to the Business Plan have been made in 2008 to reflect the IEUA FY 2008/09 budget and the Ten Year Capital Improvement Plan. The Agency plans to construct a fully integrated regional distribution system that will deliver recycled water to major industrial and municipal users and to groundwater recharge basins.

IEUA has been serving recycled water since the beginning of the Regional Contract in 1972. Initially recycled water was delivered to Whispering Lakes Golf Course and Westwind Park in Ontario and Prado Park and Golf Course. In the early 1990's IEUA planned and built the first phase of the Carbon Canyon Recycled Water Project, which now serves several customers in Chino and Chino Hills. IEUA also initiated planning of a regional recycled water delivery system. This planning effort culminated with the completion of the IEUA Regional Recycled Water Program Feasibility Study in January 2002. The Feasibility Study identified facilities to deliver, ultimately, over 70,000 acre-feet of recycled water per year (AFY) to customers and recharge sites throughout the service area.

In 2004, IEUA initiated development of the Regional Recycled Water Program Implementation Plan, which updated information from the 2002 report. The Implementation Plan identified additional future recycled water demand, primarily in the developing areas of Chino and Ontario, increasing the total ultimate deliveries to approximately 93,000 AFY. The plan identified a phased implementation over ten years with provision for additional expansion beyond the ten-year planning horizon. IEUA adopted the Recycled Water Business Plan in December 2007 to accelerate the implementation of the 2005 Regional Recycled Water Implementation Plan.

The estimated cost of the facilities planned for the next ten years is approximately $106 million with the majority of those expenditures occurring in the first three years. The program is to be funded by a combination of state and federal grants, State Revolving Fund (SRF) loans and MWD rebates. The actual schedule of implementation will depend on the availability of grant funding and changing recycled water facility needs.

The following were the significant events through 2009:

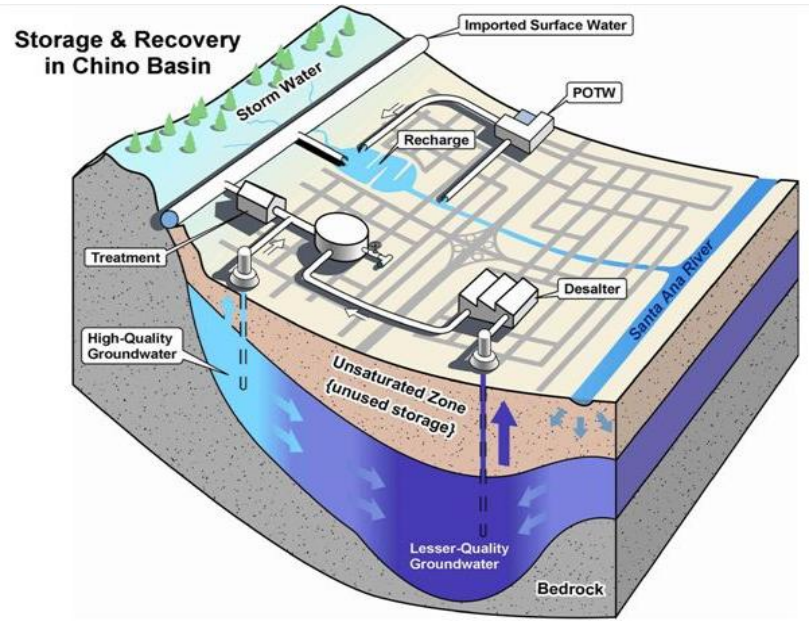
1972	Regional Contract, IEUA begins delivery of recycled water
1993	Recycled Water Master Plan
1995	Carbon Canyon Recycled Water System Plan
1998	Carbon Canyon Recycled Water System Initial Deliveries
2001	Recycled Water Facilities Planning Study
2002	Regional Recycled Water Program Feasibility Study
2002	Program EIR
2003	SWRCB Grant ($5 million) and Loan ($15 million) Approved
2003	Initiate Construction of Phase I Facilities
2003	MWD LPP Rebate Agreement Amendment
2004	RWQCB Basin Plan Amendment
2004	DWR Grant ($9 Million)
2005	Regional Recycled Water Program Implementation Plan
2006	Initiate construction of Phase II Facilities
2006	SWRCB Grant ($4 Million) and SRF Funds ($14.7 Million for Phase II)
2007	Initiate construction of Phase III facilities
2007	SWRCB Grant ($4.9 Million) and SRF Funds ($11 Million for Phase III)
2007	Recycled Water Business Plan (adopted December 2007)
2007	MWD Public Sector Rebate Program
2008	Chino Basin Water Conservation District ($4M) assistance for Retrofits of Parks and Schools
2008	USBR Federal Grant ($950,000 received of the $20M)
2008	MWD Local Resources Program Agreement
2008	DWR Grant ($1M) for Urban Drought Assistance for Retrofit Projects
2008	Updated Three-Year Business Plan
2009	USBR Federal Grant ($5 Million received; total receipts $6 M of $20 M)
2009	USBR Title XVI ARRA Funds Northeast Area Project ($6 Million)
2009	USBR Title XVI ARRA Funds Northwest Area Project ($8 Million)
2009	SWRCB Grant ($4.2 Million) and SRF Funds ($15 Million) Phase IV
2009	SWRCB Funds ($1.5 Million) Phase V

The 2002 Feasibility Study and 2005 Implementation Plan included an assessment of the potential recycled water customers within the IEUA service area. Staff worked with the regional agencies to identify over 1,000 potential customers. This information was used to plan the regional and local recycled water distribution pipelines. Pipeline locations were selected to provide recycled water to the largest customers or groups of customers resulting in cost effective facilities. Ultimately, this distribution system layout will serve over 1,200 of the largest customers and supply over 93,000 acre-feet per year (AFY), which includes 33,000 AFY for recharge.

5.2 Recharge Program Background

The CBWM and IEUA joint recharge program partnership is described in the CBWM's Optimum Basin Management Program (OBMP) Recharge Master Plan, Phase II Report (August, 2001). It is a comprehensive plan to increase artificial groundwater recharge within Chino Basin using storm water, recycled water, and imported water. The recharge program is one of the centerpieces of the Chino Basin OBMP. Through the development of increased recharge capacity in the Basin, greater quantities of high quality water can be captured and stored during wet years and be made available during drought years and times of imported water supply shortages. Figure 5-1 illustrates in general how the recharge program fits into the overall plan for Chino Basin groundwater management as outlined in the Watermaster's OBMP and the Recharge Master Plan.

Figure 5-1:



In January of 2002, the IEUA Board of Directors approved the Recharge Master Plan Implementation Memorandum of Agreement, between CBWM, Chino Basin Water Conservation District, San Bernardino County Flood Control District (SBCFCD), and IEUA. Members of these four agencies formed a Groundwater Recharge Coordinating Committee to implement an initial $40-million program, entitled the Chino Basin Facilities Improvement Project (CBFIP), that resulted in construction projects to develop the program's recharge facilities from existing flood control basins. IEUA serves as the lead agency for implementation (design, construction, operation, and maintenance) of this cooperative program.

Implementation of the Recharge Master Plan included enhancements to existing flood control and recharge basins through the CBFIP (Phase I and Phase II). The recharge capacity is made up of:

- 33,000 AFY of storm water
- 57,000 AFY of imported water
- 20,000 AFY of recycled water from the IEUA's Regional Water Recycling Plants.

The CBFIP will maximize recharge capacity, protect and increase the yield of the Chino Basin, increase the amount of recycled water that can be recharged, and improve groundwater quality. Construction and improvements have been made to 19 recharge sites with a total potential recharge capacity of approximately 110,000 AFY.

In the summer of 2005, Phase I CBFIP improvements were completed and recharge operations commenced in the upgraded facilities. Figure 5-2 is a map of the current CBFIP recharge sites. Operational experience in the ensuing 3 years identified lower infiltration rates, system limitations, and recharge capacity than envisioned during the original recharge master plan. Additional recharge capacity and operational flexibility were the goals of the Phase II CBFIP.

In April 2006, IEUA and Watermaster approved the $10.5 million Phase II CBFIP improvements made possible by a Department of Water Resources grant and matching funding from IEUA and CBWM. The Phase II improvements will be complete and operational in early 2009, and will enhance the storm water capture, imported water delivery, and operational flexibility of the existing recharge facilities.

IEUA is also working with the State Department of Public Health and the Regional Water Quality Control Board Santa Ana Region to evaluated recharge permit changes that will allow increases in the amount of recycled water that may be recharged. Specifically, it will increase the amount of recycled water recharge during dry years used against blended credits from storm water and imported water recharge during wet years.

The original Recharge Master Plan requires update, and will be revised by July 2010 as part of CBWM's Peace II agreement. When completed, the updated plan will incorporate enhancements to recharge basins and updated regulatory permit requirements. Until that time, Table 5-1 describes the potential recharge capacities of the recharge sites upon completion, assuming optimum operation and maintenance.

Figure 5-2: Chino Basin Recharge Sites Locations

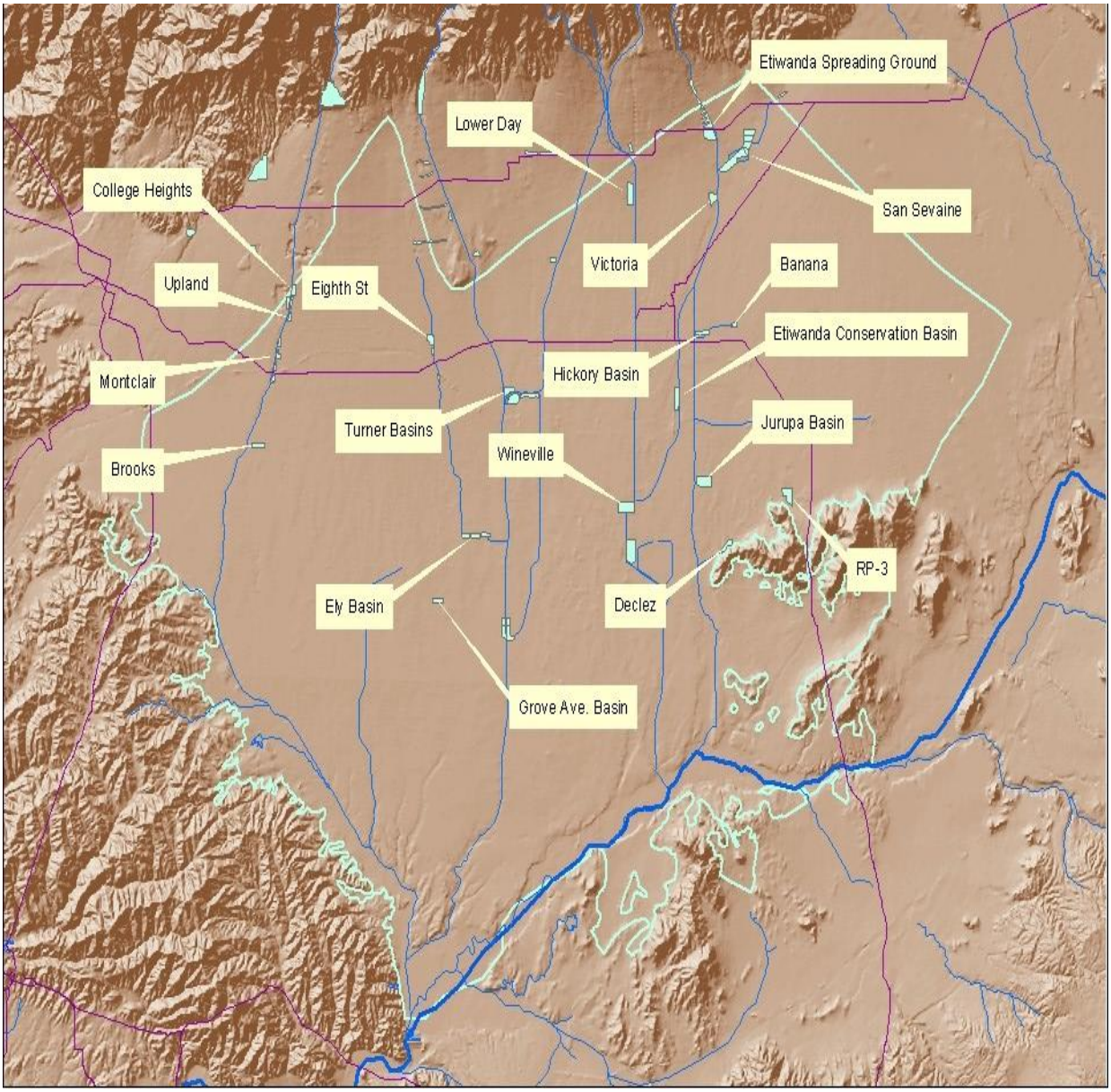


Table 5-1
CHINO BASIN POTENTIAL SOURCE WATER RECHARGE CAPABILITIES

Basin Name	Potential Basin Recharge Capacity Acre Feet Per Year (AFY)			
	Storm Water	Imported Water	Recycled Water	Total
8th Street Basins	870	1,160	870	2,900
Banana Basin	870	1,160	870	2,900
Brooks Street Basins	870	1,160	870	2,900
College Heights Basins	2,600	6,070	0	8,670
Declez Basins	1,040	1,390	1,040	3,470
Ely Basins	870	1,160	870	2,900
Etiwanda Cons. Ponds [1]	0	0	0	0
Etiwanda Debris Basin	1,210	1,620	1,210	4,040
Grove Basin	350	0	0	350
Hickory Basin	870	1,160	870	2,900
Jurupa Basin [2]	0	0	0	0
Lower Day Basin	1,560	2,080	1,560	5,200
Montclair Basins	6,940	16,190	0	23,130
RP-3 Basins	1,210	1,620	1,210	4,040
San Sevaine Basins	8,670	11,560	8,670	28,900
Turner Basins	1,040	1,390	1,040	3,470
Upland Basin	3,470	8,090	0	11,560
Victoria Basin	1,040	1,390	1,040	3,470
Total	**33,480**	**57,200**	**20,120**	**110,800**

1. Etiwanda Conservation Ponds are located on Southern California Edison's right-of-way, and have yet to be developed due to lack of agreement on lease terms.

2. Jurupa Basin, through geotechnical testing (URS, 2003), is believed to have minimal infiltration benefits. As such, Jurupa Basin is used as a holding basin for water sources pumped to the RP3 Basins or further routing to Declez Basin.

5.3 Recycled Water Use for Recharge

Reuse of recycled water for groundwater recharge is a critical component of the OBMP and water supply plans for the region. It will increase the reliability of water supplies during dry years and save $6 million to $9 million per year in imported water costs. The recharge of high-quality recycled water and high-quality imported and storm water sources will allow Chino Basin groundwater quality objectives to be met. Improvements in groundwater quality through recharge will ultimately lower the cost of the Chino Basin Desalter groundwater treatment process.

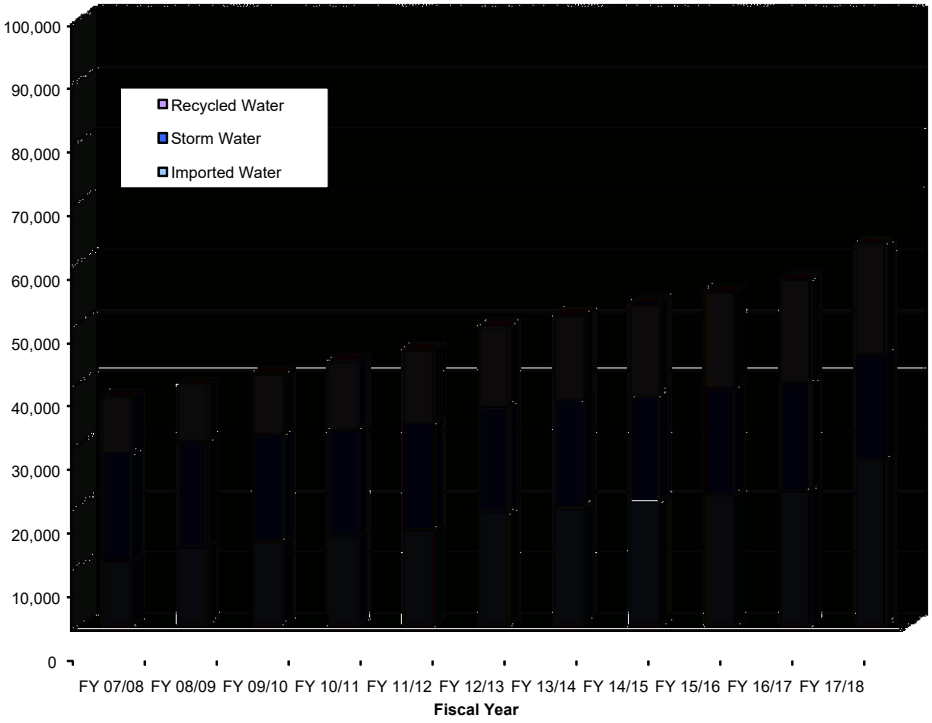
In April 2005, IEUA and CBWM obtained their Phase I Recycled Water Groundwater Recharge Permit which included six recharge sites and a 20-percent by basin recycled water recharge limit. In June 2007, IEUA and CBWM obtained their Phase II Recycled Water Groundwater Recharge permit, which added seven more recharge sites and included changes allowing as much as 50 % by basin recycled water recharge as driven by water quality performance. However, operational experiences since 2005 indicate a more likely average of 30-percent recycled water recharge.

In October 2009, IEUA and CBWM received an amendment to the recharge permit that will increase flexibility of recycled water recharge operations, especially during multiyear drought. The amendment allows groundwater underflow to be included as a diluent water source which can now be factored into the volume-based recycled water contribution (RWC) running average. The RWC average calculation period was also increased from 60 to 120 months which will maintain a more stable RWC average by allowing the other diluent water sources (storm water and imported water) to remain in the RWC average for a longer period of time.

The schedule for increasing the amount of recycled, storm, and imported water recharged into the Chino Groundwater Basin is illustrated in Figure 5-3.

Figure 5-3:

Imported, Storm, and Recycled Water Recharge Schedule



ASSUMPTIONS:

Total Recharge is the CBWM Replenishment Obligation projections presented to the GRCC on March 27, 2007.

Recycled Water is a projection based on historical diluent recharge at basins available for recycled water recharge from the 2008 Three-Year Recycled Water Plan, then increased 1,000 AF per year until reaching 33% (based on a 5-year running average) of the CBWM replenishment obligation (Total Recharge).

Storm Water is a projection of the long-term average sums of 12,000 AFY of new storm water capture and 5,600 AFY of pre-basin improvement capture.

Imported Water is the Total

5.4 Recycled Water Business Plan Update

The Recycled Water Business Plan (Business Plan) was developed in 2007 to accelerate the Regional Recycled Water Implementation Plan (2005) as a response to potential water supply shortages and reductions in MWD imported water supplies. Since the Business Plan's adoption in 2007, an update was completed to reflect the FY 2008/09 budget and the new connected recycled water demand goal of 50,000 AFY was changed from FY 2009/10 to FY 2011/12. The connected demand goal remains unchanged with the adoption of the FY 2009/10 Budget, and the proposed TYCIP. The Agency's commitment and coordination with the member agencies within the Chino Basin to increase and ensure a reliable supply of recycled water to residents and customers has been continuous since the adoption of the Business Plan.

The implementation of the Business Plan has resulted in multiple benefits as summarized below. The program is self-funded through recycled water sales and the MWD local projects program. In addition, the recycled water supply is not impacted by drought and will mitigate the impacts of regional or statewide water supply limitations.

- New Water Supply – 37,000 AFY Increase in Connected Demand (50,000 AFY Total Connected)
- Capital Projects – an average expenditure of $30 million/year for the next three years (Business Plan total cost $145 million, with SRF of approximately $87 million, and Grant funding for approximately $24 million, IEUA Bonds providing $28 million, and other sources providing the balance of funding of $6 million)

- Recycled Water Revenues – About $8.5 million/year (wholesale rate revenue plus MWD rebates)
- Annual expenditures for debt service (approximately $4.8 million per year) and operation and maintenance costs (approximately $6.3 million per year) will be funded through recycled water sales, MWD rebate revenues, and other existing IEUA revenue sources

The Business Plan is intended to be a "short-term" action oriented document that will guide the IEUA recycled capital improvement program through the expansion of its recycled water distribution system. The Business Plan will be updated annually to adjust to the goals, timelines and projects that will expand the use of recycled water. Currently, this document focuses on the 2007-2012 fiscal years. The annual goals for connecting customers to recycled water are summarized in Table 5-1.

TABLE 5-2

ANNUAL GOALS FOR RECYCLED WATER CONNECTED DEMAND AND SALES

Year	Fiscal Year	Connected Demand AFY	Increase		Estimated Sales* AFY
			AFY	%	
Base Year	2006/07	13,000		----	----
1	2007/08	17,600	4,600	135%	13,500
2	2008/09	27,034	14,034	208%	16,000
3	2009/10	36,000	13,000	277%	32,000
4	2010/11	45,000	32,000	346%	40,000
5	2011/12	50,000	37,000	385%	45,000

*Estimated sales lag connected demands due to demands for recharge and other factors.

5.5 Red Team

The Red Team is an interagency group composed mainly of IEUA staff and key people from member agencies. The purpose behind this arranged team is to open avenues of communication to aid with the construction of the recycled water infrastructure as well as potentially identify new recycled water projects.

The Red Team assisted in the preparation of the Business Plan from August 2007 to December 2007, and has met on a regular basis through FY 2009/10 to discuss key issues, such as, recycled water rates, the status of recycled water projects, water reuse practices and demand management issues.

5.6 Regional Recycled Water Priorities

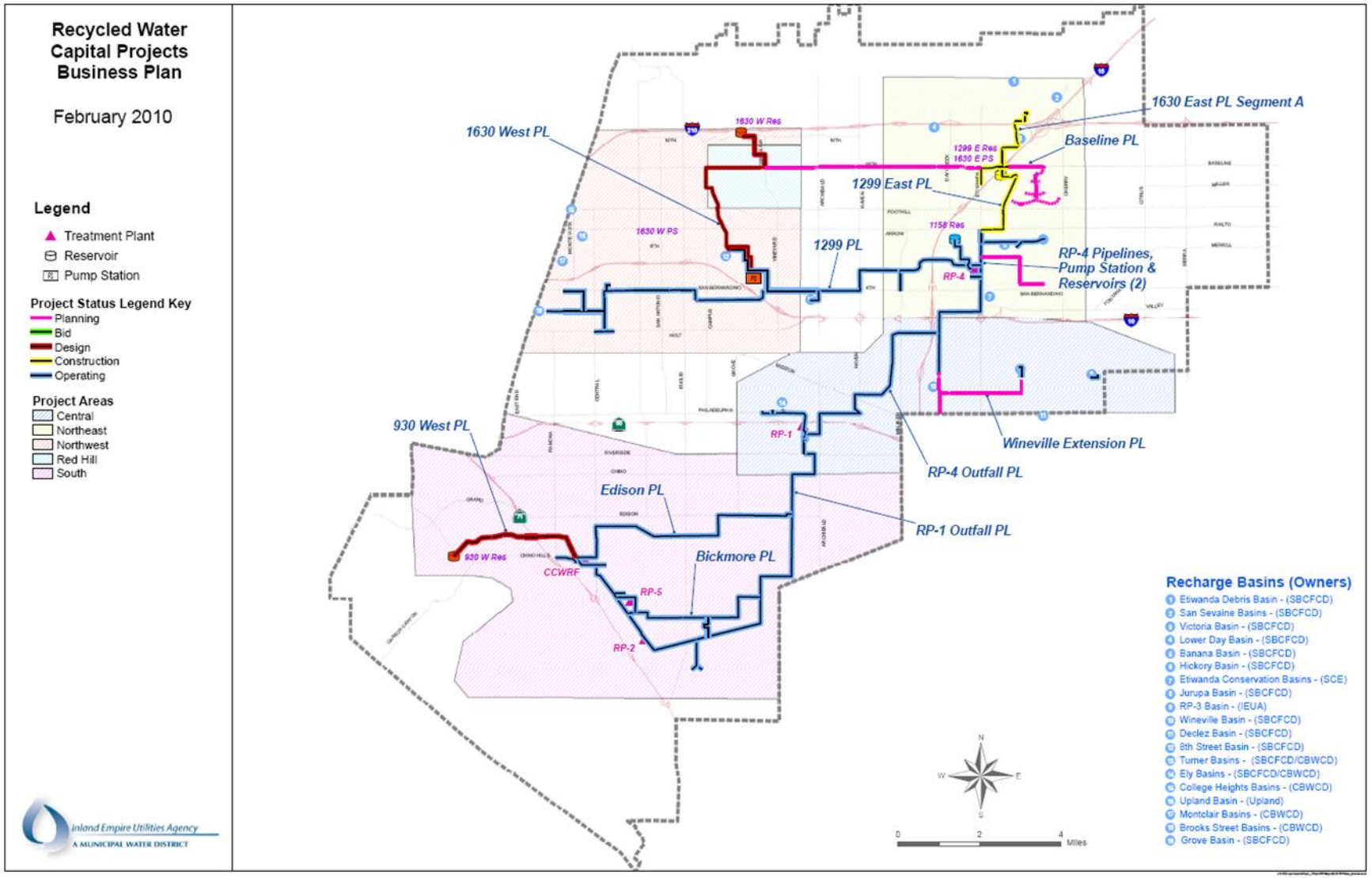
In September 2000, the IEUA Board and Regional Technical and Policy Committees adopted a recycled water policy which defines the roles and responsibilities of IEUA and the Regional Contracting Agencies for the construction and ownership of the regional and local facilities. Regional facilities are defined as pipelines, pump stations, and reservoirs which serve recycled water to a recharge site or to more than one Contracting Agency. Regional facilities will be constructed and owned by IEUA. Local facilities that deliver recycled water from the regional facilities to customers within a Contracting Agency's service area will be the responsibility of that respective agency to plan, build, operate and maintain such facilities. Local facilities will primarily be pipelines (local laterals) and may also include pump stations and reservoirs. With the implementation of the Business Plan, new policies have been created to include provisions for: regional funding of local storage facilities which reduce regional storage needs; provision for reimbursement of regional facilities constructed by others (local agency or developer); and financing of local facilities and customer on-site retrofits.

IEUA's regional recycled water system consists of a looped pipeline system which connects all four Regional Water Recycling Plants. The regional facilities have been described in over 50 separate projects of pipelines, pump stations and reservoirs. These projects have been grouped into priorities and categorized into four project areas: Northeast, Northwest, Central and the Southern Project Area. The phasing priority was determined based on the amount of recycled water that each phase could serve and the proximity of each phase to one of the plants or existing recycled water supply systems. Priorities I and II of the program will deliver recycled water to most of the recharge sites since the recharge sites represent significant recycled water users. The Regional Recycled Water Program facilities in the various stages of implementation are shown in Figure 5-4.

5.7 Local Recycled Water Facilities

As described above, local recycled water facilities are those which serve only one contracting agency. Each local agency is responsible for the planning, design, construction and operation of local laterals within its service area. IEUA staff is working closely with the agencies to coordinate their recycled water planning efforts. In order to assist the local agencies with the implementation of their recycled water systems, IEUA is providing technical assistance and, if requested, financing of the local agency's facilities. Funds for this financing are included in the TYCIP and will be funded via State Revolving Fund Loan proceeds. However, the amount of funding will depend on the Agency's needs. A similar financing approach was used for the construction of the Carbon Canyon Recycled Water Project in the 1990s.

Figure 5-4: IEUA Regional Recycled Water Capital Project Priorities



5.8 Regional Recycled Water Program Summary

Completed Activities/Projects:

MVWD Laterals	February 2009
RP-4 Reservoir, Pump Station and Pipeline	April 2009
Multiple Retrofit Projects for MVWD	July 2009
Schaefer Avenue Lateral	Aug 2009
DPH/RWQCB Recharge Permit Amendment	October 2009
Multiple Retrofit Projects for Ontario Montclair Schools	Dec 2009
Guasti Park Retrofit	Dec 2009
Chaffey High School Retrofit	Dec 2009

Current/Near Term Projects Status as of June 2009:

Recycled Water Connected Demand	36,000 AFY (FY 2009/10)
Northeast Area RW Projects, Phase I	September 2010
Northwest Area RW Projects	September 2011
Southern Area RW Projects	June 2012*

*pending project funding approval

5.9 Funding

In order to accomplish the goals of the Business Plan, a financial plan has been developed that includes an evaluation of the cost of the Plan, the funding sources that pay the costs of the Plan, and estimates of annual revenues. Implementation of the Business plan has been programmed and scheduled with the use of state and federal grant funds and SRF low-interest loans to minimize use of Regional Capital Fund transfers. The following funding goals have been identified:

- Capital Budget Funding Sources – $145 million total Business Plan cost will be funded from four sources: State and Federal Grants ($24 million), State Revolving Fund loans ($87 million), 2008 IEUA Bond Funds ($28 million), and MWD/Chino Basin Water Conservation District Public Sector Rebates and Reimbursements for Private/Public Retrofits and Laterals ($6).

- Annual Revenues – based on 50,000 AFY in sales in FY 2012/13, recycled water sales will generate $6.4 million annually at 50,000 AFY the revenues from recycled water sales, MWD LRP program, and other IEUA revenue sources will be sufficient to meet debt service costs estimated at $5 million in FY 2012/13 and increasing to $7 million annually beginning in FY 2018/19.

5.10 Funding Status

STATE WATER RESOURCES CONTROL BOARD (SWRCB): To date IEUA has received funding contracts from the SWRCB for $5 million in grant funds (and up to $15 million in SRF loans for Phase I. In March 2006 IEUA received funding approval from SWRCB for Phase II projects. IEUA has approval of $4 million in grant funds and up to $14 million in SRF loans for the Phase II projects. In October 2007, IEUA received funding approval from SWRCB for Phase III projects. IEUA has approval of $4.9 million in grant funds from SAWPA and up to $11 million in SRF loans for Phase III projects. Financial Assistance for projects in the Northeast Project Area (Phases IV and V), in the amount of $20 million, was the first appropriation approved by the SWRCB under the federal stimulus funding. It was approved by the SWRCB on March 17, 2009 along with a grant for $4.2 million.

UNITED STATES BUREAU OF RECLAMATION (USBR): In 2005, IEUA received a federal appropriation of $950,000 for the recycled water program and an additional $5 million was received before June April 2009. The balance of $14 million was allocated as part of the stimulus funds for the Northeast Area Projects ($6 million) and the Northwest Area Projects ($8 million) in FY 2009/10.

DEPARTMENT OF WATER RESOURCES (DWR): The Agency also a $1 million grant for Urban Drought Assistance, which will be utilized to complete retrofit projects to convert customers from potable water to recycled water. The grant was allocated to various member agencies in order to implement the retrofit projects.

5.11 Permitting

Several regulatory and environmental permits and approvals are required to implement the Regional Recycled Water Program and deliver recycled water. IEUA has made significant progress and has completed many of the regulatory requirements. The following are the regulatory requirements and the current status of each permit process:

- CEQA – IEUA certified a Programmatic EIR in June 2002 which included IEUA's Wastewater Master Plan, Organics Management Business Plan and the Regional Recycled Water Program. Supplements to the Programmatic EIR are prepared, when necessary, as specific project elements are better defined during each project design;
- CBWM Article X approval for groundwater recharge is required under Watermaster's rules and regulations. IEUA obtained Watermaster's approval for the recharge of up to 33,000 AFY in 2002;
- Basin Plan Amendment – In order to recharge recycled water in the Chino Groundwater Basin, IEUA and Watermaster prepared a Maximum Benefit Concept Proposal to the Santa Ana Regional Water Quality Control Board for the basin plan amendment. The proposal was approved by the RWQCB and incorporated into the basin plan amendment in February 2004. The State Water Resources Control Board approved the basin plan amendment in September 2004. The incorporation of "Maximum Benefit" into a basin plan is unprecedented in the state;

- RWQCB Waste Discharge Requirements and NPDES permit for direct reuse – All of IEUA's Water Recycling Plants have existing permits from the RWQCB for recycled water deliveries for direct reuse customers, i.e. irrigation, industrial, recreational impoundments. On a quarterly basis, IEUA reports new customers connected to the recycled water system and recycled water use for each customer;
- DHS (currently named DPH) Title 22 Engineering Report – In order to assure that recycled water is not "cross-connected" to any potable water system, the California Department of Public Health requires an engineering report which identifies the potable and non-potable plumbing systems for each recycled water customer;
- DPH Title 22 Engineering Report for Groundwater Recharge - Prior to recharge of recycled water, an engineering report is required. The report is reviewed by DPH and a public hearing is required to solicit comments. IEUA prepared and submitted the Title 22 Engineering report for the seven recharge basins served by the Phase I facilities. A public hearing was held in December 2003 and several supportive letters and comments were provided; and
- RWQCB Permit for Recycled Water Recharge - The Santa Ana Regional Water Quality Control Board approved the permit for recycled water recharge in April 2005. The RWQCB permit for recycled water recharge for the Phase II basins was issued in summer 2007. The DHS public hearing held in April 2006 received strong support and no opposition.
- In 2009, the RWQCB permit was amended to allow diluent water to include groundwater underflow and to allow the recycled water contribution (RWC) average to be based on a 120 month running average (increase from the previously approved 60 month running average). These modifications allow significant operational flexibility specifically during a multiyear drought when storm water and imported water supplies are not available.

Summary of Permitting Status

CEQA	Certified 2002
CBWB Article X	Approved 2002
SARWQCB Basin Plan Amendment	Approved 2004
SARWQCB Discharge Permit	Issued for all plants
DHS customer retrofits	Approved for connected customers
DHS/RWQCB recharge approval	
Ely Basin 2,300 AFY	Approved 1998
Phase I Recharge 7,700 AFY	April 2005
Phase II Recharge 17,300 AFY	June 2007
DHS/RWQCB Permit Amendment (RWC avg. & diluent water source)	October 2009

5.12 Customer Development

As described above, there are over 1,000 potential recycled water customers which can be served by the regional and local recycled water facilities. The IEUA Board of Directors adopted the Recycled Water Business Plan in December 2007, which focuses on expanding IEUA's recycled water system. The recycled water system includes regional and local facilities to increase the use of recycled water to over 50,000 AFY, which includes 35,000 AFY of direct reuse and 15,000 AFY of recycled water recharge. IEUA is working with staff from the local agencies to focus on the list of six month targeted candidate customers. This list will be constantly updated as expansion projects to the recycled water system are built and customers are connected. Currently, there are many direct use customers identified in this list with a total demand of over 5,500 AFY. All public facilities, especially the schools and parks, are given higher priority at this time. IEUA submitted the first package of MWD's public facilities, whose locations require on-site retrofit, in early 2008. This will provide for the reimbursement of the actual on-site retrofit design and construction costs to all those public facilities. In addition, Chino Basin Water Conservation District (CBWCD) approved a $4 million dollar appropriation for the matching contribution to MWD's public sector funding. As a result of these incentive programs provided by MWD and CBWCD, IEUA and the local member agencies are accelerating the conversion process.

IEUA is also working with staff from the local agencies to connect additional farmers in the area. The recycled water usage by farms including CIM/Cal Poly, Chino Airport farming area and other smaller farms in the cities of Chino and Ontario provide the groundwater replenishment credit from CBWM to these cities. The recent cooling trend of new real estate building activities has increased the farming activities in this region. When those farms are converted to recycled water, the total usage could increase up to 3,500 AFY.

5.13 Current Ten-Year Capital Improvement Plan

5.13.1 Recycled Water Projects

The Recycled Water Capital Improvement (WC) Fund tracks the revenues and expenses associated with the development of the Agency's Recycled Water Program. The total ten-year budget for Recycled Water Capital Improvement Program projects is approximately $106 million; the projects are primarily for the construction of the major new facilities included in the Business Plan, including pipelines, pump stations, and reservoirs; approximately $5 million is for the construction of local laterals and miscellaneous connections, retrofits, engineering reports, cross-connection testing and the recycled water SCADA master plan. The construction program is phased so that the most cost-effective projects can be brought on-line first. Major new projects in each of the project areas are summarized below in Table 5-3.

TABLE 5-3

RECYCLED WATER (WC) CAPITAL IMPROVEMENT PROGRAM-MAJOR PROJECTS

Project	Ten-Year Cost ($ Millions)
Northeast Area Projects	**$ 32**
1299 E Pipeline	$ 7
1299 E Reservoir	$ 11
1630 E Pipeline Segment A	$ 10
Church Street Lateral and Well & Lysimeters	$ 4
Northwest Area Projects	**$ 52**
1630 W. Reservoir	$ 9.5
1630 W Pump Station	$ 3
1630 W. Pipeline, Phase 1	$ 7.5
1630 W. Pipeline, Phase 2	$ 9
1630 W. Pipeline, Phase 3	$ 19
Baseline Regional Pipeline	$ 4
Southern/Central Area Projects	**$ 40**
930 W Reservoir and Pipeline	$ 22
RP5 Pump Station Expansion	$ 3
Wineville Extension RW Pipeline	$ 15
Miscellaneous Connections, Retrofits and Laterals	**$ 8.0**

5.13.2 Recharge Water Projects

The main project in the Recharge Water (RW) Capital Improvement Program, the Recharge Basin Enhancement Project, was completed in FY 2008/09. The new capital project costs projected in the current TYCIP for the Groundwater Recharge Capital Fund mainly involve safety improvements and reliability improvements as indicated in Table 5-4.

TABLE 5-4
RECHARGE WATER CAPITAL IMPROVEMENT PLAN-- MAJOR PROJECTS

Project	Scheduled Completion	Ten-Year Cost ($ Millions)
Hickory Basin Berm Modification	June 2011	$95,000
Jurupa Pump Station A/C Modification	June 2011	$185,000

The future capital improvements to the recharge program (Phase III CBFIP) will be evaluated following completion of the update to the Chino Basin Recharge Master Plan, targeted for June 2010. In the interim, IEUA staff will evaluate the effectiveness of the constructed Phase II basin improvement projects towards increasing basin recharge capacity. In the time between completion of the Phase II improvements and the updated Master Plan, IEUA groundwater recharge staff will compile a prioritized list of basin improvement projects for evaluation in the Recharge Master Plan update.

6.0 NON-RECLAIMABLE WASTEWATER SYSTEM

At the request of IEUA Board of Directors, Staff developed an asset management program to identify, inventory, and assess the condition of IEUA's major assets and to plan for necessary capital improvement projects. This chapter discusses ongoing and future projects for the Non-Reclaimable Wastewater System (NRWS) in accordance with the asset management program. IEUA's 2002 Salinity Management Action Plan, which calls for maximizing the use of the NRWS and developing a program to reduce the salt impacts from water softeners to IEUA water recycling facilities, is reflected in these capital projects

In 2003, IEUA entered into an agreement with Metropolitan Water District (MWD), CBWM, and Three Valleys Municipal Water District to provide up to 100,000 acre-feet of groundwater storage in the MWD Storage Account in the Chino Basin as part of the Dry-Year Yield Program (DYY). This program provides for the extraction of up to 33,000 acre-feet per year (AFY). As of July 2008, the Operating Parties under this Agreement are: City of Chino, City of Chino Hills, Cucamonga Valley Water District, City of Ontario, City of Upland, Monte Vista Water District, and Jurupa Community Services District. As a result of this program, the Cities of Chino, Chino Hills, Ontario, Upland, and Monte Vista Water District have constructed five ion exchange plants. These plants are designed to treat well water for the removal of nitrate and salinity. The brine produced from the process is discharged to the NRWS.

MWD is interested in expanding its current DYY from 100,000 AFY of ground water storage to 150,000 AFY. Using similar criteria developed for the current program, this expansion would increase Metropolitan's DYY from 33,000 AFY to 50,000 AFY. Metropolitan has authorized IEUA and its consultants to develop a Program Report that evaluates whether the expansion is possible and, if so, what facilities and costs are required to reduce imported deliveries during dry years by as much as 50,000 AFY.

6.1 Background

IEUA owns and operates the NRWS that provides for export of high-salinity and industrial wastewater generated within IEUA service areas to the Pacific Ocean. The wastewater discharged to the NRWS consists mainly of industrial and groundwater treatment brines. IEUA also discharges belt press filtrate resulting from dewatering of the biosolids generated within the IEUA's water recycling treatment facilities and some domestic waste from non-sewered areas. The NRWS is physically separated from the Regional Domestic Wastewater System and provides a means for segregating poor quality, saline wastewater and exporting it out of the IEUA service area.

This improves the quality of the recycled water for local use and helps ensuring that IEUA can comply with the final effluent total dissolved solids (TDS) and total nitrogen limits listed in the National Pollutant Discharge Elimination System (NPDES) permits.

For FY 2008/09, the NRWS exported approximately 42,935 tons of salt to the ocean, as summarized below and illustrated in Figure 6-1.

Figure 6-1: Salt Export from Chino Basin

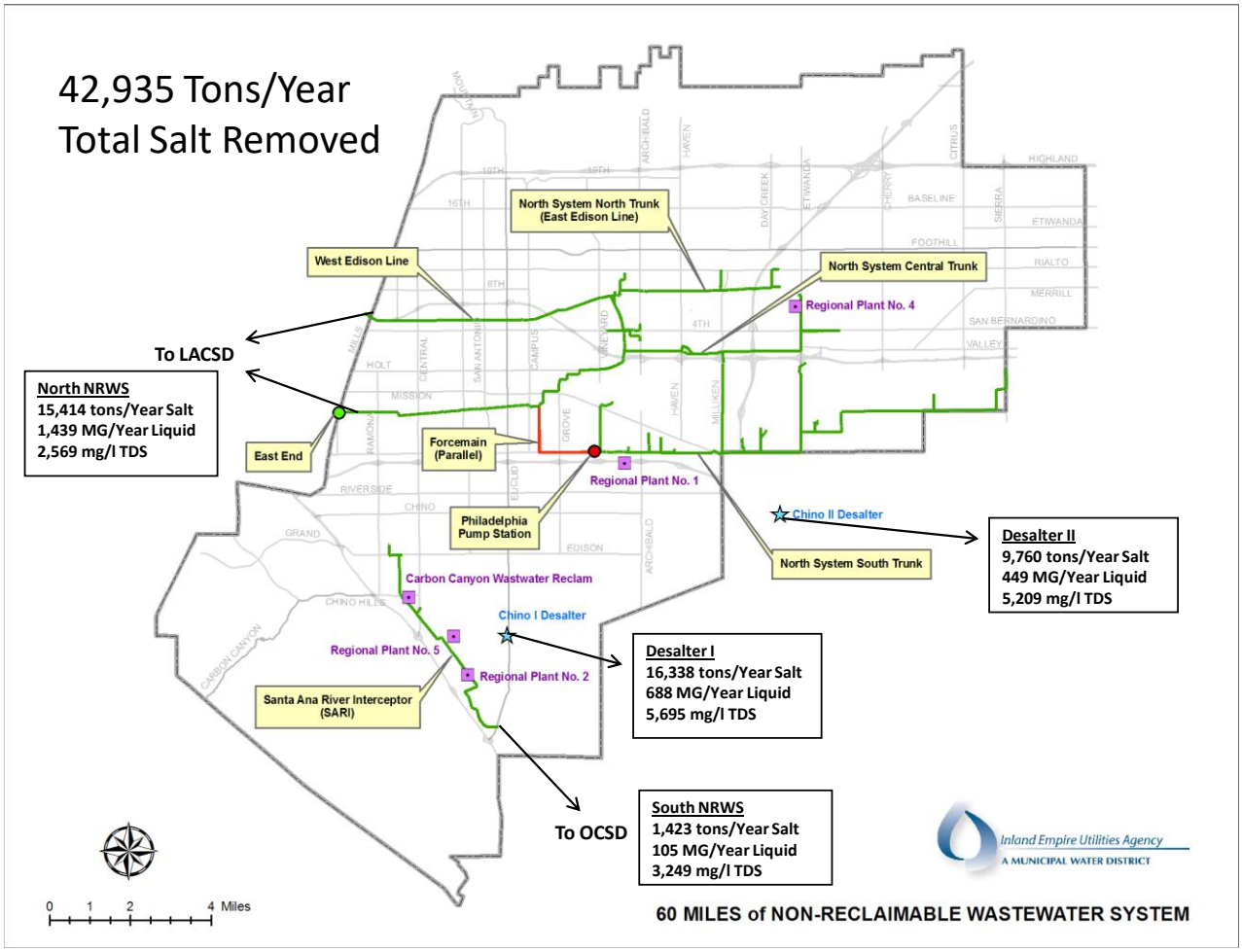


TABLE 6-1

TONS OF SALT REMOVED

FY 2008/2009	Million Gallons/Year	mg/L	Tons/Year
North NRW System	1,439	2,569	15,414
South NRW System	105	3,249	1,423
Desalter 1, (14 MGD)	688	5,695	16,338
Desalter 2, (10 MGD)	449	5,209	9,760
Total	2,681	3,840 (Flow-Weighted Average)	42,935

The NRWS collection system includes 60 miles of pipeline and is comprised of a north and a south system. The north system, which serves approximately 45 industries, conveys wastewater to adjacent interceptor sewer lines owned and operated by the County Sanitation Districts of Los Angeles County (CSDLAC). From there, it is conveyed to CSDLAC's treatment facility in Carson, where it is treated and discharged to the ocean. The south system, which serves approximately 15 industries, conveys wastewater to the Santa Ana Regional Interceptor (SARI) pipeline, owned by the Santa Ana Watershed Project Authority (SAWPA), and from there it is carried to the Orange County Sanitation Districts (OCSD) facility in Fountain Valley for treatment and ocean discharge.

Export of saline and industrial wastewater from the local area in this manner protects the quality of the IEUA's recycled water and is a key element of the CBWM's Optimum Basin Management Plan (OBMP). Diverting saline wastewater to the NRWS instead of collecting it in the regional wastewater system has reduced the TDS levels in the recycled water by approximately 430 mg/l. It is estimated that diverting most of the existing industrial users discharging to the regional sewer with TDS concentrations above 550 mg/l to the NRWS could lower the TDS level of the recycled water by another 8 to 11 mg/l. In addition, reducing salts from residential water softeners could further reduce the TDS level. Most important, brine from the groundwater desalter facilities should also be diverted to the NRWS in order to avoid raising the TDS level of the recycled water.

6.2 NRWS and Salinity Management Action Plan

IEUA developed a Salinity Management Action Plan in 2002 in cooperation with the Regional Technical and Policy Committees. This was done to protect and enhance the ability of the region to use recycled water for groundwater recharge, outdoor irrigation and industrial process water. Use of recycled water is critical to the reliability of future water supplies for the region. Some of the strategies that were identified to reduce the salinity of recycled water supplies included:

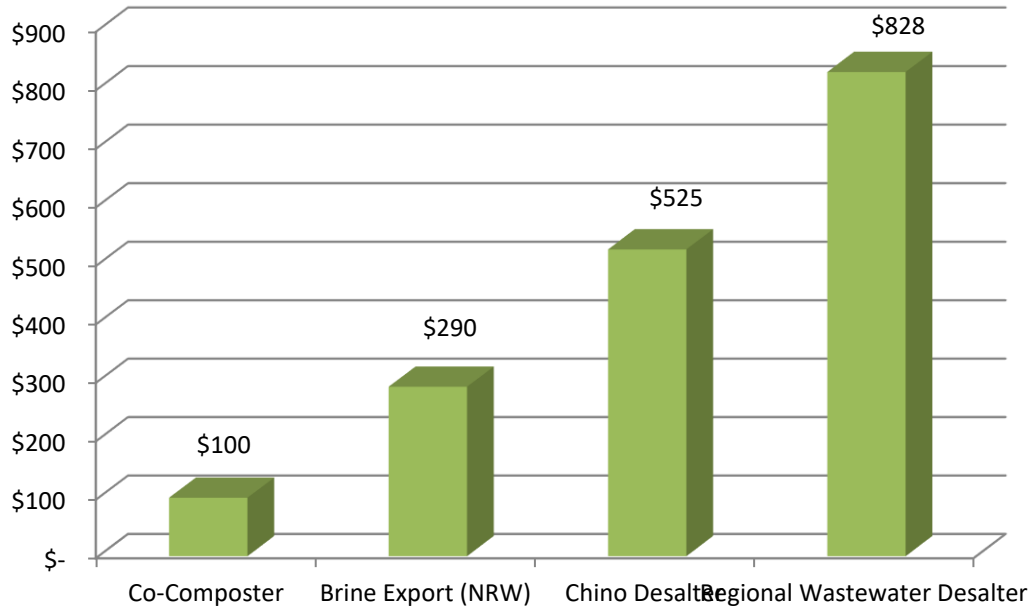
- Maximizing the use of the NRWS
- Developing a program to reduce the salt impacts of water softeners
- Reducing salinity contributions from IEUA water recycling facilities
- Construction of regional groundwater desalters.

These actions were incorporated into the Basin Plan Amendment adopted by the Santa Ana Regional Water Quality Control Board in 2004, which included the salt and nutrient management plan for the Chino Basin. Regional implementation of these actions over the past decades has resulted in the annual export of over 40,000 tons per year of salt from the region.

A study by Parsons Engineering Science (2000) evaluated the long-term issues and future funding needs for operating and maintaining the NRWS in the most cost-effective manner. Parsons suggested that the most cost-effective strategies for maximizing the use of the NRW system were: (1) diverting more high-salinity wastewater flow from the Regional system to the NRWS, thereby reducing the need for expansion of the Regional system; and (2) melding the NRW user rates and charges with the Regional system, "Regionalization". The study confirmed that utilization of the NRWS minimizes IEUA's treatment costs for salt, as illustrated in Figure 6-2.

In 2003, IEUA in partnership with the Regional Technical and Policy Committees, the CBWM and the Santa Ana Regional Water Quality Control Board, developed a strategy to reduce TDS at the IEUA regional water recycling plants and to encourage salt export through optimum utilization of the NRWS consistent with the OBMP.

Figure 6-2:
Relative Costs of Salt Removal From Chino Basin
(Dollars per Ton of Salt Removed)



Implementation of the current Salinity Action Plan is expected to achieve substantial avoided costs and valuable benefits for the region. The Plan consists of the following:

- Water Softener Removal Rebate Program — IEUA developed a "pilot" Automatic Water Softener Removal Rebate Program that was launched in September 2008. Implemented in partnership with the Metropolitan Water District of Southern California, National Water Research Institute, and the Southern California Salinity Coalition, the program developed fact sheets, newspaper and cable TV ads, and even a video that could be shown on local cable stations explaining the impact of the salt from the use of residential self-regenerating water softeners on the regional recycled water supply. As of early February, 2010, almost 200 residents have participated in the pilot rebate program and an estimated 40 tons of salt has been removed from the Regional system. The second phase of the pilot program kicked off in December 2009, with contracting agencies inserting the rebate offer into residential water bill mailings. A focused campaign promoting the rebate program will continue throughout the year with the goal of achieving the removal of 1,000 self-regenerating water softeners.

  The goal of this project is to achieve significant reductions in salinity contributed to the wastewater systems from automatic water softeners. It is estimated that by removing all self-regenerating water softeners, recycled water TDS will be reduced by about 15 to 25 mg/L. This program provides an opportunity to educate the public on why salinity is such an important water quality issue and also places emphasis on the growing importance of recycled water as one of the core water supplies for the IEUA's service area.

- Water Softener Legislation (AB 1366) – In 2009, IEUA successfully sponsored legislation, AB 1366, that now provides local agencies with expanded authority to regulate residential self-regenerating water softeners, especially in areas of the state with water bodies adversely impacted by salinity and high use groundwater basins that are hydrogeologically vulnerable to salinity pollution, such as the Chino Basin.

  Subsequent to the passing of AB 1366, in March 2010, the Santa Ana Regional Water Quality Control Board (Regional Board) amended IEUA's Regional Recycling Water Permit making the necessary finding that controlling the discharge of waste from residential self-regenerating water softeners into the collection systems will contribute to the achievement of the water quality objectives approved in the Basin Plan Amendment.

  IEUA will be adopting an ordinance that will provide the contracting agencies with the authority to implement and enforce local ordinances to regulate the residential use of self-regenerating water softeners. These ordinances will prohibit all new or replacement installations of residential self-regenerating water softeners. The water softener public education campaign and IEUA-administered rebate program for the voluntary removal of previously installed self-regenerating water softeners will be continued to reduce salt discharges from these existing systems. The water softener public education campaign will be continued to explain why the prohibition on salt discharging water softeners is so important to protecting the availability and quality of the region's recycled water supplies.

- Implementation of the Maximum Benefit Basin Plan—Ensure compliance with the Maximum Benefit requirements and with the Memorandum of Understanding with the Orange County Water District and Regional Board. Critical near-term action items undertaken include: (1) developing monitoring work plan with Watermaster; (2) evaluating regional wastewater pretreatment ordinance technical TDS increment; and (3) preparing annual reports on salt balance (Watermaster responsibility);

- Buyback Agreement with CSDLAC—IEUA relinquished 3 MGD of owned capacity in the NRW to LACSD in April 2004, which has lowered annual payments to CSDLAC by approximately 23% or approximately $350,000 annually. The savings will be passed on to NRWS customers through more favorable rates and charges. Also encourages the use of the NRWS by new and existing industries to discharge their saline effluent and increase the salt export;

- MWD Dry Year Yield Conjunctive Use Ion Exchange Projects—Construct lateral connections to the NRW system (IEUA implementation responsibility) in conjunction with the Cities of Upland, Monte Vista Water District, Chino, Chino Hills, and Ontario for several proposed ion exchange projects. The projects have and will continue to improve groundwater basin water quality and yield, especially during dry years;

- NRW "Pass Through" Rates—IEUA staff developed a pass through rates and budget impact analysis for existing industrial customers. This action will encourage export of salts from the Chino Basin by connecting more industries to discharge their brine wastes to the NRWS. "Pass Through" rates provide economic incentives for existing regional industries with effluent TDS concentrations above 500 mg/L to divert their discharge to the NRWS and to use recycled water. This is a key component of the Chino Basin OBMP strategy;

- Chino Desalter "SARI" Capacity Alternatives—In April 2004, IEUA made an agreement with Chino Desalter Authority (CDA) to sell IEUA owned SARI capacity to the CDA to discharge the brine waste from the Chino I Desalter Expansion and the future Chino II Desalter to SARI. As a result of this program more than 26,000 tons of salts were transported outside Chino Basin ground water in Fiscal Year 2008-09.

- Leasing of Temporary SARI Capacity to Lewis Operating Company—IEUA entered into an agreement with Lewis Operating Company (LOC) to lease a portion of the SARI capacity for their Chino Preserve Expansion. IEUA has made this lease available to LOC until the City of Chino completes the design and construction of the Pine Ave. interceptor sewer. In lieu of building the Pine Avenue sewer, the City of Chino is considering building a new sewer lift station on the existing Prado Lift Station site. Once these permanent sewer facilities are completed, the California Institute for Women (CIW) will divert their discharge from the SARI to the new Interceptor, which will flow to RP-5 (Status: In Progress);

6.3 Economic Benefits of the NRWS and Salinity Management Action Plan

IEUA expects to achieve substantial avoided costs as well as benefits for the service area by implementation of the NRWS Action Plan. The IEUA will avoid the cost of treating non-reclaimable industrial wastewater at IEUA's water recycling plants, which would require additional secondary and tertiary treatment capacity to handle the flow plus desalination facilities to remove TDS. A resulting economic benefit to IEUA is the ability to use 35,000 acre-feet per year of recycled water for groundwater recharge instead of more expensive imported water. IEUA expects to avoid an estimated $430 million in future costs over the next ten years as a result of the full implementation of the NRW Action Plan. These avoided costs are summarized in Table 6-1.

TABLE 6-2

COSTS AVOIDED BY THE NRW ACTION PLAN

Action Avoided	Estimated Future Costs Avoided ($ Millions)
Construction & Operation of Desalination Facilities at Regional Plants	$250
Construction of Secondary and Tertiary Treatment Facilities at Regional Plants for 15 MGD (at a rate of $8 per gallon per day including solids handling)	$120
Purchase Imported Water for Recharge to Replace 35,000 AFY Recycled Water	$6 per year
Total Net Economic Benefits Over Ten Years	$430

There will also be additional revenues from the sale of unused capacity, either: (1) as part of the CSDLAC buyback agreement; (2) for the Chino Desalters; (3) for local ion exchange groundwater treatment projects; or (4) for local development in non-sewered areas. These cost savings are expected to offset the cost of "regionalizing" the NRWS.

6.4 Current Ten-Year Plan

The Ten-Year Plan cost for the NRWS is $30 million. Several actions are being taken to increase the economic value of the NRWS and to improve or retain the integrity of the NRWS. The major CIP projects for the NRWS are described below and listed in Table 6-2.

IEUA is obligated to make annual payments to CSDLAC to cover its proportional share of the capital repair, relocation, reconstruction and rehabilitation (4R) costs into CSDLAC sewer system. The relinquishment of 3 MGD of unused NRWS capacity to CSDLAC reduced the ten-year budget to $6.0 million for 4R capital replacement costs, a savings of $3.3 million.

As a part of the Ten-Year CIP, one of the goals of IEUA is to identify and assess the condition, rehabilitation and replacement costs for the NRWS. IEUA retained the services of PBS&J and performed an exhaustive condition assessment of the NRWS pipelines and infrastructure including manholes using Closed Circuit Tele Vision (CCTV) and Global Positioning System (GPS) technology.

TABLE 6-3
NRW SYSTEM CAPITAL IMPROVEMENT PROGRAM—MAJOR PROJECTS

Project	Scheduled Completion	Ten-Year Cost ($ Millions)
NRW System Upgrades	Fiscal Year thru 2019/20	$ 9.8
CSDLAC Capital Replacement Costs	Fiscal Year thru 2019/20	$ 16.5
NWRS Connections and Emergency Pipeline Repairs	Fiscal Year thru 2019/20	$ 3.0
Other Projects	Fiscal Year 2019/20	$ 0.3
Total Capital Improvement Projects Over Ten Years		**$29.6**

This assessment indicated the following: 48 miles of pipeline and 571 manholes of the NRWS were inspected. Overall, the pipelines that were inspected are in good condition, with 21% of the segments requiring no action. Nevertheless, the system is in need of cleaning, as over half of the inspected segments have debris accumulation or deposits in the pipeline and about 9 % of the system could not be inspected due to the excessive debris. Structural defects were found in 17% of the system that will require point repair and replacement over two years, and rehabilitation of pipelines over the following eight years by Cast in Place Pipe lining techniques. About 5,100 feet of SARI pipeline, 15,000 feet of North, Central and South Trunks of the Northern NRW system, and 4,500 feet of laterals require rehabilitation. Manholes were in relatively good condition, with 61% requiring no action, 17% needing maintenance, 13% needing repair/rehabilitation and 9% needing re-inspection as they could not be located or were buried. A planning level condition assessment of the Philadelphia Avenue Pump Station found that it is aging and in need of improvements and upgrades. It was also recommended that the Philadelphia Pump Station (PPS) needed new pumps, instrumentation, controls and improvements to the ferric chloride system.

IEUA staff had completed cleaning of approximately five (5) miles of north NRWS. IEUA staff will continue cleaning, CCTV, and condition assessment of the northern NRWS as an ongoing program to meet the recently adopted requirements of the State mandated Wastewater Discharge Requirement's of Sanitary Sewer Management Program (SSMP).

7.0 FINANCING

7.1 Introduction

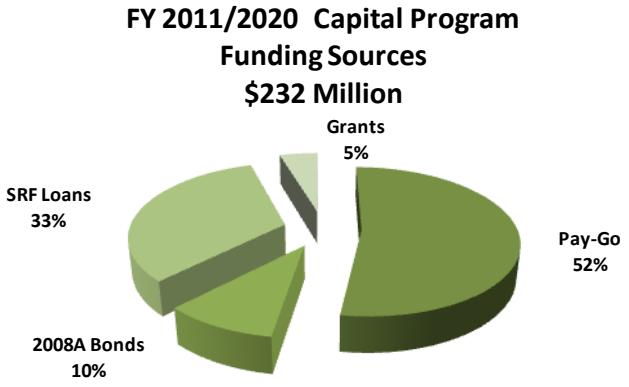
A key assumption in the current TYCIP is the ongoing global economic recession that began in 2007. Recent economic forecasts indicate a slow recovery is not expected until 2013 or 2014. California economist, Dr. John Husing of Economics & Politics, Inc., estimates a "hole of $10.6 billion" in the state economy due to the drastic drop in new development caused by the economic downturn. During the second quarter of 2008, Realty Track reported the San Bernardino/Riverside metro area to have the second highest number of foreclosures in the nation. In November 2009, 25 out of 49 U.S. metropolitan areas with the highest rate of unemployment were in the California (these are areas with populations of over one million). Of the 25 metropolitan areas, the Inland Empire reported the second highest unemployment rate of 14.2%, with the City of Detroit not too far ahead at 15.4%. Until this economic downturn, the Agency's service area was part of one of the fastest growing metropolitan areas in the nation. In most national surveys, the Agency's service area ranked consistently in the top ten growth regions over the past several years. Prior to the current ongoing economic recession, the area's moderate growth was expected to continue through 2030 until reaching full build out in approximately 25 years. The Agency's Long Range Plan of Finance (LRPF) adopted in 2007 was based on the assumption of continued growth and included expansion projects in the amount of $1.2 billion for its wastewater infrastructure as part of the 30 year capital program.

According to Dr. Husing, an economic recovery is not expected until 2012 or 2013 on a national level, and even later for California, particularly for Southern California. In light of the bleak economic conditions, the Agency shifted the focus of its capital program from expansion to the refurbishment, replacement and maintenance of its existing facilities. Beginning in FY 2007/08 and continuing through FY 2008/09, the Agency and the Board deferred over $200 million of non-critical capital projects originally included in the FY 2007/08 – FY 2016/17 Ten Year Capital Improvement Plan (TYCIP). Most of these projects were slated to begin between fiscal years 2007 – 2010. Capital projects deferred were primarily expansion and improvement projects for the wastewater system that were based on the assumption the area's population would continue to grow through 2025. One exception is the Recycled Water Business Plan (RWBP), which was adopted by the Board December 2007 for the expansion of the Agency's Recycled Water Distribution system. The purpose of the RWBP was to increase the use of recycled water within the Agency's service area. The aggressive three year period was driven by a shortage of potable water supply that is insufficient to meet the growing demands.

In general, the Agency's capital financing is derived from four (4) primary sources (Figure 7-1):

1. Pay-go cash which for purposes of the model is defined as net system revenues[1]
2. Remaining unexpended 2008A Grant Proceeds
3. State revolving fund fixed low interest loans (SRF)
4. Federal and State Grant revenues

Figure 7-1: Funding Sources



7.2 Agency Capital Funding Sources

Presented below is a brief description of the Agency's primary revenue sources for capital expenditures.

7.2.1 Connection Fees

For all new development within the IEUA service area, the Agency levies a fee to connect to the IEUA regional sewer system. These fees, commonly called "connection fees," are collected by each of the Agency's contracting cities or agencies and held in trust in a Capital Capacity Reimbursement Account (CCRA) until requested, or "called," by the Agency. Capital calls, or connection fee payments, of CCRA funds are based on identified and projected capital needs. Connection fees are restricted to capital acquisition, construction, maintenance, and equipment and process modifications.

The Agency's policy objective and contractual obligation (based on the Regional Sewage Contract) is to have connection fees support only capital improvements associated with new development. For example, connection fees support new treatment capacity for the Wastewater Program, but are not to be used to support ongoing operations or capital replacement of existing facilities. The Agency's current connection fee rate is $4,766 per new connection effective July 1, 2009. No increase in the EDU connection fee is proposed for FY 2010/11.

[1] Primarily user charges, connection fees and property taxes not needed for debt service.

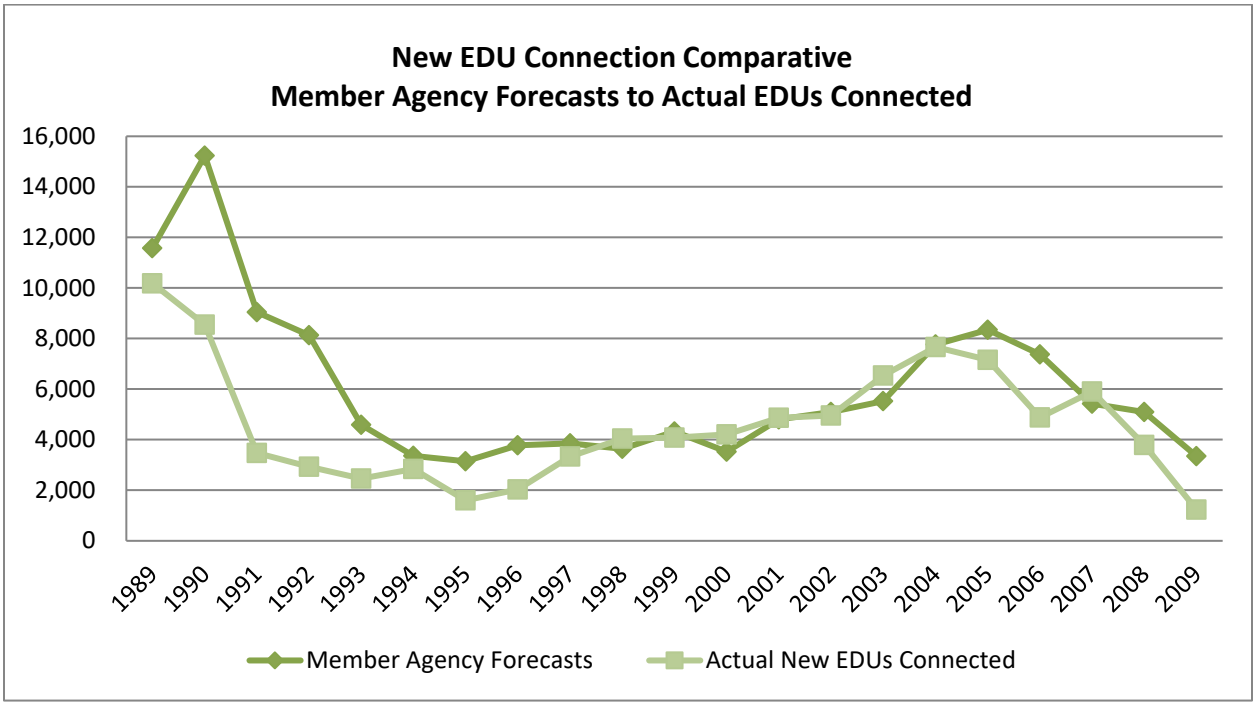
The drastic slowdown in new development in the Agency's service area is expected to continue for several years resulting in a significant decline in the projected number of new connections, (see Table 7-1). In August 2009, the Agency's Board approved the Regional Committees recommendation to modify the procedure for the time of collection of sewer connection fees from when the permit is issued to no later than the issuance of a certificate of occupancy. The deferral of the collection of new connection fee permits help support and encourage new development in the area.

TABLE 7-1
AGENCY'S PROJECTED NEW CONNECTIONS

Projected EDU Connections & Fees ($ Millions)							
		Member Agencies		Agency		Difference	
FY	Rate	EDUs	Amount	EDUs	Amount	EDUs	Amount
2009 B	$4,673	3,350	$16	3,000	$14	-350	($2)
2009P	$4,673	3,350	$16	1,450	$7	-1,900	($9)
2009	$4,673	3,350	$16	1,231	$6	-2,119	($10)
2010 B	$4,766	4,121	$20	1,000	$5	-3,121	($15)
2010 P	$4,766	1,459	$7	1,450	$7	-9	($0)
2011	$4,766	2,370	$11	1,100	$5	-1,270	($6)
2012	$4,766	4,137	$20	1,200	$6	-2,937	($14)
2013	$4,766	4,274	$20	1,400	$7	-2,874	($14)
2014	$4,861	4,295	$21	1,600	$8	-2,695	($13)
2015	$5,007	3,984	$20	1,800	$9	-2,184	($11)
2016	$5,157	4,337	$22	2,000	$10	-2,337	($12)
2017	$5,312	4,167	$22	2,200	$12	-1,967	($10)
2018	$5,471	4,339	$24	2,400	$13	-1,939	($11)
2019	$5,635	3,925	$22	2,400	$14	-1,525	($9)
2020	$5,804	3,925	$23	2,400	$14	-1,525	($9)
FY 2010 - 2020		41,212	$212	19,950	$104	-21,262	($108)
B=Budget, P= Projected							
Member Agency projections submitted in the Fall 2009 through FY 2019							

Although projections from member agencies are considerably more optimistic, historical data supports the Agency's conservative growth forecast (see Figure 7-2).

Figure 7-2: Connection Forecasts



Connection fee revenues are estimated to increase from $5 million projected in 2011 to $14 million in 2020, a total of $97 million over the 10-year period. This forecast assumes 7,100 new residential units connect to the system between fiscal years 2011 and 2015. The number of new connections is then assumed to slightly increase by approximately 200 units per fiscal year from 1,800 in 2015 to a 2,400 in 2020. This forecast reflects a gradual recovery in residential development over the next 10 years for the region as economic conditions are anticipated to improve beginning in 2013. The revenue forecast assumes no increase to the connection fee rate between FY 2009/10 through FY 2012/13, and then slight increases, between 2% and 3% annually, through 2020. Increases will support pay-go capital improvement costs. New connection fees are forecasted to increase from the current fee of $4,766 per new connection, to $5,804 by FY 2019/20.

A review of the EDU measurement is currently underway with member agencies to evaluate the table and formulae set forth in the Regional Sewage Service Contract (the Regional Contract) Exhibit "J" for determining EDU units and the amount of Capital Capacity Reimbursement Payment. Any modifications to the EDU measurement will apply to new connections after approval of the revised Exhibit "J" by the Regional Policy Committee and Agency Board.

7.2.2 Capital Improvement Fees

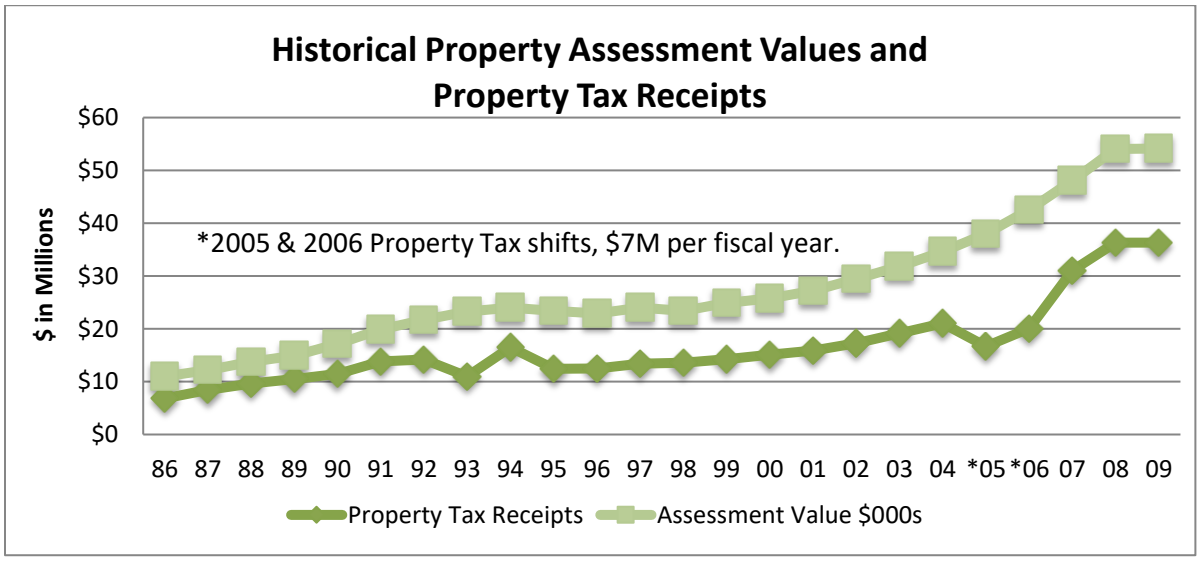
The revenues for the Non-Reclaimable Wastewater (NRW) Program to support capital replacement costs consist of a monthly Capacity Improvement Fee of $90 per capacity unit owned. These fees also support debt service costs related to the NRW system capital improvement financed with 2008A Revenue Bonds.

7.2.3 Property Taxes

The Agency receives an allocated share of the San Bernardino County-wide secured property tax levy pursuant to the California Revenue and Taxation Code. Payments from the County are regulated by the "Teeter Plan" which allows taxing agencies to collect 100% of assessed taxes each year in lieu of receiving only those taxes actually collected by the County during the current year, and receiving penalties and interest when delinquent taxes are collected in future years.

Property taxes have historically been allocated against annual debt service payments, the acquisition of the Wastewater Program and common Agency assets, and to subsidize operational costs in the Regional Sewage Program. The rapid growth and increase in property values in the Agency's service area over the last few years significantly increased property tax revenues (see Figure 7-3).

Figure 7-3: Historical Property Assessments and Revenues



1) Property tax shift by State of California for the Education Revenue Augmentation Fund (ERAF) in FY 1993
2) Prop 1A, property tax shift in FY 2005 & 2006 ($7M per fiscal year)

In the past several years, property tax revenues have increased substantially, from $15 million in FY 1999/2000 to $36 million in FY 2008/09. The increase was a result of a strong housing market and rising property assessment values in the Agency's service area.

According to a Southern California's business newspaper, the population in the Agency's service area has increased by 15%, approximately 495,000 people, since 2000. Property value assessments (excluding Redevelopment Agency's incremental value) confirm the growth trend in the region increasing by 217%, or $29 million between fiscal years FY 1998/99 and FY 2007/08.

This growth trend is not expected to continue due to the high number of foreclosures in the area as a result of the economic recession. The San Bernardino County Tax Assessor projecting a drop in property assessment values in FY 2009/10 of approximately 6%. In the second quarter of 2008, Realty/Trac reported foreclosures in the San Bernardino/Riverside metro area to be second highest in the nation, (a ratio of 1:32). Median home prices also dropped from $365,000 in 2007 to $240,000 in 2008. Despite these conditions, property tax receipts to date are 3% higher than the prior year. The estimated total property tax income for FY 2009/10 includes an anticipated drop of 3% from projected actual of $35 million, with an additional 4% decline forecasted for FY 2010/11.

Property taxes are projected to generate $34 million in FY 2010/11, or approximately 35% of the Agency's total operating revenues. While property taxes are an important source of revenue, they were also the most uncertain due to the ongoing state budget crisis. The risk of a property shift by State was minimized in FY 2009/10 with the suspension of Prop 1A. Rather than taking property taxes from local government, under Prop1A, the State borrowed the funds to help solve the FY 2009/10 state budget crisis. A subsequent trailer bill, AB 15, set the guidelines for the state to repay the borrowed property tax funds, (8% plus interest), no later than June 30, 2013, or the end of the first fiscal year following the year of the borrowing. The State then collaborated with local governments to establish a securitization mechanism to help local governments avoid negative cash flow. Under the Prop 1A Securitization Program, local governments had an opportunity to sell their property tax receivable due from the State to a joint powers authority which then issued note's backed by the State. The Agency elected to participate in the securitization program and received the $2.1M of property taxes borrowed by State in two equal installments payable in January and May, 2010.

Ultimately, the goal of the Agency, as stated in the Agency's FY 2011 LRPF, is to have programs that are self-supported by user charges and fees and minimize the reliance on property taxes to support operating costs.

Historically the Agency's policy has been to use property taxes to support debt service costs and capital expenditures. In FY 2010/11 property taxes are allocated to support 100% of debt service costs in the following funds:

- 65% - Regional Capital Improvement (RC) Fund to support the acquisition, construction and improvement of wastewater facilities.
- 19% - Regional Operations & Maintenance (RO) Fund to support capital replacement of wastewater facilities and operating costs.
- 8% - Recycled Water (WC) Program to support debt service costs.
- 8% - Administrative Services (GG) Fund to support acquisition of Agency wide assets such as fleet vehicles, computers and hardware.

7.2.4 Grant Revenues

As a Special District, IEUA is eligible for various Federal, State and Local grant programs such as the California Water Recycling Grant Program, California State Integrated Regional Water Management Grant Program, Southern California Metropolitan Water Distinct (MWD) Groundwater Conjunctive Use Grant Program, the Federal Reclamation Wastewater and Groundwater Study and Facility Act (Title XVI) Program and recently, the American Recovery and Reinvestment Act 2009 (ARRA) Grants and SRF Loan Funding . IEUA has been active in participating in these programs. As such, grant revenue has become another important source of funds for the Agency.

Grant revenue projections are based on total expected costs for eligible capital projects. Of the total $10.8 million projected grant revenues for the 10 year term, over 78% or $8.5 million will fund a portion of the Recycled Water Distribution System design and construction costs. In 2008, the Agency was awarded a $20 million federal Cooperative Agreement from the U.S. Bureau of Reclamation (USBR). The first installment of $950,000 was received in 2008, a second installment in the amount of $5 million was received in April 2009, and the remaining $14 million is projected to be fully received by 2011, under the current Federal ARRA economic stimulus funding.

Groundwater Recharge Program and Water Resources Programs also benefit from grant funding. The final grant payment from the California Department of Water Resources (DWR) grant for $4 million is anticipated to be received in the current fiscal year (2010) with the completion of the Chino Basin Recharge Facilities Improvement Phase II Projects. An additional grant for $1 million from DWR under the Urban Drought Assistance Program is also projected to support retrofitting potable water users to use recycled water in 2009 and 2010.

The Planning and Environmental Compliance Department has been working with member agencies on a Groundwater Conjunctive Use Grant Program, known as Dry Year Yield (DYY) Program, administered by MWD. IEUA has received the full grant reimbursement in FY 2008/09. Up to $15 million in grant funding may be awarded by MWD to IEUA for the Phase II Dry Year Yield projects if both MWD and the participating agencies approve expansion of the project. It is very likely that this grant will be passed through to IEUA's member agencies in the same manner as Phase I. As such, it will be recorded as grant revenue if awarded, and offset by pass through costs reported by member agencies with no fiscal impact to the Agency's reserves.

7.2.5 Federal and State Stimulus Funding

The American Recovery and Reinvestment Act (ARRA), known as the "stimulus package" was passed by Congress in February 2009. The following projects have been submitted to the SWRCB and are eligible for economic stimulus funding (Table 7-2):

TABLE 7-2

ECONOMIC STIMULUS FUNDED PROJECTS

Federal / State Agency	Project Description	Funding Amount ($ Millions)
US Bureau of Reclamation	Recycled Water Distribution System	$ 14.0
US Environmental Protection Agency/SWRCB Clean Water Act	Recycled Water Distribution System	17.8
	Other State Clean Water Act Grants	2.5
	RP1 Dewatering Facility	27.0
Total		**$ 61.3**

The California Clean Water State Revolving Fund (CWSFR), overseen by the SWRCB, will receive approximately $280 million to fund "construction ready" water and wastewater infrastructure. The Agency submitted applications for various projects which are qualified as "construction ready" and are eligible for economic stimulus funding. SWRCB, in its March 17, 2009 Board meeting, approved a funding commitment letter for $34 million, ($17.8 awarded in 2009), in CWSRF funding and a Water Recycling Funding Program grant for $4.1 million for the Agency's Northeast Recycled Water project. This was the first ARRA funding approved by the SWRCB.

The USBR received $126 million of ARRA funding for the Title XVI Recycled Water Program. IEUA has submitted an application to request the remaining $14 million of the $20 million federal cooperation agreement to be funded by the ARRA funding. As mentioned above, this funding has been awarded in 2009.

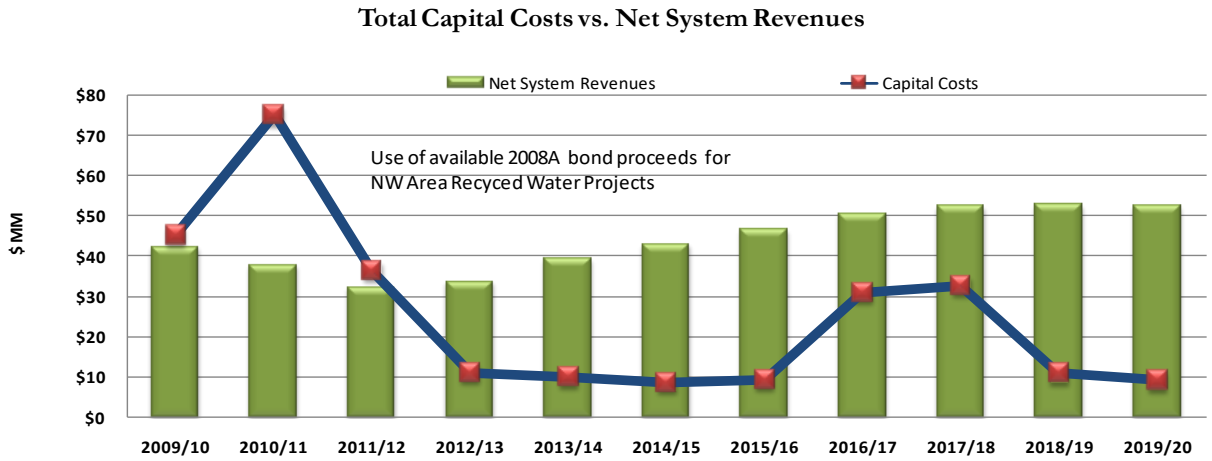
7.3 Financing Strategy

This section discusses the Agency's approach to meeting capital needs while managing its policy goals to minimize borrowing costs and maintain target fund balances. To achieve its goal, the Agency seeks to pay for capital projects first with system revenues whenever possible and pursue various forms of debt financing when net revenues are insufficient or inefficient. Aside from the SRF loans financing for the Recycled Water Program and the RP1 Dewatering Facility Expansion project in the Regional Program, the current TYCIP does not require the issuance of long term bonds during the 10 year period. Deferral of non-essential capital projects, which reduced the total ten year capital program to $232 million, spreads out the costs of improvements to allow for a pay-go financing approach while preserving adequate fund balances. Approximately 17% of capital costs in fiscal years 2011 through 2012 are funded by unexpended proceeds from the 2008A Bond issue.

Nearly 50%, or $114 million, of the total $232 million TYCIP is scheduled over the next two fiscal years, (FY 2011/12 and FY 2012/13) Capital expenditures outpace net system revenues in the first 2 years of the 10-year term by approximately $44 million (Figure 7-4).

The shortfall is funded by a combination of 2008A bond proceeds, SRF Loan proceeds, and grants. For the next 8 years of the 10-year term, net system revenues are expected to exceed capital costs by $210 million. Grant revenues projected at $11 million for the ten-year term will help offset capital costs and reduce the borrowing requirements.

Figure 7-4: Capital Costs vs. Net System Revenues



The Agency applies a tiered financing strategy to ensure the lowest cost of borrowing while maximizing flexibility. This tiered strategy includes system revenues, fund balance draws and SRF loans. Therefore applying the lowest cost funds first and the most expensive funding sources last.

Projections indicate that in order to fund aggregate capital expenses of $232 million over 10 years, the Agency will require borrowing of approximately $77 million in SRF loans. This result reflects the Agency's goal to fund capital expenses on a pay-as-you go basis, or utilize the lowest cost of financing, and minimize the use of bonds.

A summary table of the Agency's projected borrowing is presented below (Table 7-3).

TABLE 7-3
BORROWING REQUIREMENTS

Fiscal Year	Bonds	SRF Loans ($ Millions)	Aggregate Borrowing
2011	-	$21	$21
2012	-	17	38
2013	-	0	
2014	-	1	39
2015	-	0	
2016	-	-	-
2017	-	12	51
2018	-	23	74
2019	-	3	77
2020	-	-	-
Total	$0	$77	$77

Based on the proposed capital expenditures, no future long term bond issues are anticipated. If the Agency is successful in securing federal and state economic stimulus grants in addition to the $19 million USBR grant and $4.2 million from SWRCB, or stimulus SRF loan financing for projects in addition to the Recycled Water Phase IV and V Northeast section and RP-1 Dewatering Facilities Expansion projects, the amount and the nature of the funding will impact the overall financing strategy.

It is important to note that the capital expenditure estimates beyond 2015 carry some uncertainty and that new, unforeseen capital costs may arise in the out-years that have not been contemplated in this current TYCIP program.

7.4 AB-1600 Nexus Test

Each year, IEUA assists its Contracting Agencies to demonstrate compliance with AB1600 (the "Mitigation Fee Act"), which requires that CCRP must be reasonably related to the service provided. As it relates to Capital Capacity Reimbursement Payments, this is accomplished by summarizing the projected needs for the collected funds and the duration that the funds will be held. Table 7-4 summarizes IEUA's projected need for Capital Capacity Reimbursement Payment revenues for the Regional Wastewater Capital Improvement (RC) fund.

As indicated in Table 7-4, in the column labeled, "Balance of Funds Collected for 5 or More Years," post-1989 reimbursement payment receipts do not stay on deposit for more than five years during the ten-year program. If funds collected after January 1, 1989 are segregated and used to meet Regional Program needs first, post-1989 funds will be expended within the required five years. Funds in the CCRP balance are expected to expend for projects throughout the ten year period, and to provide adequate coverage for cash flow shortages arising from pending state loans. Due to the uncertainty of the current economic outlook and the slower growth forecast for the Agency's service area, the Agency's FY 2011/2020 TYCIP projected $232 million is less than the prior year's adopted TYCIP by approximately $24 million. These conservative projections for future capital costs account for the build up in the CCRP balance beginning in FY 2015/2016. The TYCIP program will be revisited each year and the CCRP fund will be utilized to meet the growth and needs of the Agency's service area. Therefore, the CCRP balance is projected to meet the statutory requirements of AB-1600.

TABLE 7-4 PROJECTED STATUS OF REIMBURSEMENT PAYMENT RECEIPTS ($Thousands)				
Fiscal Year	***Annual Contracting Agency Receipts (Reimbursement Fees)***	***IEUA Expenditure of Funds (Capital Calls)***	***Balance of Funds Collected***	***Balance of Funds Collected for 5 or More Years***
1994-95	4,906	0	13,013	0
1995-96	6,801	4,600	15,214	0
1996-97	11,185	5,125	21,274	0
1997-98	14,213	24,519	10,968	0
1998-99	13,718	14,637	10,049	0
1999-00	11,094	3,190	17,953	0
2000-01	17,216	22,400	12,769	0
2001-02	20,135	48,010	0	0
2002-03	23,999	0	23,999	0
2003-04	29,726	0	53,725	0
2004-05	26,868	51,200	29,393	0
2005-06	20,800	58,270	8,077	0
2006-07	22,615	20,100	10,592	0
2007-08	16,626	14,676	12,542	0
2008-09	5,752	11,000	7,295	0
2009-10	6,196	8,000	6,207	0
2010-11	5,243	8,000	3,449	0
2011-12	5,719	7,000	2,169	0
2012-13	6,672	2,550	6,291	0
2013-14	7,778	2,750	11,319	0
2014-15	9,013	2,300	18,031	0
2015-16	10,314	2,350	25,996	0
2016-17	11,686	8,100	29,582	0
2017-18	13,130	4,100	38,612	0
2018-19	13,524	3,750	48,386	0
2019-20	13,930	2,750	59,566	0

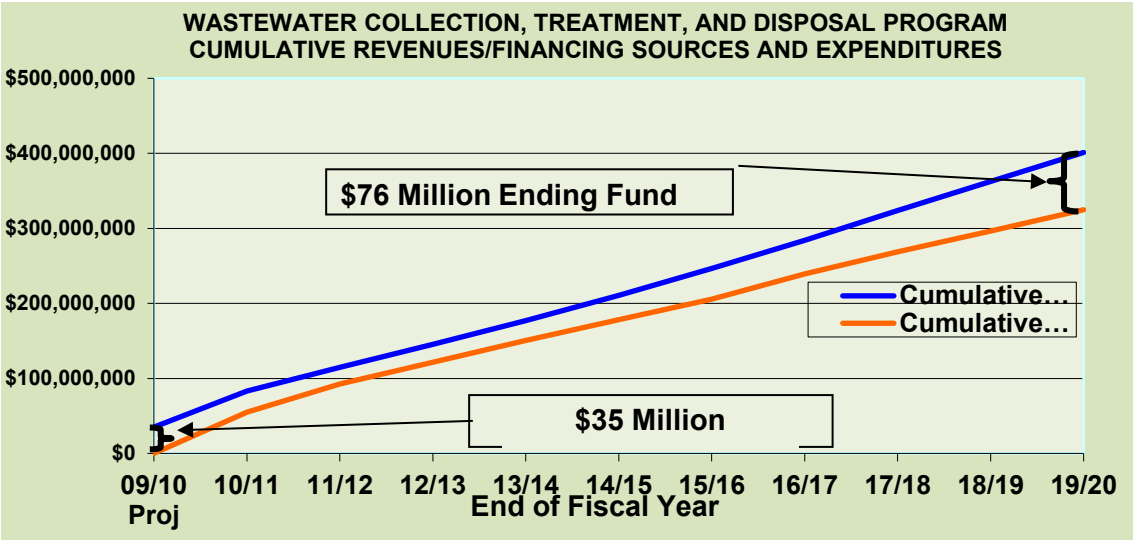
7.5 Conclusions

The recommended financing for the Regional Program to fund the Ten-Year Capital Improvement Plan will include low interest State loans of approximately $17 million, (the remaining balance of the $24 million SRF loan for the RP-1 Dewatering Facility Expansion project). Figure 7-5 shows how gross revenues and costs vary throughout the ten years, affecting the combined working capital and Member Agency reserves. Starting with a projected fund balance of $35 million at the end of FY 2009/10 with initial costs set to zero, cumulative funding sources are projected to exceed costs during the next ten years, leaving an ending combined fund balance of $76 million, which includes 16% for debt service reserves as mandated by bond covenants, or approximately $12 million.

It is important to note that the capital expenditure estimates beyond 2014 carry some uncertainty and that new, unforeseen capital costs may arise in the out-years that have not been contemplated in this current TYCIP program. The average projection beyond FY 2011/12 for the Regional Capital program is under $4 million per fiscal year. This conservative capital program is based on a key assumption of no significant growth in system flows; therefore no need to expand the existing facilities during the ten year period (FY 2010/11 – FY 2019/20). No increase in EDU connection fees are proposed over a three year period (FY 2010/11 and FY 2012/13) and only minimal inflationary increases are proposed thereafter.

Capital Capacity Reimbursement Payments are projected to provide $97 million for the capital improvement program over the next ten years. SRF loans are expected to provide approximately $77 million, ($60 million for Recycled Water projects and $17 million for Regional projects). The other main revenue sources are approximately: $352 million in property tax revenues; $98 million from NRW System user charges and capacity fees; $98 million in Recycled Water sales, $17 million from interest on reserves balance, and $11 million in grant revenue. Any significant changes in these key funding assumptions, such as a drastic drop in property tax revenues due to declining assessment values and foreclosures, may result in rate adjustments combined with additional cost reductions and may significantly impact projected ending fund balances.

Figure 7-5: Wastewater Collection, Treatment, and Disposal Program Cumulative Revenues and Expenditures



8.0 EMERGING PLANNING ISSUES

8.1 Introduction

There has been a profound shift in California water supply planning in response to three consecutive years of drought and regulatory restrictions on pumping imported water from the Bay-Delta. The current water crisis has led to Governor Schwarzenegger's declaration of a water emergency and a call for a 20% reduction in water use, state-wide. In 2009, the Metropolitan Water District of Southern California (MWD) prepared and implemented a Water Supply Allocation Plan (WSAP), while IEUA, in collaboration with its member agencies, prepared and implemented a Drought Plan in response to MWD's WSAP. IEUA is also currently developing the 2010 Urban Water Management Plan, which will be complete by the end of 2010. This TYCIP recognizes the need to continue to integrate the Agency's planning activities into Chino Basin's overall water supply management strategy. The Agency is continuing to work with local stakeholders to enhance and expand existing programs that improve local water supply availability and reliability, including:

- Recycled Water Program
- Groundwater Recharge Program
- Desalter Program
- Groundwater Conjunctive Use Programs
- Stormwater Management Programs
- Water Use Efficiency Programs
- Energy Use Sustainability and Management Programs.

8.2 Major Water Efficiency and Water Resources Initiatives

The Agency works closely with MWD, CBWM, the retail agencies, and other local stakeholders to implement regional conservation initiatives, coordinate water resource planning efforts, and support water supply programs such as stormwater capture and management, groundwater basin management, conservation, public education, water efficient landscaping, low impact development and water efficiency rebates. Three of the most recently-completed major planning initiatives were:

- Prepared and secured IEUA Board adoption of Peace II Agreement Subsequent Environmental Impact Report (SEIR) in compliance with the requirements of CEQA and Watermaster obligations to the Court and State Water Resources Control Board, Santa Ana Region.

- Completed Chino Basin DYY Program Expansion Project Development Report and Project CEQA requirements. The report describes the facilities, groundwater modeling information and CEQA documentation necessary to substantially expand the groundwater storage and annual "put" and "take" capacity of this program to 150,000 acre-feet.

- Completed IEUA regional short-term conservation business plan that identifies current conservation activities, legislation and initiatives the agency and its member agencies have identified as critical to meeting recently enacted regulatory requirements for demand reduction.

Major water conservation and water resources initiatives for FY 2010/11 and beyond include:

- ***AB 1420 (Laird/Feuer)*** - Effective January 1, 2009, this bill makes award of all state water management grants and loans contingent on compliance with the implementation of water demand management practices described in the Urban Water Management Planning (UWMP) Act.
- ***SBX 77 (Steinburg)*** – Signed into law in November 2009, this bill requires the state to achieve a 20% reduction in urban per capita water use by December 31, 2020 and requires reporting of the 20 percent by 2020 water use reduction goals in urban water management plans.
- ***Water Softener Rebate Program*** –Continue to implement and work for the success of the water softener rebate program. The program was kicked off in 2008 as a means to protect local groundwater resources by controlling the build-up of salt in the recycled water supply.
- ***IEUA Drought Plan and Extraordinary Water Conservation Measures –*** Implement the Drought Plan that is consistent with MWD Water Supply Allocation Plan and has a regionally coordinated conservation message campaign to reduce area water demands.
- ***2010 Urban Water Management Plan*** – Prepare all elements for the 2010 Regional UWMP. Develop a Water Use Efficiency Plan that is consistent with state and local conservation requirements and can be included as a conservation element in the 2010 Regional UWMP. Assist Public Information Program with implementation of Inland Empire Landscape Alliance, Garden in Every School and Chino Basin Green.
- ***MWD Dry Year Yield Programs*** – Implement Phase I of the MWD Dry Year Yield Program as well as administer and complete negotiations for Phase II of the MWD Dry Year Yield Program, to increase groundwater storage to 150,000 acre-feet.
- ***Water Resource Planning*** – Participate in regional water resource planning initiatives, including the Groundwater Recharge Master Plan led by CBWM, "One Water, One Watershed" led by the Santa Ana Watershed Project Authority to update the Regional Integrated Water Management Plan and the MWD Integrated Resources Plan.
- ***IEUA Long-Term Water Use Efficiency Business Plan*** – Complete and implement the regional, long-term business plan that will guide the water conservation programs over the next three to five years and identify key initiatives for implementation and demand reduction in order to comply with AB 1420 and SBX 77.

- ***Water Efficiency Rebate Programs*** – Evaluate current programs current funding levels and offer an expanded array of rebates to increase water savings, public awareness and participation.
- ***IEUA Landscape Evaluation Program*** – Expand existing landscape program to include residential customers and continue to work with Chino Basin Water Conservation District on the administration of this program..
- ***GEOSmart Water Conservation Financing Pilot Program*** – Develop and implement a new innovative pilot landscape program to provide incentives and financing opportunities for residential customers seeking to improve landscaping efficiency.
- ***Water Budget Program-*** Develop a regional structure that provides customers with information on their monthly or bi-monthly usage versus a budget allocation. The budget would provide information and guidance as to reasonable water usage for a customer's site.
- ***High Efficiency Nozzle Direct Installation –*** Implement a new direct installation high efficiency nozzle program that will result in a low cost solution for landscape efficiency
- ***Weather Based Irrigation Controller Installation Program*** – Implement a direct installation controller retrofit program for dedicated landscape irrigation meters as funding becomes available.
- ***Greater Prado Clean-up Program*** – Administer and implement the SWRCB-funded Greater Prado Cleanup Program in coordination with cities and regional agencies and assist with the implementation of other projects identified as priorities under the Chino Creek Integrated Plan.

8.3 Air Quality Issues and Carbon Reduction Program

The Agency's impact on air quality is stringently regulated locally by the South Coast Air Quality Management District (SCAQMD) and on the state level by the California Air Resources Board. Both current and future regulations will influence the type and scale of power generation equipment used by the Agency in upcoming years.

IEUA faces a future potential obstacle in the proposed SCAQMD Rule 317, which will impose annual fees for failure to reduce emissions of Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOCs) by at least 20 percent from 2010 reported levels. Three separate versions of this rule are presently under review by the SCAQMD's Governing Board and an implementation date has not yet been set. However, once this rule goes into effect, it will likely challenge the Agency to reduce emissions through equipment replacement or retrofit.

The Agency faces a similar challenge in the existing SCAQMD Rule 1110.2, which regulates air emissions from stationary source internal combustion engines and imposes strict limits on emissions from these units effective July 2012. The technological and economical feasibility of attaining the limits required to comply with this rule are currently being investigated by select districts throughout Southern California. The results of this assessment will play an important role in determining whether or not IEUA continues operation of the internal combustion engines or looks in another direction for power generation needs.

Facility power generation plays a vital role in air quality because it also triggers annual state greenhouse gas (GHG) reporting requirements. With the 2006 passage of AB 32, the California Global Warming Solutions Act, the California Air Resources Board (CARB) was delegated responsibility to monitor and regulate sources of GHGs. IEUA is mandated to report GHG emissions from stationary combustion sources under the Cogeneration requirement. Since this equipment is also subject to SCAQMD Rule 1110.2, future reporting requirements may vary.

Implementation of AB 32 by the CARB is proceeding at a rapid pace. Major upcoming deadlines in the implementation schedule include:

- During 2010—CARB is conducting a series of rulemakings with potential far-reaching effects, after workshops and public hearings, including revisions to the mandatory reporting regulations and a future cap-and-trade program;
- By January 1, 2011—CARB will complete the major rulemakings intended to achieve the 2020 target for GHG reduction;
- By January 1, 2012—The GHG rules and market mechanisms adopted by CARB will take effect and be legally enforceable;
- December 31, 2020—Deadline for achieving the 2020 GHG emissions cap based on returning statewide GHG emissions back to 1990 levels;
- December 31, 2050—Deadline to achieve the goal of reducing statewide GHG emissions to 80% below 1990 levels.

IEUA and other POTWs are working together to evaluate and identify potential technologies that will both comply with the air quality regulations and reduce emissions of criteria pollutants and GHGs. Quantifying emissions reductions is also important to eventually receive and market carbon credits. IEUA is seeking to translate its voluntary emissions reductions into creditable reductions consistent with AB 32 implementation strategy. Some of the potential GHG reduction actions at IEUA include:

- Energy efficiency projects
- Improve pump efficiencies
- Renewable energy projects (e.g., solar, wind, in-conduit hydropower, fuel cells)
- Biogas and alternative fuel utilization
- Water recycling/reuse to reduce water import.

IEUA is pursuing future opportunities to receive credit for voluntary reductions, such as:

- Credit for reduction in electricity use
- Credit for production of carbon-neutral fuel (e.g., digester gas)
- Credit for use of carbon neutral fuel (e.g., digester gas, biodiesel, solar, etc.).

8.4 Climate Change

Climate change has become a powerful environmental policy driver, at both the state and federal levels. With passage of AB 32, the Global Warming Solutions Act of 2006, California launched the nation's most comprehensive initiative in response to climate change concerns.

Regulatory agencies' and legislative bodies' focus on associated issues has continued to grow. More recent activities include the State's 2009 Climate Adaptation Plan and President Obama's October 2009 Executive Order providing direction on Federal Leadership in Environmental, Energy and Economic Performance.

In December 2009, the U.S. Environmental Protection Agency issued findings that GHG emissions represent a threat to public health and welfare. Passing federal legislation to respond to climate change remains a top priority in both houses of Congress. Furthermore, recent federal appellate court decisions increase the likelihood of federal regulatory action.

Climate change will exacerbate the existing water management challenges confronting California. Possible consequences include more frequent drought periods, changes in runoff patterns from the Sierra Nevada, increased flooding intensity as well as impacts to the operations of the State's surface water storage facilities. The Department of Water Resources is projecting that the California snowpack will decline by 25 to 40% by 2050, thereby significantly reducing the amount of water that is stored at higher elevations for use during the summer and fall. Higher temperatures in the Sierras will also result in earlier and more rapid runoff of snowmelt and less ability to capture it. Decreased energy production through hydro power may result. All of these trends, in addition to population growth, will result in an increased demand for water in California and inadequate storage to maintain the reliability of supplies dependent upon snowpack.

For the Santa Ana Watershed, regional temperature increases and precipitation variability would likely mean reduced flows in local streams, reducing groundwater recharge and impacting sources of water supply; increased water demand (increased evapo-transpiration) for urban uses; increased storm intensity and flooding; increased erosion and related water quality problems; and impacts on wildlife habitat. Furthermore, the implications of global sea level rise include increased sea water intrusion into groundwater supplies and physical impacts to infrastructure in coastal communities. In general, the watershed could expect to see reduced water supply availability, higher future costs for meeting water needs, and lower environmental quality.

While the science and the debate over the causes and extent of climate change will continue to evolve, water agencies must position themselves to protect and promote their members' interests. Changing policies related to climate change will create both risks and opportunities for water agencies. In particular, the relationship between water use and energy consumption, and the associated GHG emissions, will likely receive increased scrutiny by policymakers and be subject to increased regulation. Conversely, climate change policies will likely create opportunities to help finance and otherwise accelerate local implementation of conservation, recycling, and other water supply reliability projects, as well as expanding opportunities to develop renewable energy sources.

To meet these climate change challenges, IEUA is working on several fronts:

- proactively working with state policymakers and legislators to target incentives in support of our energy-saving and water-saving projects;
- working with the Association of California Water Agencies (ACWA) to encourage federal and state policy to incentivize and provide financial assistance for local resource investment in conservation and water use efficiency, recycling, and renewable energy;
- working with SAWPA through the OWOW process to develop integrated, regionally-coordinated water resource plans and projects that can be implemented on a watershed basis and that are eligible for Proposition 84 or Proposition 1E funding through the Department of Water Resources;

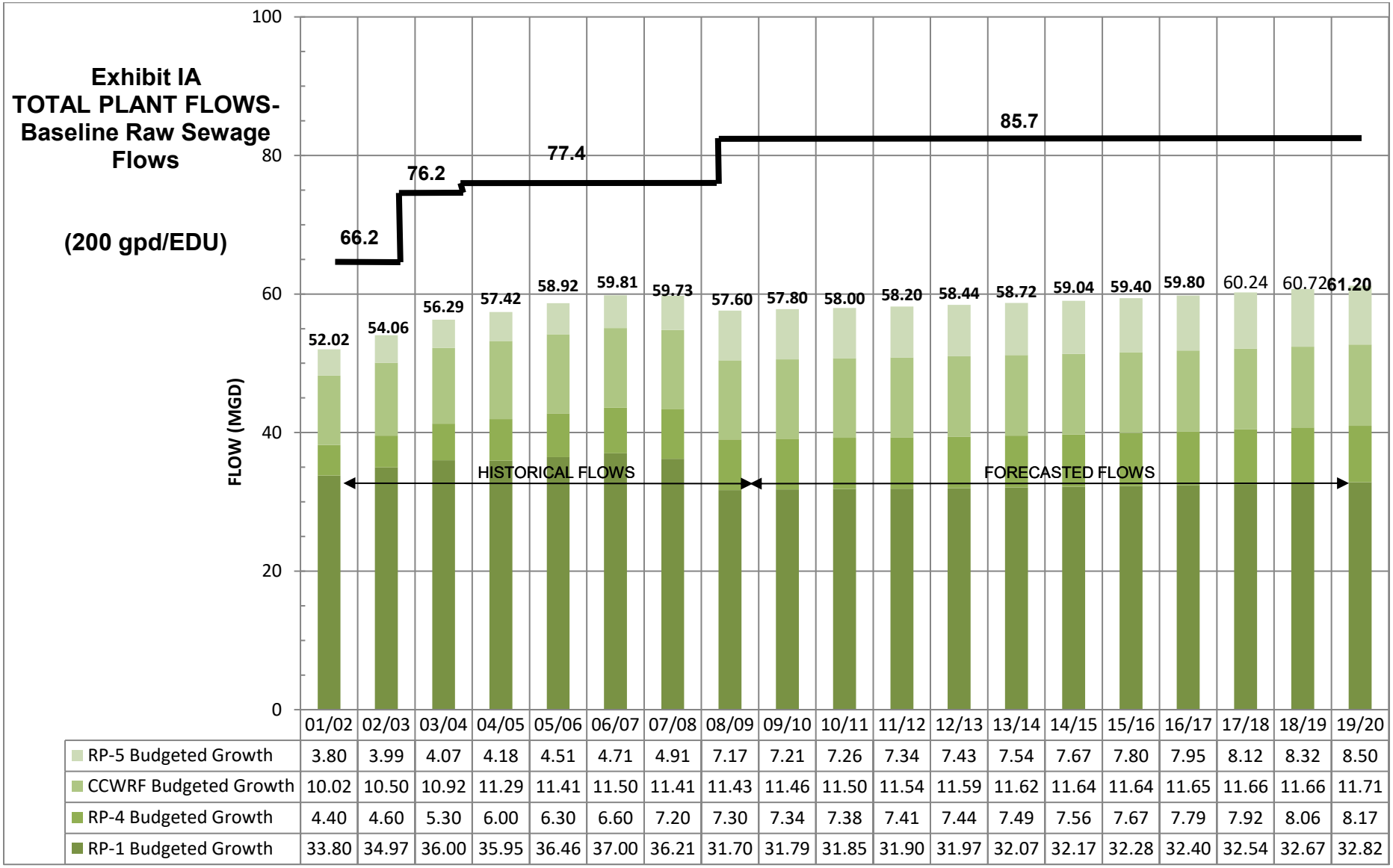
- using the "First Thursday" Prado Basin Planning Process to work with local stakeholders, such as regulators, communities, developers, recreation interests and environmental interests, to implement new stormwater programs in a cost-effective way that reduces runoff from hard surfaces and promotes groundwater infliltration and water quality improvement;
- working with the Southern California Alliance of POTWs (SCAP), California Association of Sanitation Agencies (CASA), and the California Wastewater Climate Change Group (CWCCG) to maintain active and consistent involvement with the State's Air Resources Board, as they develop and implement the AB 32 Scoping Plan and regulations;
- promoting AB 32 implementation measures that ensure wastewater agencies receive credit for early, voluntary reductions in GHG emissions; are able to participate in the production and exchange of renewable energy credits under a proposed cap-and-trade system; and are treated fairly under proposed mandatory GHG reporting regulations and fee systems; and
- working with the Metropolitan Water District of Southern California on planning efforts such as the Integrated Regional Planning process and preparing technical tools and decision support models for incorporating climate change uncertainties into the water planning process.

In addition, IEUA is proactively taking advantage of opportunities within its service area to improve water use efficiency because this is recognized as one of the most cost-effective ways to reduce carbon emissions, while imported water is IEUA's most energy-intensive source of supply. By 2025, IEUA expects that its service area will be able to meet nearly 80% of water needs through local sources. Full service imported water supplies are expected to remain roughly at the same level as 2005 or to decline slightly. This is expected to be achieved through:

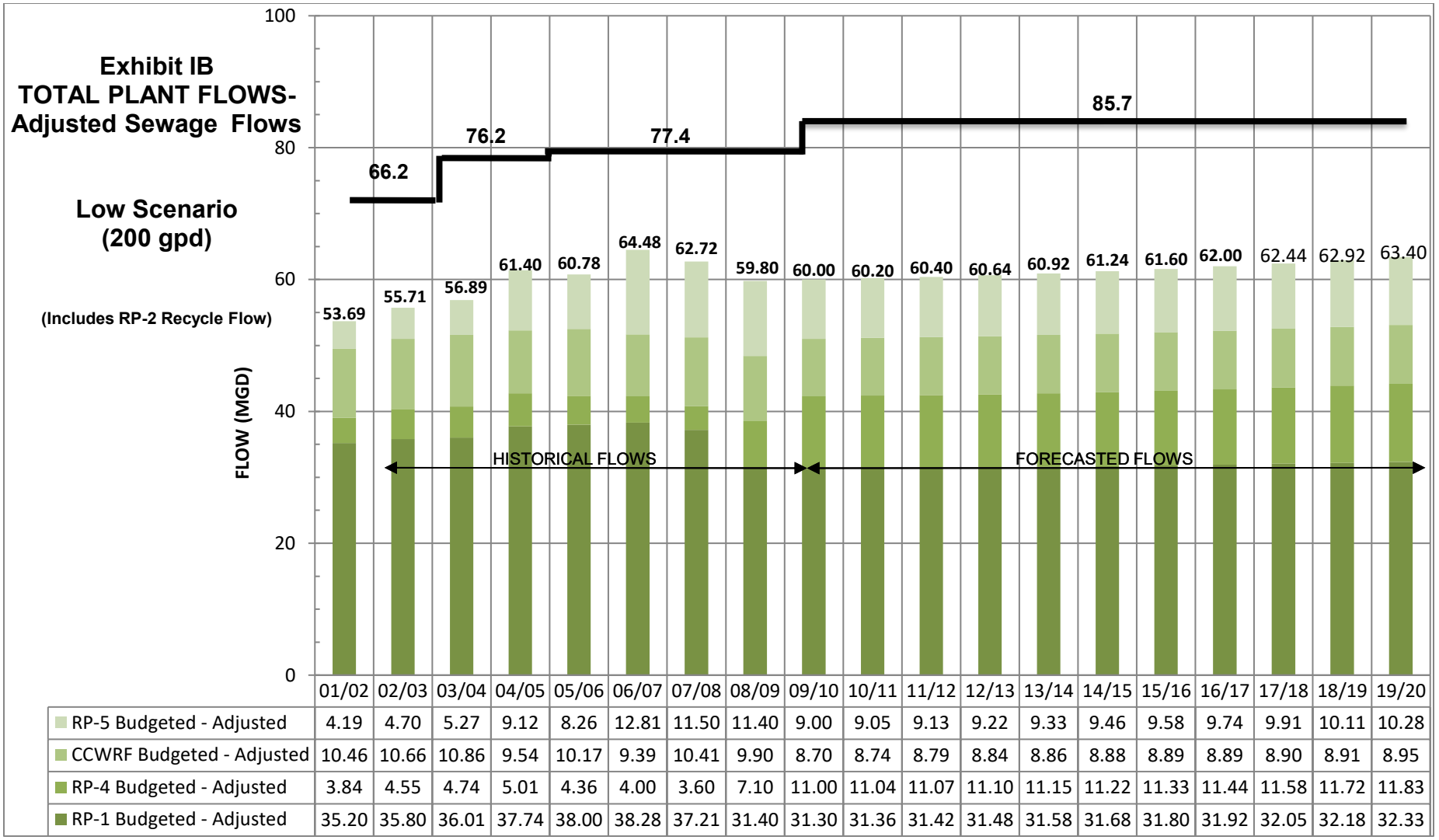
- Water conservation—33,000 acre-feet (10% of demand)
- Recycled water—70,000 to 90,000 acre-feet
- Groundwater production—220,000 acre-feet (increase of 40,000)
- Desalted groundwater—45,000 acre-feet.

Replacement of imported water delivered to IEUA with local water supplies will save California over 225,000 MWh per year by 2025, roughly equivalent to removing 450,000 cars from the road.

IEUA will continue to review the operation of its existing facilities and plans for new facilities to identify opportunities to cost-effectively reduce energy use, thereby reducing GHG emissions while enhancing adaptation to climate change.

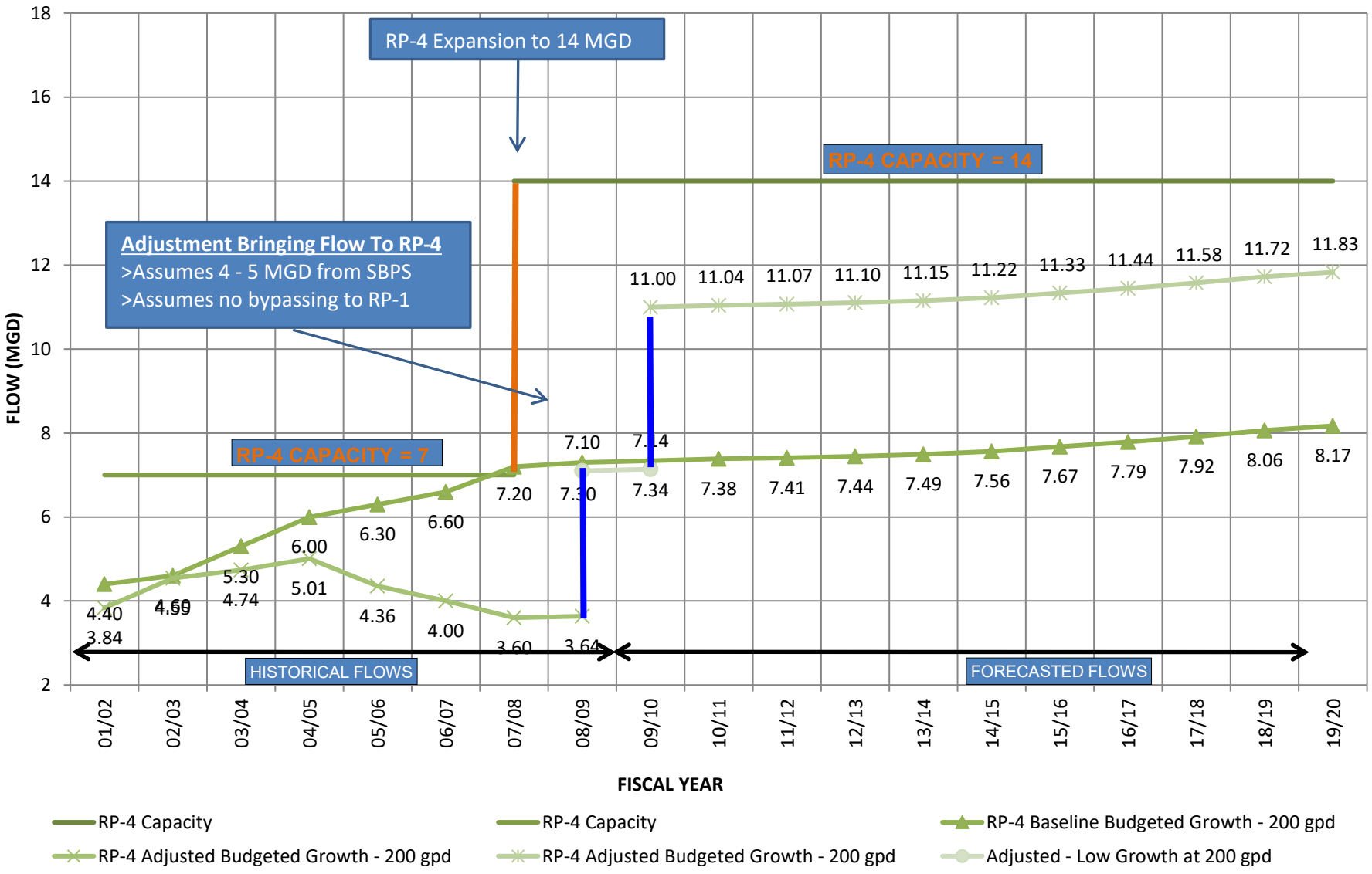


	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20
RP-5 Budgeted Growth	3.80	3.99	4.07	4.18	4.51	4.71	4.91	7.17	7.21	7.26	7.34	7.43	7.54	7.67	7.80	7.95	8.12	8.32	8.50
CCWRF Budgeted Growth	10.02	10.50	10.92	11.29	11.41	11.50	11.41	11.43	11.46	11.50	11.54	11.59	11.62	11.64	11.64	11.65	11.66	11.66	11.71
RP-4 Budgeted Growth	4.40	4.60	5.30	6.00	6.30	6.60	7.20	7.30	7.34	7.38	7.41	7.44	7.49	7.56	7.67	7.79	7.92	8.06	8.17
RP-1 Budgeted Growth	33.80	34.97	36.00	35.95	36.46	37.00	36.21	31.70	31.79	31.85	31.90	31.97	32.07	32.17	32.28	32.40	32.54	32.67	32.82



	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20
RP-5 Budgeted - Adjusted	4.19	4.70	5.27	9.12	8.26	12.81	11.50	11.40	9.00	9.05	9.13	9.22	9.33	9.46	9.58	9.74	9.91	10.11	10.28
CCWRF Budgeted - Adjusted	10.46	10.66	10.86	9.54	10.17	9.39	10.41	9.90	8.70	8.74	8.79	8.84	8.86	8.88	8.89	8.89	8.90	8.91	8.95
RP-4 Budgeted - Adjusted	3.84	4.55	4.74	5.01	4.36	4.00	3.60	7.10	11.00	11.04	11.07	11.10	11.15	11.22	11.33	11.44	11.58	11.72	11.83
RP-1 Budgeted - Adjusted	35.20	35.80	36.01	37.74	38.00	38.28	37.21	31.40	31.30	31.36	31.42	31.48	31.58	31.68	31.80	31.92	32.05	32.18	32.33

Exhibit II: RP-4 FLOW FORECAST



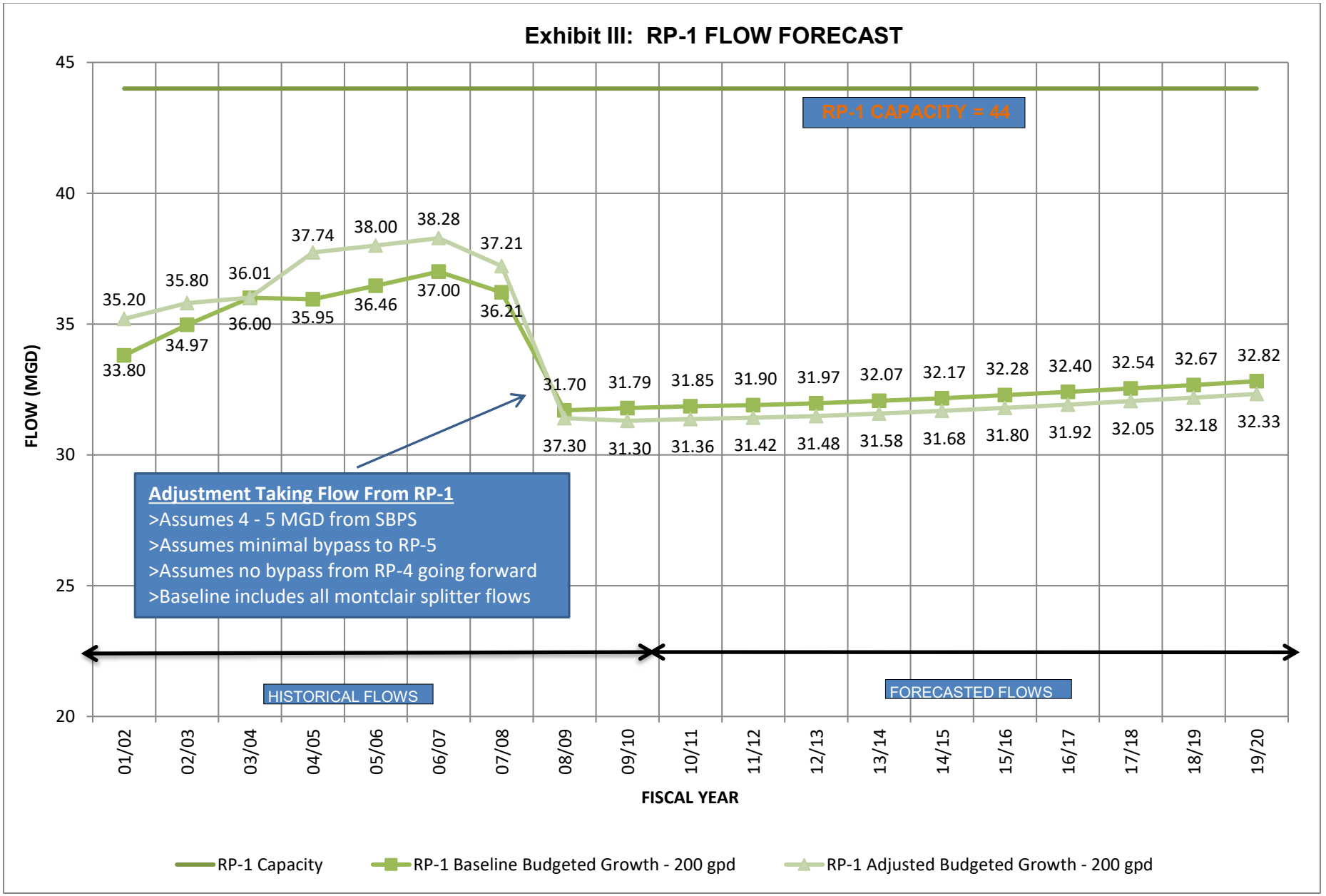
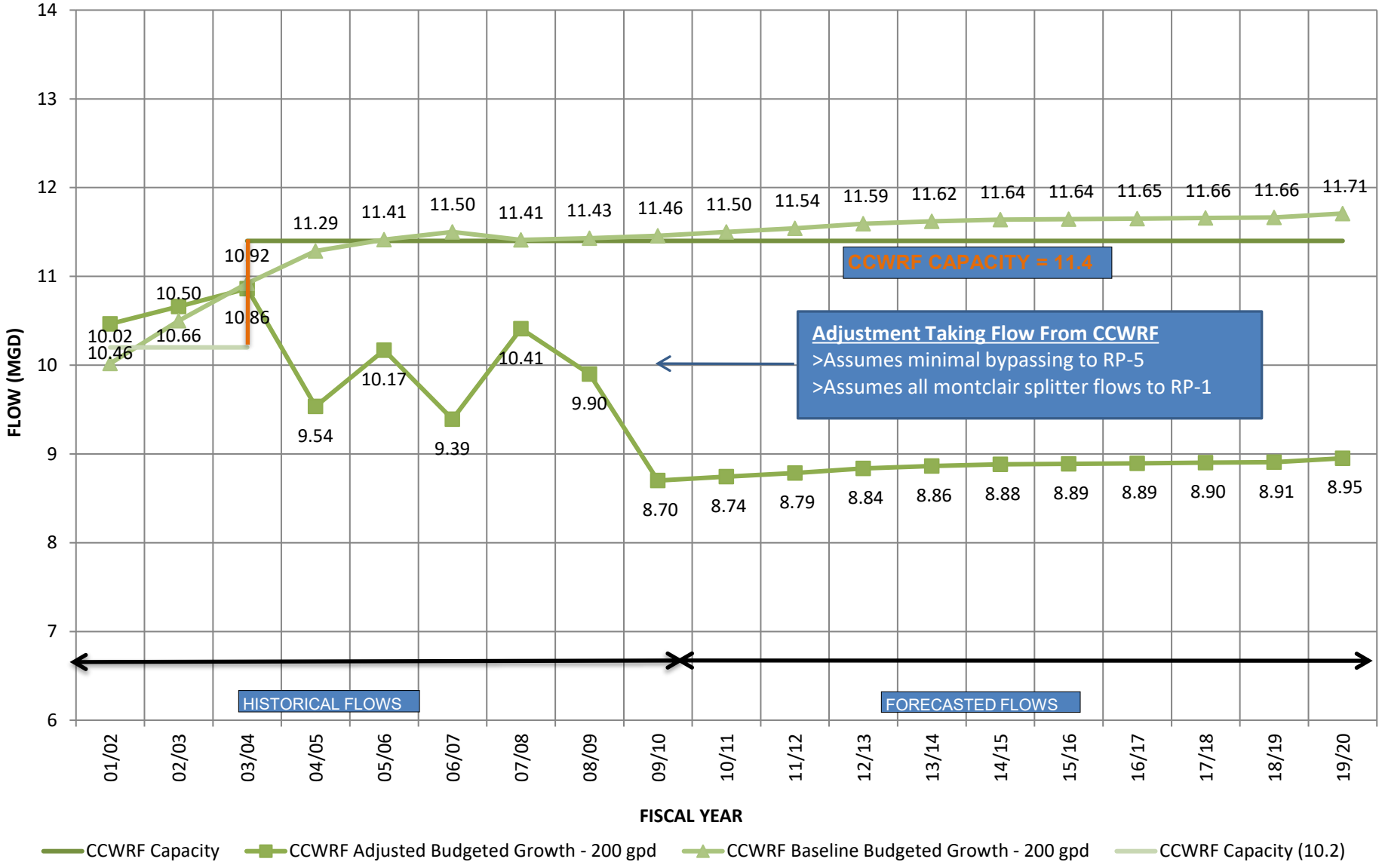
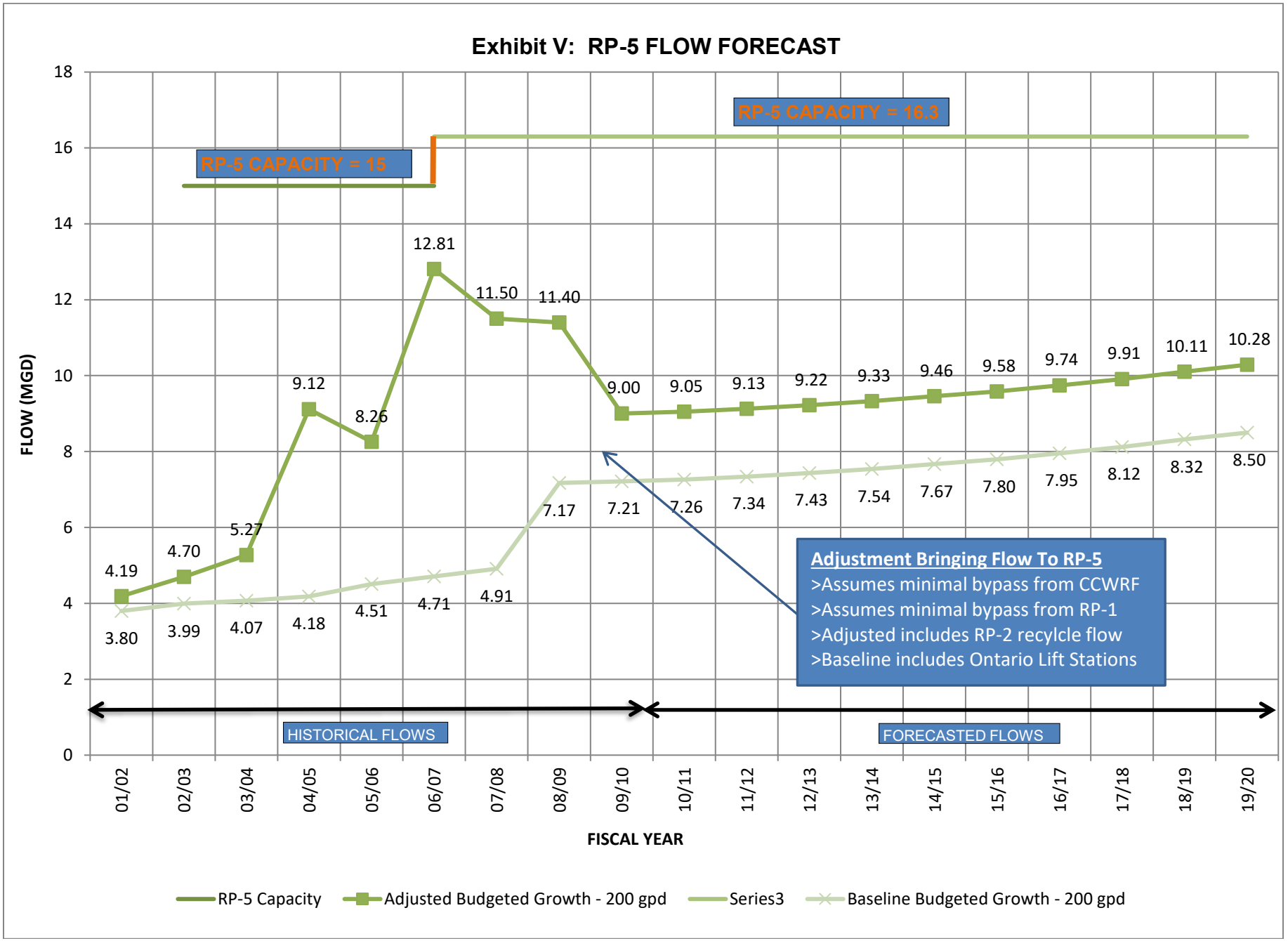

Exhibit III: RP-1 FLOW FORECAST
RP-1 CAPACITY = 44
FLOW (MGD)
45
40
35
30
25
20
35.20
35.80
36.01
37.74
38.00
38.28
37.21
33.80
34.97
36.00
35.95
36.46
37.00
36.21
31.70
31.79
31.85
31.90
31.97
32.07
32.17
32.28
32.40
32.54
32.67
32.82
37.30
31.30
31.36
31.42
31.48
31.58
31.68
31.80
31.92
32.05
32.18
32.33
Adjustment Taking Flow From RP-1
>Assumes 4 - 5 MGD from SBPS
>Assumes minimal bypass to RP-5
>Assumes no bypass from RP-4 going forward
>Baseline includes all montclair splitter flows
HISTORICAL FLOWS
FORECASTED FLOWS
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
10/11
11/12
12/13
13/14
14/15
15/16
16/17
17/18
18/19
19/20
FISCAL YEAR
RP-1 Capacity
RP-1 Baseline Budgeted Growth - 200 gpd
RP-1 Adjusted Budgeted Growth - 200 gpd

Exhibit IV: CCWRF FLOW FORECAST




Exhibit V: RP-5 FLOW FORECAST
RP-5 CAPACITY = 16.3
RP-5 CAPACITY = 15
FLOW (MGD)
FISCAL YEAR
Adjustment Bringing Flow To RP-5
>Assumes minimal bypass from CCWRF
>Assumes minimal bypass from RP-1
>Adjusted includes RP-2 recylcle flow
>Baseline includes Ontario Lift Stations
HISTORICAL FLOWS
FORECASTED FLOWS
4.19
4.70
5.27
9.12
8.26
12.81
11.50
11.40
9.00
9.05
9.13
9.22
9.33
9.46
9.58
9.74
9.91
10.11
10.28
3.80
3.99
4.07
4.18
4.51
4.71
4.91
7.17
7.21
7.26
7.34
7.43
7.54
7.67
7.80
7.95
8.12
8.32
8.50
RP-5 Capacity
Adjusted Budgeted Growth - 200 gpd
Series3
Baseline Budgeted Growth - 200 gpd

APPENDIX A--Incremental EDU Growth Data

INCREMENTAL EDU GROWTH BY AGENCY/FACILITY (EDUs / YR)									
AGENCY	**YEAR**	**RP-1**	**RP-4**	**RP-1/ RP-4**	**CCWRF**	**RP-1/5**	**RP-2/ RP-5**	**RP-5**	**INCREMENTAL GROWTH**
CVWD	6/30/02 Baseline	12,683	15,745	19,262					N/A
	6/30/03 Baseline	13,411	16,640	20,534					2,895
	6/30/04 Baseline	14,682	17,922	22,316					4,335
Flows shown in	6/30/05 Baseline	14,811	18,101	22,509					501
"RP-1/RP-4" column are	6/30/06 Baseline	15,211	18,551	23,033					1,374
currently received by RP-1, but may in	6/30/07 Baseline	16,081	19,251	23,524					2,061
future bypass to RP-4, as the	6/30/08 Baseline	16,198	19,442	23,586					370
RP-4 Trunk Sewer is constructed.	6/30/09 Baseline	16,289	19,522	23,719					304
	09/10	84	101	123					308
	10/11	84	204	173					461
	11/12	84	206	174					464
	12/13	84	208	176					468
	13/14	84	210	177					471
	14/15	86	212	178					476
	15/16	86	214	179					479
	16/17	86	217	180					483
	17/18	86	219	182					487
	18/19	86	221	183					490
	TEN-YR TOTALS	*850*	*2,012*	*1,725*	*0*	*0*	*0*	*0*	*4,587*

FONTANA	6/30/02 Baseline	9,768	8,918	23,783					N/A
	6/30/03 Baseline	10,535	10,082	23,863					2,011
	6/30/04 Baseline	12,306	13,725	21,298					2,849
Flows from the "RP-1/RP-4"	6/30/05 Baseline	12,590	14,043	21,791					1,095
service areas currently go to	6/30/06 Baseline	12,685	15,293	21,854					1,408
RP-1, but may in future go to	6/30/07 Baseline	13,060	15,729	22,129					1,086
RP-4 when San Bernardino Ave.	6/30/08 Baseline	13,115	16,154	22,282					633
Interceptor and Pump Station is constructed	6/30/09 Baseline	13,157	16,448	22,380					434
	09/10	180	200	120					500
	10/11	200	300	150					650
	11/12	205	335	175					715
	12/13	160	405	195					760
	13/14	80	515	220					815
	14/15	85	700	215					1,000
	15/16	80	1,095	190					1,365
	16/17	87	960	170					1,217
	17/18	75	1,070	180					1,325
	18/19	70	960	165					1,195

	TEN-YR TOTALS	*1,222*	*6,540*	*1,780*	*0*	*0*	*0*	*0*	*9,542*

INCREMENTAL EDU GROWTH BY AGENCY/FACILITY (EDUs / YR) continued									
AGENCY	**YEAR**	**RP-1**	**RP-4**	**RP-1/RP-4**	**CCWRF**	**RP-1/5**	**RP-2/RP-5**	**RP-5**	**INCREMENTAL GROWTH**
MONTCLAIR	**6/30/02 Baseline**	**732**			**10,703**				**N/A**
	6/30/03 Baseline	**728**			**10,649**				**-57**
	6/30/04 Baseline	**720**			**10,536**				**-122**
Items shown in "CCWRF" column	**6/30/05 Baseline**	**731**			**10,511**				**-14**
flow directly to CCWRF unless	**6/30/06 Baseline**	**921**			**10,546**				**225**
diverted to RP-1. This	**6/30/07 Baseline**	**923**			**10,654**				**110**
breakdown assumes no	**6/30/08 Baseline**	**949**			**10,716**				**88**
diversions.	**6/30/09 Baseline**	**949**			**10,824**				**108**
	09/10	18			140				158

	10/11	25			265				290
	11/12	20			235				255
	12/13	8			115				123
	13/14	8			40				48
	14/15	8			40				48
	15/16	8			40				48
	16/17	8			40				48
	17/18	8			40				48
	18/19	8			40				48
	TEN-YR TOTAL	***119***	***0***	***0***	***995***	***0***	***0***	***0***	***1,114***
ONTARIO	**6/30/02 Baseline**	**57,660**				**N/A**		**0**	**N/A**
	6/30/03 Baseline	**58,415**				**N/A**		**0**	**755**
The flows going to RP-5 increases as:	**6/30/04 Baseline**	**45,437**				**12,978**		**0**	**0**
1) The RP-1/RP-5 Bypass Sewer comes on line,	**6/30/05 Baseline**	**46,037**				**13,182**		**0**	**804**

2) New Model Colony is built,	**6/30/06 Baseline**	**46,237**				**13,344**		**0**	**362**
3) Portions of Ag Preserve become	**6/30/07 Baseline**	**46,587**				**13,344**		**173**	**523**
sewered, and	**6/30/08 Baseline**	**47,304**				**13,344**		**388**	**932**
4) Flow is diverted from RP-1 Lift	**6/30/09 Baseline**	**47,375**				**13,344**		**456**	**139**
Station by gravity flow to RP-5.	09/10	73						245	318
	10/11	73						245	318
	11/12	327						1,101	1,428
	12/13	345						1,163	1,508
	13/14	383						1,290	1,673
	14/15	404						1,350	1,754
	15/16	404						1,350	1,754
	16/17	459						1,533	1,992
	17/18	459						1,533	1,992
	18/19	459						1,533	1,992
	TEN-YR TOTAL	***3,386***	***0***	***0***	***0***	***0***	***0***	***11,343***	***14,729***

INCREMENTAL EDU GROWTH BY AGENCY/FACILITY (EDUs / YR) continued									
AGENCY	**YEAR**	**RP-1**	**RP-4**	**RP-1/RP-4**	**CCWRF**	**RP-1/5**	**RP-2/RP-5**	**RP-5**	**INCREMENTAL GROWTH**
UPLAND	**6/30/02 Baseline**	**19,487**			**6,018**				**N/A**
	6/30/03 Baseline	**19,683**			**6,030**				**208**
Items shown in the CCWRF	**6/30/04 Baseline**	**19,898**			**6,042**				**227**
column could be diverted to	**6/30/05 Baseline**	**20,298**			**6,439**				**797**
RP-1. This breakdown assumes	**6/30/06 Baseline**	**20,430**			**6,571**				**264**
no diversions.	**6/30/07 Baseline**	**20,489**			**6,602**				**90**
	6/30/08 Baseline	**21,049**			**6,659**				**617**
	6/30/09 Baseline	**21,070**			**6,664**				**26**
	09/10	47			5				52
	10/11	65			132				197

	11/12	69			353				422
	12/13	146			435				581
	13/14	584			111				695
	14/15	262			140				402
	15/16	475			19				494
	16/17	275			5				280
	17/18	350			5				355
	18/19	100			5				105
	TEN-YR TOTAL	***2,373***	***0***	***0***	***1,210***	***0***	***0***	***0***	***3,583***
CHINO	**6/30/02 Baseline**	**622**			**14,096**		**0**	**2,304**	**N/A**
	6/30/03 Baseline	**622**			**11,415**		**0**	**2,167**	**-2,818**
1) Flow from "RP-2/5" service area	**6/30/04 Baseline**	**622**			**11,370**		**19**	**2,189**	**-4**
is lifted to RP-5 by a pump station	**6/30/05 Baseline**	**622**			**12,459**		**1,111**	**2,315**	**2,307**
located at RP-2 or by The Preserve Lift	**6/30/06 Baseline**	**622**			**12,734**		**1,689**	**2,411**	**949**

Stations. Flow from "RP-5"	**6/30/07 Baseline**	**622**			**12,922**		**1,708**	**3,711**	**1,507**
2) Flow from "RP-5" service area	**6/30/08 Baseline**	**622**			**13,025**		**1,713**	**4,111**	**508**
flows directly to RP-5	**6/30/09 Baseline**	**622**			**13,098**		**1,713**	**4,212**	**174**
	09/10	0			35		0	57	92
	10/11	1			5		0	36	42
	11/12	0			0		0	56	56
	12/13	0			0		0	54	54
	13/14	0			0		0	63	63
	14/15	2			5		0	54	61
	15/16	0			0		0	54	54
	16/17	0			0		0	54	54
	17/18	0			0		0	54	54
	18/19	0			0		0	54	54
	TEN-YR TOTAL	***3***	***0***	***0***	***45***	***0***	***0***	***536***	***584***

INCREMENTAL EDU GROWTH BY AGENCY/FACILITY (EDUs / YR) continued									
AGENCY	**YEAR**	**RP-1**	**RP-4**	**RP-1/RP-4**	**CCWRF**	**RP-1/5**	**RP-2/RP-5**	**RP-5**	**INCREMENTAL GROWTH**
CHINO HILLS	**6/30/02 Baseline**				**10,942**		**1,622**	**10,408**	**N/A**
	6/30/03 Baseline				**11,024**		**1,622**	**10,867**	**541**
1) Flow from "RP-2/RP-5" service	**6/30/04 Baseline**				**11,183**		**1,622**	**11,312**	**603**
area is lifted to RP-5 by	**6/30/05 Baseline**				**11,275**		**1,622**	**11,494**	**274**
a pump station located	**6/30/06 Baseline**				**11,384**		**1,622**	**11,684**	**299**
at RP-2. Flow from	**6/30/07 Baseline**				**11,424**		**1,622**	**12,174**	**530**
2) Flow from "RP-5 service area flows	**6/30/08 Baseline**				**11,606**		**1,622**	**12,574**	**582**
directly to RP-5.	**6/30/09 Baseline**				**11,608**		**1,622**	**12,704**	**132**
	09/10				18		0	13	31
	10/11				135		0	277	412

	11/12				263		0	534	797
	12/13				331		0	449	780
	13/14				299		0	231	530
	14/15				22		0	221	243
	15/16				20		0	123	143
	16/17				20		0	73	93
	17/18				20		0	58	78
	18/19				13		0	28	41
	TEN-YR TOTAL	***0***	***0***	***0***	***1,141***	***0***	***0***	***2,007***	***3,148***
GRAND TOTALS	**YEAR**	**RP-1**	**RP-4**	**RP-1/RP-4**	**CCWRF**	**RP-1/5**	**RP-2/RP-5**	**RP-5**	**INCREMENTAL GROWTH**
	6/30/02 Baseline	**100,952**	**24,663**	**43,045**	**41,759**	**0**	**1,622**	**12,712**	**N/A**
	6/30/03 Baseline	**103,394**	**26,722**	**44,397**	**39,118**	**0**	**1,622**	**13,034**	**3,535**
	6/30/04 Baseline	**93,665**	**31,647**	**43,614**	**39,131**	**12,978**	**1,641**	**13,501**	**7,889**
	6/30/05 Baseline	**95,089**	**32,144**	**44,300**	**40,684**	**13,182**	**2,733**	**13,809**	**5,765**

	6/30/06 Baseline	**96,106**	**33,844**	**44,887**	**41,235**	**13,344**	**3,311**	**14,095**	**4,881**
	6/30/07 Baseline	**97,762**	**34,980**	**45,653**	**41,602**	**13,344**	**3,330**	**16,058**	**5,907**
	6/30/08 Baseline	**99,237**	**35,596**	**45,868**	**42,006**	**13,344**	**3,335**	**17,073**	**3,730**
	6/30/09 Baseline	**99,462**	**35,970**	**46,099**	**42,194**	**13,344**	**3,335**	**17,372**	**1,317**
	09/10	402	301	243	198	0	0	315	1,459
	10/11	448	504	323	537	0	0	558	2,370
	11/12	705	541	349	851	0	0	1,691	4,137
	12/13	743	613	371	881	0	0	1,666	4,274
	13/14	1,139	725	397	450	0	0	1,584	4,295
	14/15	847	912	393	207	0	0	1,625	3,984
	15/16	1,053	1,309	369	79	0	0	1,527	4,337
	16/17	915	1,177	350	65	0	0	1,660	4,167
	17/18	978	1,289	362	65	0	0	1,645	4,339
	18/19	723	1,181	348	58	0	0	1,615	3,925
TOTAL	***TEN-YR TOTAL***	**7,953**	**8,552**	**3,505**	**3,391**	**0**	**0**	**13,886**	**37,287**

APPENDIX B

PROPOSED CAPITAL PROJECTS SUMMARY

ADMINISTRATIVE SERVICES FUND - GG												
Project #	**Description**	**FY 2010/11**	**FY 2011/12**	**FY 2012/13**	**FY 2013/14**	**FY 2014/15**	**FY 2015/16**	**FY 2016/17**	**FY 2017/18**	**FY 2018/19**	**FY 2019/20**	**Total TYCIP**
	Capital Construction											
CP08005	HQ Security System Upgrades	$769	$0	$0	$0	$0	$0	$0	$0	$0	$0	$769
CP09003	Headquarters Campus Fencing	50,000	50,000	130,000	150,000	0	0	0	0	0	0	380,000
EN09019	IS Service Room Modifications and Air Cond	43,540	0	0	0	0	0	0	0	0	0	43,540
IS11006	Future Information Technology Initiatives	0	50,000	140,000	120,000	140,000	0	0	0	0	0	450,000
	Total Capital Construction	**$94,309**	**$100,000**	**$270,000**	**$270,000**	**$140,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$874,309**
	Capital Equipment											
EN10002	CM Tracking Project System Enhancements	$39,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$39,000
IS09005	Network Infrastructure (Network Equipment Replacement - Servers, Switches, Routers, etc.)	0	41,000	30,000	50,000	50,000	0	0	0	0	0	171,000
IS09009	SAP xMII System Implementation	0	450,000	0	0	0	0	0	0	0	0	450,000
IS10002	Future Information Technology Initiatives	0	0	0	0	140,000	140,000	140,000	140,000	100,000	100,000	760,000
IS11008	High End Color Laser Printers (2) for HQ Staff and RP1 (1)	0	33,000	0	0	0	0	0	0	0	0	33,000
IS11011	Business Network Server Hardware Replacement	31,000	175,000	60,000	120,000	0	0	0	0	0	0	386,000
IS11012	Storage Attached Network (SAN) for Desktop Streaming PCs	0	40,000	0	0	0	0	0	0	0	0	40,000
IS11013	Firewall and Internet Router for Internet Redundancy Solution + IDS sensor	0	27,000	0	0	0	0	0	0	0	0	27,000
IS13001	SAP/AWSM SAP Version Upgrade	0	0	0	400,000	0	0	0	0	0	0	400,000
IS13002	SAP System Hardware Replacement	0	0	0	175,000	0	0	0	175,000	0	0	350,000
	Total Capital Equipment	**$70,000**	**$766,000**	**$90,000**	**$745,000**	**$190,000**	**$140,000**	**$140,000**	**$315,000**	**$100,000**	**$100,000**	**$2,656,000**
	Capital Replacement											
CP09002	CCTV Equipment Replacement	$20,000	$20,000	$0	$0	$0	$0	$0	$0	$0	$0	$40,000
CP09004	Replacement Copiers	10,000	0	0	0	0	0	0	0	0	0	10,000
EN11010	Headquarters Building Central Plant Improvements	150,000	650,000	0	0	0	0	0	0	0	0	800,000
EP11010	HQ Agency Wide Facilities Roof Repair	75,000	0	0	0	0	0	0	0	0	0	75,000
EP11011	HQ Agency Wide Asphalt Repairs	75,000	0	0	0	0	0	0	0	0	0	75,000
FA05002	ERP/CMMS Procurement	0	0	1,386,000	0	0	0	0	0	0	0	1,386,000
IS11009	Replace Existing Source Fire Intrusion Prevention Appliances	25,000	0	0	0	0	0	0	0	0	0	25,000
IS11010	Business Network Tape Drive Replacement	0	0	0	40,000	0	0	0	0	0	0	40,000
	Total Capital Replacement	**$355,000**	**$670,000**	**$1,386,000**	**$40,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,451,000**
	Total Capital Project Costs	**$519,309**	**$1,536,000**	**$1,746,000**	**$1,055,000**	**$330,000**	**$140,000**	**$140,000**	**$315,000**	**$100,000**	**$100,000**	**$5,981,309**
	Cost Reimbursable											
PL07001	Cleanup Prado (Grant Funded)	$288,791	$0	$0	$0	$0	$0	$0	$0	$0	$0	$288,791
	Total Cost Reimbursable	**$288,791**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$288,791**
	Total O & M Projects	**$288,791**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$288,791**
TOTAL ADMINISTRATIVE SERVICES FUND - GG		**$808,100**	**$1,536,000**	**$1,746,000**	**$1,055,000**	**$330,000**	**$140,000**	**$140,000**	**$315,000**	**$100,000**	**$100,000**	**$6,270,100**

NON-RECLAIMABLE (NRW) FUND - NC												
Project #	**Description**	**FY 2010/11**	**FY 2011/12**	**FY 2012/13**	**FY 2013/14**	**FY 2014/15**	**FY 2015/16**	**FY 2016/17**	**FY 2017/18**	**FY 2018/19**	**FY 2019/20**	**Total TYCIP**
	Capital Construction											
EC10009	CSDLAC Capital Replacement Costs	$1,442,000	$1,485,260	$1,529,818	$1,575,712	$1,622,984	$1,671,673	$1,721,823	$1,773,478	$1,826,682	$1,826,682	$16,476,112
EN11016	CM NRW Connection & Emergency Projects	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000
EN11026	ENG NRW Connection & Emergency Projects	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
	Total Capital Construction	**$1,742,000**	**$1,785,260**	**$1,829,818**	**$1,875,712**	**$1,922,984**	**$1,971,673**	**$2,021,823**	**$2,073,478**	**$2,126,682**	**$2,126,682**	**$19,476,112**
	Capital Equipment											
EC11001	CCTV Video Capture System	$41,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$41,000
	Total Capital Equipment	**$41,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$41,000**
	Capital Replacement											
EN07011	NRW System Upgrades	$709,400	$1,450,000	$1,615,000	$1,115,000	$1,115,000	$1,115,000	$1,115,000	$1,115,000	$0	$500,000	$9,849,400
GM10003	CEO/GM NRW Capital Replacement	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	200,000
	Total Capital Replacement	**$729,400**	**$1,470,000**	**$1,635,000**	**$1,135,000**	**$1,135,000**	**$1,135,000**	**$1,135,000**	**$1,135,000**	**$20,000**	**$520,000**	**$10,049,400**
	Total Capital Project Costs	**$2,512,400**	**$3,255,260**	**$3,464,818**	**$3,010,712**	**$3,057,984**	**$3,106,673**	**$3,156,823**	**$3,208,478**	**$2,146,682**	**$2,646,682**	**$29,566,512**
	Operation & Maintenance											
CW15011	NRW Office Engineering Projects	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$100,000
EC08013	NRW Pipeline Cleaning	125,000	125,000	125,000	100,000	0	0	0	0	0	0	475,000
	Total Operation & Maintenance	**$135,000**	**$135,000**	**$135,000**	**$110,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**	**$575,000**
	Total O & M Project Costs	**$135,000**	**$135,000**	**$135,000**	**$110,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**	**$575,000**
	TOTAL NON RECLAIMABLE WATER FUND - NC	**$2,647,400**	**$3,390,260**	**$3,599,818**	**$3,120,712**	**$3,067,984**	**$3,116,673**	**$3,166,823**	**$3,218,478**	**$2,156,682**	**$2,656,682**	**$30,141,512**

REGIONAL CAPITAL IMPROVEMENT FUND - RC Project #	Description	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	TYCIP
	Capital Construction											
EN04018	Engineering-As-Builting	$86,700	$70,550	$0	$0	$0	$0	$0	$0	$0	$0	$157,250
EN05050	RP2 Digester Gas System Modification	20,000	0	0	0	0	0	0	0	0	0	20,000
EN05061	CCW Tertiary Filter &Chlorine Tank Expansion	18,000	0	0	0	0	0	0	0	0	0	18,000
EN06015	RP1 Dewatering Facility Expansion	18,504,000	494,536	0	0	0	0	0	0	0	0	18,998,536
EN06020	RP5 System Facility Upgrade & Improvements	330,000	0	0	0	0	0	0	0	0	0	330,000
EN07006	RP1 Facilities Improvements	100,000	0	0	0	0	0	0	0	0	0	100,000
EN08009	New Operations Laboratory	1,050,000	0	0	0	0	0	0	0	0	0	1,050,000
EN09023	RP5 & SHF Renewable Energy Independent Review	100,000	50,000	0	0	0	0	0	0	0	0	150,000
EN10011	RP4 Wind Power Plant PPA	10,000	0	0	0	0	0	0	0	0	0	10,000
EN11014	CM Misc. Wastewater Construction & Emergency Projects	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,500,000
EN11017	Capital Upgrades to RP1, RP2, CCWRF, RP4, & RP5	3,850,000	4,400,000	1,400,000	1,900,000	1,500,000	1,500,000	7,000,000	2,900,000	1,500,000	2,000,000	27,950,000
EN11024	EGR Misc. Wastewater Construction & Emergency Projects	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,500,000
EN11027	HQ Repairs and Drainage Improvements	325,000	0	0		0	0	0	0	0	0	325,000
EN11028	RP4 Storage Pond Inprovements	515,000	0	0	0	0	0	0	0	0	0	515,000
EN11300	EGR Regional Sewer Special Projects	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
EP11016	Sub-Metering (All Facilities)	150,000	0	0	0	0	0	0	0	0	0	150,000
PL03006	RP1 Odor Control - Phase 1	3,337,046	0	0	0	0	0	0	0	0	0	3,337,046
Cap Invest	IERCA 50% Capital Contribution	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,500,000
	Total Capital Construction	**$29,245,746**	**$5,865,086**	**$2,250,000**	**$2,750,000**	**$2,350,000**	**$2,350,000**	**$7,850,000**	**$3,750,000**	**$2,350,000**	**$2,850,000**	**$61,610,832**
	Capital Equipment											
CP11001	Agency-Wide Security Equipment Upgrade	$65,000	$95,000	$96,100	$0	$0	$0	$0	$0	$0	$0	$256,100
EM05013	RP1 Install Wireless	0	0	150,000	0	0	0	0	0	0	0	150,000
EP11001	Rockwell Automation PLC Upgrades RP1, RP4 and Prado	0	85,000	0	0	0	0	0	0	0	0	85,000
EP11002	Purchase 3 Broadband Hardened DCS Pentops (2 Ops, 1 Maint.)	22,975	0	0	0	0	0	0	0	0	0	22,975
EP11003	DCS UPS Redundancy	175,300	0	0	0	0	0	0	0	0	0	175,300
EP11004	DCS Server Replacement	32,500	35,000	35,000	36,500	36,500	0	0	0	0	0	175,500
EP11005	DCS Network Equipment Replacement	8,000	9,000	9,000	9,500	9,500	0	0	0	0	0	45,000
EP11006	DCS PC Workstation Replacement	17,000	17,000	17,000	17,500	17,500	0	0	0	0	0	86,000
EP11007	DCS Notebook Replacement	10,500	10,500	10,500	11,000	11,000	0	0	0	0	0	53,500
EP11017	SBLS Critical Spare Equipment Purchase	220,200	0	0	0	0	0	0	0	0	0	220,200
EP11019	CCRWF Primary Effluent Pump Assembly	140,000	0	0	0	0	0	0	0	0	0	140,000
IS10009	Wireless Communications for Montclair and Philadelphia Lift Station	60,000	0	0	0	0	0	0	0	0	0	60,000
IS10011	Future DCS Initiatives	0	0	0	50,000	150,000	0	0	0	0	0	200,000
IS11007	Two AutoCAD Computers	5,500	0	0	0	0	0	0	0	0	0	5,500
IS12001	Upgrade DCS Foxboro I/A to Infusion (Wonderware)	0	0	0	100,000	100,000	0	0	0	0	0	200,000
IS12002	Upgrade DCS AIM Historian to InSQL	0	0	0	100,000	0	0	0	0	0	0	100,000
LB12001	GCMS Semi Volatiles Wastewater	0	150,000	0	0	0	0	0	0	0	0	150,000
LB13001	GCMS Volatiles Wastewater	0	0	250,000	0	0	0	0	0	0	0	250,000
LB14001	GC Pesticides Wastewater	0	0	0	100,000	0	0	0	0	0	0	100,000
PA08021	Enterprise Historian	0	180,000	180,669	0	0	0	0	0	0	0	360,669
	Total Capital Equipment	**$756,975**	**$581,500**	**$748,269**	**$424,500**	**$324,500**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,835,744**
	Capital Replacement											
EN06011	Collection System Emergency Upgrade	$146,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$146,500
EN08002	RP1,RP2,CCWRF O&M Manuals	0	0	0	0	0	0	500,000	495,998	415,516	0	1,411,514
EP11012	Agency Operations Wide Facilities Roof Repair	75,000	0	0	0	0	0	0	0	0	0	75,000
EP11013	Agency Operations Wide Asphalt Repairs	75,000	0	0	0	0	0	0	0	0	0	75,000
IS11014	Replace Telephone System Server Hardware	42,500	0	0	0	0	0	0	0	0	0	42,500
PA06012	RP1 Primary Clarifiers	39,000	0	0	0	0	0	0	0	0	0	39,000
	Total Capital Replacement	**$378,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$500,000**	**$495,998**	**$415,516**	**$0**	**$1,789,514**
	Total Capital Project Costs	**$30,380,721**	**$6,446,586**	**$2,998,269**	**$3,174,500**	**$2,674,500**	**$2,350,000**	**$8,350,000**	**$4,245,998**	**$2,765,516**	**$2,850,000**	**$66,236,090**

REGIONAL CAPITAL IMPROVEMENT FUND - RC Project #	Description	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	TYCIP
	Cost Reimbursable											
PL05013	Chino Creek Master Plan - Administration	$5,231	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,231
PL05014	Chino Creek Master Plan - Outreach & Education	23,500	0	0	0	0	0	0	0	0	0	23,500
	Total Cost Reimbursable	**$28,731**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$28,731**
	Operation & Maintenance											
CW19011	Sewer Office Engineering Projects	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$500,000
CW29010	Sewer Office Engineering Projects	24,677	0	0	0	0	0	0	0	0	0	24,677
CW29110	Sewer Office Engineering Projects	3,692	0	0	0	0	0	0	0	0	0	3,692
EN03300	Regional System Special Projects & Metering	105,600	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,005,600
EN05053	Facility Performance Objective Analysis	20,000	0	0	0	0	0	0	0	0	0	20,000
PL05002	Phase II Surface Wetlands	1,271,491	0	0	0	0	0	0	0	0	0	1,271,491
PL05007	Facility Master Plan	100,000	100,000	0	0	0	0	0	0	0	0	200,000
TS08002	SOP Upgrade & UPC	240,000	0	0	0	0	0	0	0	0	0	240,000
TS09002	Update Existing Facility O&M Manuals	244,000	0	0	0	0	0	0	0	0	0	244,000
TS09003	Electronic O & M Manual Database	50,000	75,844	0	0	0	0	0	0	0	0	125,844
	Total Operation & Maintenance	**$2,109,460**	**$325,844**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$3,635,304**
	Total O&M Project Costs	**$2,138,191**	**$325,844**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$150,000**	**$3,664,035**
	TOTAL REGIONAL CAPITAL IMPROVEMENT FUND - RC	**$32,518,912**	**$6,772,430**	**$3,148,269**	**$3,324,500**	**$2,824,500**	**$2,500,000**	**$8,500,000**	**$4,395,998**	**$2,915,516**	**$3,000,000**	**$69,900,125**

REGIONAL OPERATIONS AND MAINTENANCE FUND - RO												
Project #	**Description**	**FY 2010/11**	**FY 2011/12**	**FY 2012/13**	**FY 2013/14**	**FY 2014/15**	**FY 2015/16**	**FY 2016/17**	**FY 2017/18**	**FY 2018/19**	**FY 2019/20**	**Total TYCIP**
	Capital Construction											
EN08023	RP1 Asset Replacement	$1,300,000	$500,000	$500,000	$500,000	$700,000	$250,000	$1,300,000	$300,000	$2,250,000	$1,000,000	$8,600,000
EN09021	RP4 Headworks Retrofit	299,000	0	0	0	0	0	0	0	0	0	299,000
EN09022	HQA SCADA Service Room Modifications and Air	5,000	0	0	0	0	0	0	0	0	0	5,000
EP11020	RP2 Digester Cleaning	300,000	0	0	0	0	0	0	0	0	0	300,000
	Total Capital Construction	**$1,904,000**	**$500,000**	**$500,000**	**$500,000**	**$700,000**	**$250,000**	**$1,300,000**	**$300,000**	**$2,250,000**	**$1,000,000**	**$9,204,000**
	Capital Equipment											
EP11008	Purchase Motor Circuit Analysis Tool	$50,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$50,000
EP11021	Agency Wide Sodium Bisulfite (SBS) Freezing Protection Project	100,000	0	0	0	0	0	0	0	0	0	100,000
IS09020	Replace RP1 and RP4 DCS WAN Routers	26,000	0	0	0	0	0	0	0	0	0	26,000
IS10016	Replacement PCs/Laptops	16,500	150,000	150,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	806,500
IS10017	Replace Network Access Switches	0	30,000	11,000	11,000	0	0	0	0	0	0	52,000
IS10018	Replace Select PCs with Desktop Streaming (DS) PCs	0	20,000	20,000	20,000	20,000	0	0	0	0	0	80,000
IS10019	Replace HQ Network Router	0	16,000	0	0	0	0	0	0	0	0	16,000
IS10020	Replace Server Room UPS	0	30,000	0	0	0	0	0	0	0	0	30,000
IS10021	Replace Records Management Scanner	13,700	13,700	13,700	0	0	0	0	0	0	0	41,100
IS10022	Storage Attached Network (SAN) for Desktop Streaming	0	40,000	0	0	0	0	0	0	0	0	40,000
IS10024	High End Color Laser Printers for HQ and RP1 (3)	0	33,000	0	0	0	0	0	0	0	0	33,000
IS10025	SAP Public Sector Budget Prep Application & Implementation	0	0	200,000	0	0	0	0	0	0	0	200,000
IS10026	Redundant Internet Connection (CCWRF) Firewall & IDS	0	27,000	0	0	0	0	0	0	0	0	27,000
IS10027	Future Information Technology Initiatives	0	50,000	140,000	120,000	140,000	0	0	0	0	0	450,000
IS10028	Document Management System Upgrade (OnBase)	0	20,000	0	0	0	0	0	0	0	0	20,000
IS10029	Document Management System - Workflow / SAP Integration	0	0	150,000	0	0	0	0	0	0	0	150,000
	Total Capital Equipment	**$206,200**	**$429,700**	**$684,700**	**$221,000**	**$230,000**	**$70,000**	**$70,000**	**$70,000**	**$70,000**	**$70,000**	**$2,121,600**
	Capital Replacement											
EN08013	Plant Equipment Improvements	$515,000	$500,000	$500,000	$1,000,000	$500,000	$2,000,000	$2,000,000	$2,000,000	$1,775,000	$0	$10,790,000
EP11009	RP1 Aeration Basin Clean and Air Panel Membrane Replacement	520,000	0	0	0	0	0	0	0	0	0	520,000
EP11014	RP1/RP5 Bio-Filter Media Replacement	90,000	0	0	0	0	0	0	0	0	0	90,000
EP11015	Major Facilities Capital Repairs/Replacement	500,000	500,000	500,000	500,000	500,000	0	0	0	0	0	2,500,000
	Total Capital Replacement	**$1,625,000**	**$1,000,000**	**$1,000,000**	**$1,500,000**	**$1,000,000**	**$2,000,000**	**$2,000,000**	**$2,000,000**	**$1,775,000**	**$0**	**$13,900,000**
	Total Capital Project Costs	**$3,735,200**	**$1,929,700**	**$2,184,700**	**$2,221,000**	**$1,930,000**	**$2,320,000**	**$3,370,000**	**$2,370,000**	**$4,095,000**	**$1,070,000**	**$25,225,600**
	Cost Reimbursable											
EC08019	Pilot Water Softener Rebate Program	$233,804	$233,804	$233,804	$0	$0	$0	$0	$0	$0	$0	$701,412
	Total Cost Reimbursable	**$233,804**	**$233,804**	**$233,804**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$701,412**
	Operation & Maintenance											
EP09001	Major Facilities O&M Repairs/Replacement	$100,715	0	0	0	0	0	0	0	0	0	$100,715
EP10001	Major Facilities O&M Repairs/Replacement	500,000	550,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	4,250,000
	Total Operation & Maintenance	**$600,715**	**$550,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$4,350,715**
	Total O&M Project Costs	**$834,519**	**$783,804**	**$633,804**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$400,000**	**$5,052,127**
	TOTAL REGIONAL OPERATIONS FUND - RO	**$4,569,719**	**$2,713,504**	**$2,818,504**	**$2,621,000**	**$2,330,000**	**$2,720,000**	**$3,770,000**	**$2,770,000**	**$4,495,000**	**$1,470,000**	**$30,277,727**

RECHARGE WATER FUND - RW												
Project #	**Description**	**FY 2010/11**	**FY 2011/12**	**FY 2012/13**	**FY 2013/14**	**FY 2014/15**	**FY 2015/16**	**FY 2016/17**	**FY 2017/18**	**FY 2018/19**	**FY 2019/20**	**Total TYCIP**
	Capital Construction											
EN11012	Jurupa Pump Station Air Conditioning	$185,504	$0	$0	$0	$0	$0	$0	$0	$0	$0	$185,504
EN11013	Hickory Basin Conservation Berm Outlet Modification	92,752	0	0	0	0	0	0	0	0	0	92,752
	Total Capital Construction	**$278,256**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$278,256**
	Capital Equipment											
IS13005	GWR Server Replacement (Primary & Backup Terminal)	$0	$0	$50,075	$0	$0	$0	$0	$0	$0	$0	$50,075
	Total Capital Equipment	**$0**	**$0**	**$50,075**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$50,075**
	Total Capital Project Costs	**$278,256**	**$0**	**$50,075**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$328,331**
	TOTAL RECHARGE WATER FUND - RW	**$278,256**	**$0**	**$50,075**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$328,331**

RECYCLED WATER FUND - WC												
Project #	**Description**	**FY 2010/11**	**FY 2011/12**	**FY 2012/13**	**FY 2013/14**	**FY 2014/15**	**FY 2015/16**	**FY 2016/17**	**FY 2017/18**	**FY 2018/19**	**FY 2019/20**	**Total TYCIP**
	Capital Construction											
EN06025	Wineville Extension Recycled Water Pipeline	$0	$0	$0	$0	$0	$500,000	$3,500,000	$10,603,858	$0	$0	$14,603,858
EN07010	930 W Reservoir & Pipeline	4,910,000	15,365,000	0	0	0	0	0	0	0	0	20,275,000
EN08018	1630 W Reservoir & Pipeline	7,000,000	2,107,509	0	0	0	0	0	0	0	0	9,107,509
EN09002	Church Street Lateral	700,000	0	0	0	0	0	0	0	0	0	700,000
EN09003	1430 W Reservoir and 1630 W Pump Station	6,000,000	2,277,206	0	0	0	0	0	0	0	0	8,277,206
EN09009	1630 W Pipeline Phase 3	0	0	0	0	0	300,000	9,900,000	9,000,000	0	0	19,200,000
EN09012	Victoria & San Sevaine - Wells & Lysimeter Installation	24,069	0	0	0	0	0	0	0	0	0	24,069
EN10001	RP5 Recycled Water Pump Station Expansion - Phase I	2,000,000	0	0	0	0	0	0	0	0	0	2,000,000
EN11015	CM Misc. Recycled Water Projects	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000
EN11025	EGR Misc. Recycled Water Projects	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000
WR08020	Misc. Connections & Retrofits	500,000	500,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	1,400,000
WR08023	Euclid Recycled Water Lateral	4,500,000	1,153,146	0	0	0	0	0	0	0	0	5,653,146
WR08027	1299 E Pipeline	2,881,825	0	0	0	0	0	0	0	0	0	2,881,825
WR08028	1299 E Reservoir	4,872,881	0	0	0	0	0	0	0	0	0	4,872,881
WR08030	Baseline Regional Pipeline	0	0	0	0	0	100,000	2,027,500	2,072,500	0	0	4,200,000
WR08031	1630 E Pipeline Segment A	4,904,539	0	0	0	0	0	0	0	0	0	4,904,539
WR08032	1630 W Pump Station	1,500,000	1,465,899	0	0	0	0	0	0	0	0	2,965,899
	Total Capital Construction	**$40,193,314**	**$23,268,760**	**$450,000**	**$450,000**	**$450,000**	**$1,350,000**	**$15,877,500**	**$22,126,358**	**$450,000**	**$450,000**	**$105,065,932**
	Capital Equipment											
LB11001	Automated Extraction System	$70,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$70,000
	Total Capital Equipment	**$70,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$70,000**
	Total Capital Project Costs	**$40,263,314**	**$23,268,760**	**$450,000**	**$450,000**	**$450,000**	**$1,350,000**	**$15,877,500**	**$22,126,358**	**$450,000**	**$450,000**	**$105,135,932**
	Cost Reimbursable											
WR08018	GWR Relative Risk Assessment	$175,000	$75,000	$0	$0	$0	$0	$0	$0	$0	$0	$250,000
	Total Cost Reimbursable	**$175,000**	**$75,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$250,000**
	Operation & Maintenance											
CW16011	Recycled Water Office Engineering Projects	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$500,000
	Total Operation & Maintenance	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$500,000**
	Total O&M Project Costs	**$225,000**	**$125,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$50,000**	**$750,000**
	TOTAL RECYCLED WATER FUND - WC	**$40,488,314**	**$23,393,760**	**$500,000**	**$500,000**	**$500,000**	**$1,400,000**	**$15,927,500**	**$22,176,358**	**$500,000**	**$500,000**	**$105,885,932**

WATER RESOURCES FUND - WW												
Project #	**Description**	**FY 2010/11**	**FY 2011/12**	**FY 2012/13**	**FY 2013/14**	**FY 2014/15**	**FY 2015/16**	**FY 2016/17**	**FY 2017/18**	**FY 2018/19**	**FY 2019/20**	**Total TYCIP**
	Cost Reimbursable											
WR11001	MWD Member Agency Administered Program	384,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	3,804,000
WR11002	CBWCD Landscape Audit Program	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	750,000
WR11003	USBR Landscape Resource Guide	30,000	0	0	0	0	0	0	0	0	0	30,000
WR11005	Residential Pilot Landscape Finance Program (50%)	50,000	0	0	0	0	0	0	0	0	0	50,000
	Total Cost Reimbursable	**$539,000**	**$455,000**	**$455,000**	**$455,000**	**$455,000**	**$455,000**	**$455,000**	**$455,000**	**$455,000**	**$455,000**	**$4,634,000**
	Operation & Maintenance											
WR02019	Dry Year Storage Administration	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$50,000
WR11004	Garden In Every School Program	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	450,000
WR11005	Residential Pilot Landscape Finance Program (50%)	50,000	0	0	0	0	0	0	0	0	0	50,000
WR11006	Landscape Alliance	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
WR11007	Residential Rebate Incentives	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
WR11008	National Theatre for Children	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	550,000
WR11009	CII Rebate Incentives	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
WR11010	Chino Basin Green	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	50,000
WR11013	Sponsorships & Public Outreach	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	66,000	660,000
	Total Operation & Maintenance	**$436,000**	**$386,000**	**$386,000**	**$386,000**	**$386,000**	**$386,000**	**$386,000**	**$386,000**	**$386,000**	**$386,000**	**$3,910,000**
	Total O&M Project Costs	**$975,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$8,544,000**
	TOTAL WATER RESOURCES FUND - WW	**$975,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$841,000**	**$8,544,000**



AGENCY INFORMATION

Inland Empire Utilities Agency

6075 Kimball Avenue

Chino, CA 91708

Phone: 909-993-1600

Fax 909-993-9000

MAILING ADDRESS

Post Office Box 9020

Chino Hills, CA 91709